thermo scientific

Thermo Scientific Laboratory Products

Every Lab, Every Day

ThermoFisher SCIENTIFIC

optimize your productivity

Welcome to the Thermo Scientific Laboratory Products Every Lab, Every Day catalog featuring a wide range of essential solutions ideal for maximizing your daily work.

From heating, stirring and shaking to water purification and fluid handling products, we hope you find this catalog an invaluable resource for selecting the laboratory solutions required to produce consistent, optimal work...in every lab, every day—all backed by the quality, value and expertise you've come to expect from us.

Please visit our web site, www.thermofisher.com/everylab for additional information and resources.

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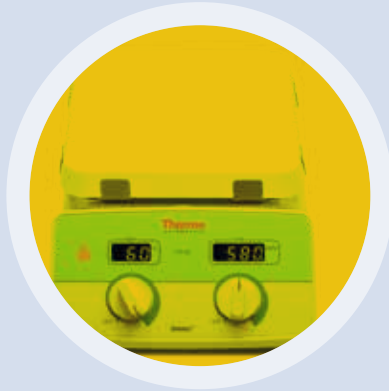

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dry baths/ block heaters

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Thermo Scientific Digital Dry Bath / Block Heater

Increase lab versatility with the Thermo Scientific digital dry baths / block heaters, which offer a range of configurations with interchangeable modular blocks for a variety application needs.

- Digital controls and display of time and temperature
- Built-in temperature sensing probe for outstanding temperature accuracy and control
- 1, 2 and 4 block sizes
- Precise temperature control with PID circuit
- Temperature calibration enables to offset the temperature to desired value
- Timer allows the user to accurately monitor the heating time
- Interchangeable aluminum alloy sample blocks provide versatility and allow for easy cleaning and disinfecting
- Powder-coated steel body construction ensures durability

Applications

Sample preparation

Enzyme preservation

Enzyme-substrate reactions

DNA amplification

Electrophoresis gel degeneration

Serum coagulation

Cat No.	88870001	88870004	88870002	88870005	88870003	88870006
Voltage/Hz	100-120V 50/60Hz	200-240V 50/60Hz	100-120V 50/60Hz	200-240V 50/60Hz	100-120V 50/60Hz	200-240V 50/60Hz
Plugs						
Block Capacity	1		2		4	
Controller Type	PID digital					
Temperature Range	Ambient + 5°C – 130°C (Ambient at 25°C)					
Temperature Control Accuracy at 37°C	≤ ± 0.5°C					
Temperature Uniformity at 37°C	≤ ± 1°C					
Timer Range	0-99:59 min or continuous					
Heating Up Time	≤ 20 min 30°C to 130°C				≤ 25 min 30°C to 130°C	
Relative Humidity Tolerance	≤ 80%					
Dimensions L x W x H	288 × 200 × 100 mm 11.3 x 7.9 x 3.9 in		318 × 200 × 100 mm 12.5 x 7.9 x 3.9 in		450 × 200 × 100 mm 17.7 x 7.9 x 3.9 in	
Weight	2.9 kg 6.39 lbs.		3.3 kg 7.28 lbs.		4.7 kg 10.36 lbs.	
Fuse Protector ø5×20	250V 2.5A		250V 5A	250V 2.5A	250V 8A	250V 3.15A
Shipment Includes:	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*
Required Accessories	1 block		2 blocks		4 blocks	
Certification	CE cULus RoHS					
Warranty	2 years					

Unit must be ordered with a block. *Block lifter secured in back of unit.

Thermo Scientific Touch Screen Dry Bath/Block Heater

Designed to achieve precise temperature stability and uniformity with an easy-to-use touch screen.

- Built-in temperature sensing probe designed for outstanding temperature accuracy and control
- Temperature deviation adjustment
- Precise temperature control with PID circuit
- Temperature calibration enables to offset the temperature to desired value
- Timer enables the user to accurately monitor the heating time
- Easy-to-use touch screen control
- Programmable: Up to 10 programs with 5 steps per program
- Interchangeable aluminum alloy sample blocks designed to provide versatility, easy cleaning and disinfecting
- Range of configuration to hold 1, 2 and 4 interchangeable modular blocks to accommodate a variety of vessels and applications
- Powder-coated steel body construction ensures durability
- When the external temperature sensor is connected, the internal temperature sensor will disconnect automatically, allowing the temperature control and display to rely on the external temperature sensor

Applications

- Sample preparation
- Enzyme preservation
- Enzyme-substrate reactions
- DNA amplification
- Electrophoresis gel degeneration
- Serum coagulation

Cat No.	88870007	88870010	88870008	88870011	88870009	88870012
Voltage/Hz	100-120V 50/60Hz	200-240V 50/60Hz	100-120V 50/60Hz	200-240V 50/60Hz	100-120V 50/60Hz	200-240V 50/60Hz
Plugs						
Block Capacity	1		2		4	
Controller Type	PID Digital					
Temperature Range	Ambient + 5°C – 130°C (Ambient at 25°C)					
Temperature Control Accuracy at 37°C	≤ ± 0.5°C					
Temperature Uniformity at 37°C	≤ ± 1°C					
Timer Range	0-99:59 min or continuous					
Heating Up Time	≤ 20 min 30°C to 130°C				≤ 25 min 30°C to 130°C	
Relative Humidity Tolerance	≤ 80%					
Dimensions L x W x H	373 × 200 × 100 mm 14.7 x 7.9 x 3.9 in		403 × 200 × 100 mm 15.9 x 7.9 x 3.9 in		535 × 200 × 100 mm 21.1 x 7.9 x 3.9 in	
Weight	3.4 kg 7.5 lbs.		3.7 kg 8.16 lbs.		5.1 kg 11.24 lbs.	
Fuse Protector ø5×20	250V 2.5A		250V 5A	250V 2.5A	250V 8A	250V 3.15A
Shipment Includes:	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*	Dry bath, US style plug, block lifter*	Dry bath, CN, EU & UK plugs, block lifter*
Required Accessories	1 block		2 blocks		4 blocks	
Certification	CE cULus RoHS					
Warranty	2 years					

***Block lifter secured in back of unit**

Thermo Scientific Compact Dry Bath / Block Heater

Maximize valuable bench space with our compact, light weight dry bath / block heater, available with multiple combinations of block sizes for tube size versatility.

Compact Dry Bath S

Compact Dry Bath D

- Digital temperature controls and display
- Small footprint and lightweight
- Built-in temperature-sensing probe assists with outstanding temperature accuracy and control
- Designed for precise temperature control
- Fast heating rate
- Multiple combination of different size of blocks allows for maximum tube size versatility during experimental procedure
- 12V low voltage power input

Applications

- Sample preparation
- Enzyme preservation
- Enzyme-substrate reactions
- DNA amplification

Cat No.	88871001	88871003	88871002	88871004
Plugs				
Name	Compact Dry Bath S		Compact Dry Bath D	
Voltage	100 - 240V			
Temperature Range	Ambient + 2°C – 100°C (Ambient at 25°C)			
Temperature Control Accuracy at 37°C	≤ ± 0.5°C			
Temperature Uniformity at 37°C	≤ ± 0.5°C			
Average Heating Rate (30°C to 100°C, Ambient at 25°C, with one 0.2 ml block)	16 minutes		20 minutes	
Dimensions L x W x H	185 x 185 x 25 mm 7.3 x 7.3 x 1 in		200 x 200 x 25 mm 7.9 x 7.9 x 1 in	
Weight	<1 kg 2.2 lbs. (without blocks)		<1.5 kg 3.3 lbs. (without blocks)	
Power	12V DC, 5A		12V DC, 7A	
Shipment Includes:	Dry bath, US style plug, block lifter, plastic lid	Dry bath, CN, EU & UK style plugs, block lifter, plastic lid	Dry bath, US style plug, block lifter, plastic lid	Dry bath, CN, EU & UK style plugs, block lifter, plastic lid
Required Accessories	Full, half or quarter blocks (see Page 134)			
Certification	CE cTUVus RoHs			
Warranty	2 years			

***Unit must be ordered with a tube block; see next page.**

Thermo Scientific Digital and Touch Screen Dry Baths/Block Heaters

	Cat. No.	Block Description	Max Tubes	Block Dimensions WxDxH (mm / in)
	88870101	Flat bottom 46 x 6 mm dia 31mm depth	46	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870102	Flat bottom 28 x 10 mm dia 31mm depth	28	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870103	Conical bottom 28 x 1.5 mL 10.8 mm dia 31mm depth	28	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870104	Conical bottom 28 x 2.0 mL 10.8 mm dia 31mm depth	28	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870105	Flat bottom 28 x 13 mm dia 31mm depth	24	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870106	Flat bottom 15 x 16 mm dia 31mm depth	15	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870107	Flat bottom 12 x 18 mm dia 31mm depth	12	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870108	Flat bottom 8 x 20 mm dia 31mm depth	8	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870109	Flat bottom 6 x 25 mm dia 31mm depth	6	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870110	Conical bottom 40 x 0.5 mL 8 mm dia 21mm depth	40	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870111	1 x 96-well ELISA	96	124 x 76 x 39 / 4.9 x 3.0 x 1.5

	Cat. No.	Block Description	Max Tubes	Block Dimensions WxDxH (mm / in)
	88870112	32 x 6 mm dia & 21 x 10 mm dia 31 mm depth	32 + 21	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870113	32 x 6 mm dia & 21 x 10 mm dia 31 mm depth	18 + 10	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870114	3 x 25 mm dia & 12 x 12–13 mm dia & 6 x 6 mm dia 31 mm depth	3 + 12 + 6	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870115	Mixed block 30 x 0.5 mL & 20 x 0.2 mL 31mm depth	30 + 20	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870116	Flat bottom 15 x 15 mL 17mm dia 115mm depth	15	124 x 76 x 113 / 4.9 x 3.0 x 4.55
	88870117	Flat bottom 5 x 50 mL 29.8mm dia 115mm depth	4	124 x 76 x 113 / 4.9 x 3.0 x 4.55
	88870118	Conical bottom 15 x 15 mL 17mm dia 115mm depth	15	124 x 76 x 113 / 4.9 x 3.0 x 4.55
	88870119	Conical bottom 4 x 50 mL 29.8mm dia 115mm depth	4	124 x 76 x 113 / 4.9 x 3.0 x 4.55
	88870120	Conical bottom 1 x 96-well 0.2 mL non-skirted PCR Plate 11mm depth	96	124 x 76 x 39 / 4.9 x 3.0 x 1.5
	88870121	Conical bottom 1 x 96-well 0.2 mL for half- or full-skirted PCR Plate; 11mm depth	96	124 x 76 x 55 / 4.9 x 3.0 x 2.17
	88870122	Temperature probe, PT1000, stainless steel for Advanced Dry Bath only	N/A	N/A

Thermo Scientific Compact Dry Bath/Block Heater

Cat. No.	Description	Max Tubes	Dimensions WxDxH (mm / in)
88871101	0.2 ml 1/4 block	24	54 x 36 x 15 / 2.1 x 1.4 x 0.6
88871102	0.5 ml 1/4 block	12	54 x 36 x 30 / 2.1 x 1.4 x 1.2
88871103	1.5 ml 1/4 block	6	54 x 36 x 30 / 2.1 x 1.4 x 1.2
88871104	2.0 ml 1/4 block	6	54 x 36 x 30 / 2.1 x 1.4 x 1.2
88871105	15 ml 1/2 block	6	108 x 36 x 72 / 4.3 x 1.4 x 2.8
88871106	50 ml 1/2 block	3	108 x 36 x 72 / 4.3 x 1.4 x 2.8
88871107	96-well/flat bottom full block	96	108 x 72 x 18 / 4.3 x 2.8 x 0.7
88871108	Heat insulator for Compact S	N/A	143 x 107 x 80 / 5.6 x 4.2 x 3.2
88871109	Heat insulator for Compact D	N/A	179 x 143 x 80 / 7.0 x 5.6 x 3.2
88871110	Plastic lid for Compact S	N/A	122 x 86 x 40 / 4.8 x 3.4 x 1.6
88871111	Plastic lid for Compact D	N/A	158 x 122 x 30 / 6.2 x 4.8 x 1.2

NOTE: All blocks are made from aluminum alloy

Thermo Scientific Digital Heating Cooling Drybath

Maximize lab space and flexiblity with our compact programmable heating/cooling dry bath with digital display

- PID control ensures precise temperature control
- Temperature Range from 4°C to 95°C
- Programmable:
  - > 10 programs, up to 10 steps per program
- Two types of timing modes:
  - > Start only after temperature reaches desired set point
  - > Start immediately after the timer is set
- Low profile design
- Blocks easily interchanged

Common Applications

- DNA extractions
- Enzymatic reactions
- Reactions that need to processed at or near room temperature
- Reagent warming/cooling

Required Accessory: must purchase a block with this unit

Cat. No.	88880029*	88880030*
Plug Configurations		
Control	Feedback Control PID	
Display	Digital	
Temperature	Range (°C / °F): 4 to 95 / 39.2 to 203 Variation at 37°C (°C / °F): 0.55 / 0.99	
Dimensions W x D x H	**Internal:** 99 x 77.5 x 36mm / 3.9 x 3.1 x 1.4in **External:** 276 x 334 x 165mm / 10.9 x 13.1 x 6.5in	
Weight	5kg / 11lbs	
Power	120V, 60Hz	230V, 50/60Hz
Certification	CE	
Warranty	2 years	

***NOTE: Unit must be ordered with a block**

Accessories for Digital Cooling Drybath	Max. Tubes	Block Dimensions W x D x H	Cat. No.
Block for microtube 0.5ml	48	98 x 76.5 x 41mm 3.9 x 3 x 1.6in	**88880129**
Block for microtube 1.5ml	30	98 x 76.5 x 41mm 3.9 x 3 x 1.6in	**88880130**
Block for centrifuge tube 15ml	15	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880131**

All blocks are made of Aluminum Alloy

Accessories for Digital Cooling Drybath (continued)	Max. Tubes	Block Dimensions W x D x H	Cat. No.
Block for centrifuge tube 50ml (small)	6	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880132**
Block for centrifuge tube 50ml (large)	6	98 x 76.5 x 87mm 3.9 x 3 x 3.4in	**88880133**
Block for Φ10mm tube	35	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880134**
Block for Φ12mm tube	24	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880135**
Block for Φ13mm tube	24	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880136**
Block for Φ15mm tube	20	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880137**
Block for Φ16mm tube	16	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880138**
Block for Φ18mm tube	12	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880139**
Block for Φ20mm tube	12	98 x 76.5 x 51mm 3.9 x 3 x 2in	**88880140**

Thermo Scientific Digital Heating Shaking Drybath

Increase lab versatility with the Digital Shaking Drybath, which can be used as a drybath, shaker, or both

Features

- PID control ensures consistent shaking results and precise temperature control
- Speed range from 150 to 1500rpm (block dependent)
- Programmable:
  - > 10 programs, up to 10 steps per program
  - > Interval shaking function allows shaking and non-shaking in same program
- Two types of timing modes
  - > Start only after temperature reaches desired set point
  - > Start immediately after the timer is set
- Low-profile design
- Easily changed blocks in multiple sizes allow for maximum flexibility in vessel choice

Common Applications

- DNA extractions
- Enzymatic reactions

Required Accessory: must purchase a block with this unit

Cat. No.	88880027*	88880028*
Plug configurations		
Control	Feedback Control PID	
Display	Digital	
Temperature	Range (°C / °F): Amb +5 to 100 / 41 to 212 Fluctuation at 80°C (°C / °F): 0.5 / 0.9	
Speed Range rpm*	**#88880125:** 96 well block 150 - 1500rpm	
	#88880126: 0.5ml Tube Block 150 - 1000rpm	
	#88880127: 1.5 and 2ml Tube Block 150 - 1000rpm	
	#88880128: 50ml Tube Block 150 - 800rpm	
	#88880151: 15ml Tube Block 150 - 900rpm	
	#88880152: ø12 Tube Block 150 - 850rpm	
	#88880153: ø13 Tube Block 150 - 850rpm	
Orbit Size Diameter	2mm / 0.8in	
Dimensions W x D x H	276 x 334 x 170mm / 10.9 x 13.1 x 6.7in	
Weight	8.3kg / 18.3lbs	
Power	120V, 60Hz	230V, 50/60Hz
Certification	CE	
Warranty	2 years	

Accessories for Digital Shaking Drybath	Max. Mountable Tubes	Cat. No.
0.2ml Microplate Block Set with Cover*	96	**88880125**
0.5ml Tube Block Set with Cover*	48	**88880126**
1.5/2.0ml Tube Block Set with Cover*	24	**88880127**
50ml Tube Block Set with Cover*	6	**88880128**
15ml Tube Block Set with Cover*	15	**88880151**
12mm dia Tube Block Set with Cover*	24	**88880152**
13mm Tube Block Set with Cover*	24	**88880153**

*Cover is a plastic piece that simply sits on top of the aluminum block to protect user from burns and hold block in place; it's not a lid to cover tubes.

Tube Block Sets

Thermo Scientific Thermal Mixer

A versatile mixer offers variable speed and temperature control with a choice of blocks for microtubes and microplates.

- Heating and cooling capability to cover a wide range of applications
- Compact size with quiet operation
- Convenient packages that include Thermal Mixer with a block

Features

- Fast heat-up and cooling times and quick to reach specified mixing speed
- Temperature range : +4°C to 100°C
- Temperature control range : 15°C below ambient to 100°C
- Shaking speed : 250 to 1400 rpm
- Temperature stability : ±0.1°C
- Even mixing across the thermoshaker block
- Excellent uniformity across the block
- Digital timer with sound alarm : 1 min to 96 hours
- Temperature calibration function – Compensate for differences in the thermal behavior of different tubes and samples
- Choice of 5 interchangeable blocks
- LCD Display indicates the set and actual time of operation, mixing speed, and temperature
- Heating/Cooling and mixing functions can be run each other

Common Applications

- Genetic analysis
- DNA and RNA extraction
- Sample preparation
- Biochemical studies of enzymatic reactions and processes
- Extraction of metabolites from cellular material
- Incubation
- Agitation
- Digestion
- Samples/standards for peptide mapping

Dimensions (H x D x W)	**130mm x 230mm x 205mm**
Weight	4 kg
Temperature Setting Range	4°C to 100°C
Temperature Control Range	15°C below ambient to +100°C
Temperature Uniformity Over Block	At 4°C ±0.6°C/ at 37°C ±0.1°C/ at 100°C ±0.3°C
Temperature Display	LCD
Average Heat Up Speed	5°C/min from +25°C to +100°C
Average Cooling Speed from 100°C to 25°C at 25°C to 4°C	5°C/min (approx. 15 mins) 1.8°C/min (approx. 8 mins)
Shaking Speed	250 to 1400 rpm
Orbit Diameter	2 mm
Timer (with auto-off and audible alarm)	1 min to 96 hours (1 min increment)
Heating/Cooling Power	60 W
Input Voltage	12V DC
Input Current	4.16 A
External Power Supply	120-240V
Maximum Noise	53.8 dB
Plug Types	US, EU, UK, China, AUS/NZ plug
Certification	CE
Warranty	2 years, see representative for details.

Convenient Package Ordering - With one part number you receive a Thermal Mixer and a block.
See block sizes below. Order using corresponding package part number.

Description	Part No.
20 X 0.5 ml microtubes and 12 x 1.5 ml microtubes	13687720
24 X 1.5 ml microtubes	13687717
24 x 2.0 ml microtubes	13687718
20 X 0.2 ml microtubes and 12 x 1.5 ml microtubes	13687719
96-well microplates* or tube strips (0.2 ml)	13687721

Package ordering valid in NA and EU.

Order Separately
Order components individually by selecting the part number below.

Description	Part No.
Thermo Scientific Thermal Mixer, US, EU, UK (blocks not included)	13687711
Thermo Scientific Thermal Mixer, AUS/NZ/China, (Blocks not included)	13687722
Block, 20 X 0.5 ml microtubes and 12 x 1.5 ml microtubes	13687715
Block, 24 X 1.5 ml microtubes	13687712
Block, 24 x 2.0 ml microtubes	13687713
Block, 20 X 0.2 ml microtubes and 12 x 1.5 ml microtubes	13687714
Block, 96-well microplates* or tube strips (0.2 ml)	13687716
*Block will accept non-skirted and semi-skirted round bottom plates.	

electrophoresis

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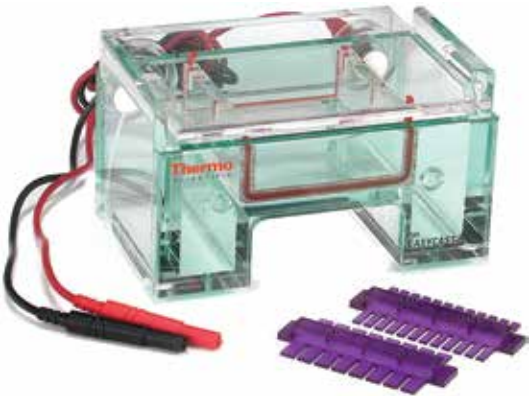
Thermo Scientific Owl EasyCast B1A Mini Gel Electrophoresis Systems

Ideal size for every lab to provide flat, even banding patterns and consistent results with less hassle



- Perfect size to determine molecular weight ranges of PCR fragments or larger sized DNA molecules
- All in one design allows the option of casting and running a gel in the buffer chamber, eliminating the need for additional equipment. Two comb slots on gel tray double sample capacity by doubling number of sample wells
- UVT gel trays are silk screened with a fluorescent ruler for easy measurement of bands
- Feature leakproof casting that allows a gel to be cast and run in the same chamber with no tape or additional parts required
- Run from 5 to 24 samples in 15 minutes

Ordering Information: Available with optional buffer exchange ports (B1A-BP) for use with an external recirculation pump.
Includes: Main buffer chamber, SuperSafe* lid with attached power supply leads, EasyCast gasketed UVT gel tray, two double-sided combs: 6 & 10 well, 1.0/1.5mm thick
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Description	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
B1A	EasyCast	Mini	8 × 7cm	16 × 10.5 × 9.5cm (6.31 × 4.13 × 3.75in.)	400mL	5 to 24
B1A-BP	EasyCast w/Buffer exchange ports	Mini	8 × 7cm	16 × 10.5 × 9.5cm (6.31 × 4.13 × 3.75in.)	400mL	5 to 24

Thermo Scientific Owl EasyCast B1A Mini Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes One black and one red lead)
B1A-UVT	EasyCast gasketed rapid load UVT gel tray with 12 slots and 12 rapid load combs (B2-RL-9D)
B1A-GK	Replacement gaskets (1 pair)
B1A-CST	External caster (trays & combs not included)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface Includes bubble level

Cat. No.	Description	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl EasyCast B1A Mini Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness /Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
B1A-5C	Standard comb; 5 teeth	1.0mm / 11.3mm	8µL	30µL	51µL	72µL
B1A-5D	Standard comb; 5 teeth	1.5mm / 11.3mm	13µL	44µL	76µL	108µL
B1A-6	Double-sided comb; 6 teeth	1.0 / 1.5mm / 9.1 / 9.1mm	7 / 10µL	24 / 36µL	41 / 61µL	58 / 87µL
B1A-8	Double-sided comb; 8 teeth	1.0 / 1.5mm / 6.4 / 6.4mm	5 / 7µL	17 / 25µL	29 / 43µL	41 / 61µL
B1A-10	Double-sided comb; 10 teeth	1.0 / 1.5mm / 4.8 / 4.8mm	4 / 5 µL	13 / 19µL	21 / 32µL	30 / 46µL
B1A-12	Double-sided comb; 12 teeth	1.0 / 1.5mm / 3.7 / 3.7mm	3 / 4µL	10 / 14µL	16 / 25µL	23 / 35µL
B1A-PREP	Prep comb; 2 teeth	1.5mm / 57 / 5 mm	64 / 6µL	225 / 19µL	385 / 32µL	550 / 46µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl EasyCast B1 Mini Gel Electrophoresis Systems

Durability and ease of use makes this the perfect choice for students and high volume researchers

- Economical enough for every researcher to have one at their workstation
- Leakproof casting that allows a gel to be cast and run in the same chamber with no tape or additional parts required
- Offers a wide range of combs
- Two comb slots on gel tray double sample capacity by doubling number of sample wells
- UVT gel trays are silk screened with a fluorescent ruler for easy measurement of bands

Ordering Information: Available with optional buffer exchange ports, (B1-BP), for use with an external recirculation pump. Please order using Cat. No. B1 when ordering the EasyCast system without buffer exchange ports.
Includes: Main buffer chamber, SuperSafe* lid with attached power supply leads, EasyCast Gasketed UVT gel tray, two Combs: 10 & 14 Well, Double-sided, 1.0/1.5mm thick
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Description	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
B1	EasyCast	Mini	11 × 9cm	22 × 15 × 9.5cm (8.63 × 5.88 × 3.75in.)	600mL	5 to 34
B1-BP	EasyCast w/buffer exchange ports	Mini	11 × 9cm	22 × 15 × 9.5cm (8.63 × 5.88 × 3.75in.)	600mL	5 to 34

Thermo Scientific Owl EasyCast B1 Mini Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)
B1-UVT	Gasketed UVT Gel Tray
B1-GK	GK Replacement Gaskets (1 pair)
B1-CST	CST External Caster (trays and combs not included)

Thermo Scientific Owl Leveling Platform

Three-point leveling platform ensures flat casting and running surface. Includes bubble level.

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl EasyCast B1 Mini Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness /Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
B1-5C	Standard 5-tooth comb	1.0mm / 15.4mm	12µL	40µL	69µL	98µL
B1-5D	Standard 5-tooth comb	1.5mm / 15.4mm	17µL	61µL	104µL	147µL
B1-8C	Standard 8-tooth comb	1.0mm / 9.0mm	7µL	24µL	40µL	57µL
B1-8D	Standard 8-tooth comb	1.5mm / 9.0mm	10µL	35µL	61µL	86µL
B1-10	Double-sided 10 tooth comb	1.0 / 1.5mm/ 6.8 / 6.8mm	5 / 8µL	18 / 27µL	31 / 46µL	43 / 65µL
B1-12C	Standard 12 tooth comb	1.0mm / 5.4mm	4µL	14µL	24µL	34µL
B1-12D	Standard 12 tooth comb	1.5mm / 5.4mm	6µL	21µL	36µL	51µL
B1-14	Double-sided 14 tooth comb	1.0 / 1.5mm / 4.4 / 4.4mm	3 / 5µL	11 / 17µL	20 / 29µL	28 / 42µL
B1-RL-9C‡	Rapid-load 9 tooth (1X) comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
B1-RL-9D‡	Rapid-load 9 tooth (1X) comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
B1-RL-17C‡	Rapid-load 17 tooth (2X) comb	1.0mm / 2.5mm	2µL	7µL	12µL	17µL
B1-RL-17D‡	Rapid-load 17 tooth (2X) comb	1.5mm / 2.5mm	3µL	11µL	18µL	26µL
B1-PREP	Prep comb	1.5mm / 78 / 5mm	90 / 6µL	310 / 19µL	525 / 32µL	750 / 46µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl EasyCast B2 Mini Gel Electrophoresis Systems

Outstanding flexibility in a small footprint

- Our most popular system with simple to use casting method, and multiple comb and tray options
- Leakproof casting allows a gel to be cast and run in the same chamber with no tape or additional parts required.
- Longer gel length and the 2 comb slots provide the flexibility of running 8 to 48 samples on 1 gel
- Optional rapid load tray can increase the maximum number of samples to 108 in an 8 or 12 multichannel pipette format.
- 2 comb slots on the U.V. Transmissible (UVT) gel tray double sample capacity by doubling the number of sample wells
- UVT gel trays are silk screened with a fluorescent ruler for easy measurement of bands

Ordering Information: Available with optional buffer exchange ports (B2-BP) for use with an external recirculation pump.
Includes: Buffer chamber, SuperSafe* lid with attached power supply leads, EasyCast gasketed U.V. Transmissible (UVT) gel tray,
2 combs: 12 & 20 well, double-sided, 1.0/1.5 mm thick.
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Description	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
B2	EasyCast	Mini	14 × 12cm	24.5 × 18 × 9.5cm (9.63 × 7.06 × 3.75in.)	800mL	8 to 48
B2-BP	EasyCast w/buffer exchange ports	Mini	14 × 12cm	24.5 × 18 × 9.5cm (9.63 × 7.06 × 3.75in.)	800mL	8 to 48

Thermo Scientific Owl EasyCast Mini Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)
B2-UVT	EasyCast gasketed UVT gel tray
B2-GK	Replacement gaskets (1 pair)

Thermo Scientific Owl EasyCast B2 Mini Gel System Accessories

Cat. No.	Description
B2-RL-UVT	EasyCast gasketed rapid load UVT gel tray with 12 slots
B2-RL	EasyCast gasketed rapid load UVT gel tray with 12 slots and 12 rapid load combs, B2-RL-9D
B2-CST	External caster for casting up to 3 gels at once (trays & combs not included)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl EasyCast B2 Mini Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
B2-8C	Standard 8-tooth comb	1.0mm / 12.5mm	9µL	33µL	56µL	80µL
B2-8D	Standard 8-tooth comb	1.5mm / 12.5mm	14µL	49µL	84µL	120µL
B2-12	Double-sided 12 tooth comb	1.0 & 1.5mm / 7.2mm	5 / 8 µL	18 / 28µL	32 / 49µL	46 / 69µL
B2-16	Double-sided 16 tooth comb	1.0 & 1.5mm / 5.4mm	4 / 6µL	14 / 21µL	24 / 36µL	34 / 52µL
B2-20	Double-sided 20 tooth comb	1.0 & 1.5mm / 3.9mm	3 / 4µL	10 / 15µL	18 / 26µL	25 / 37µL
B2-24	Double-sided 24 tooth comb	1.0 & 1.5mm / 3.0mm	2 / 3µL	8 / 12µL	14 / 20µL	19 / 29µL
B2-RL-9C‡	Rapid-load 9 tooth (1X) comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
B2-RL-9D‡	Rapid-load 9 tooth (1X) comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
B2-RL-25C‡	Rapid-load 25 tooth (2X) comb	1.0mm / 2.5mm	2µL	7µL	12µL	17µL
B2-RL-25D‡	Rapid-load 25 tooth (2X) comb	1.5mm / 2.5mm	3µL	11µL	18µL	26µL
B2-PREP	Prep comb w/2 teeth	1.5mm / 106 / 5	120 / 5.5µL	415 / 20µL	710 / 34µL	1000 / 48µL
B2-WALL	Wall comb w/1 tooth	1.5mm / 120	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl EasyCast B3 Gel System with Built-In Recirculation

Built-in Recirculation is ideal for long runs, multiple sample sets or RNA gels

- Prevent the formation of pH and ionic gradients
- Provide high resolution and uniform, reproducible results
- Deliver clear results for samples run over long time periods
- Does not require external pumps, tubing or stir bars, because recirculation system is built into buffer chamber
- Eliminate uneven migration, band distortion or disassociation of pH-dependent glyoxylated RNA molecules that can result when ionic depletion occurs

Includes: Mini gel system that consists of buffer chamber, SuperSafe* lid with attached power supply leads, EasyCast* gasketed UVT gel tray, as well as 12- and 20-well, double-sided 1.0/1.5mm thick combs.
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Description	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
B3	EasyCast	Mini	14 × 12cm	25 × 18 × 12cm (9.75 × 7 × 4.72in.)	1000mL	8 to 50

Thermo Scientific Owl EasyCast Mini Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)
B2-UVT	EasyCast gasketed UVT gel tray
B2-GK	Replacement gaskets (1 pair)

Thermo Scientific Owl EasyCast Mini Gel System Accessories

Cat. No.	Description
B2-RL-UVT	EasyCast gasketed rapid load UVT gel tray with 12 slots
B2-RL	EasyCast gasketed rapid load UVT gel tray with 12 slots and 12 rapid load combs
B2-CST	External caster (trays & combs not included)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl EasyCast B3 Mini Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
B2-8C	Standard 8-tooth comb	1.0mm / 12.5mm	9µL	33µL	56µL	80µL
B2-8D	Standard 8-tooth comb	1.5mm / 12.5mm	14µL	49µL	84µL	120µL
B2-12	Double-sided 12 tooth comb	1.0 & 1.5mm / 7.2mm	5 / 8 µL	18 / 28µL	32 / 49µL	46 / 69µL
B2-16	Double-sided 16 tooth comb	1.0 & 1.5mm / 5.4mm	4 / 6µL	14 / 21µL	24 / 36µL	34 / 52µL
B2-20	Double-sided 20 tooth comb	1.0 & 1.5mm / 3.9mm	3 / 4µL	10 / 15µL	18 / 26µL	25 / 37µL
B2-24	Double-sided 24 tooth comb	1.0 & 1.5mm / 3.0mm	2 / 3µL	8 / 12µL	14 / 20µL	19 / 29µL
B2-RL-9C‡	Rapid-load 9 tooth (1X) comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
B2-RL-9D‡	Rapid-load 9 tooth (1X) comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
B2-RL-25C‡	Rapid-load 25 tooth (2X) comb	1.0mm / 2.5mm	2µL	7µL	12µL	17µL
B2-RL-25D‡	Rapid-load 25 tooth (2X) comb	1.5mm / 2.5mm	3µL	11µL	18µL	26µL
B2-PREP	Prep comb w/2 teeth	1.5mm / 106 / 5	120 / 5.5µL	415 / 20µL	710 / 34µL	1000 / 48µL
B2-WALL	Wall comb w/1 tooth	1.5mm / 120	—	—	—	—
B2-WALL	Wall comb w/1 tooth	1.5mm / 120	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl D2 Wide-Gel Electrophoresis Systems

Run from 10 to 80 samples on one gel

- Wide gel size allows 15 or 30 samples to be loaded per row with a micro well comb
- Using special combs and a multichannel pipetter, samples may be loaded directly from a 96-well plate, 8 or 12 at a time
- Excellent for screening PCR samples or routine DNA fragment analysis
- Small footprint saves space on lab bench
- Incorporates EasyCast* casting design with external caster — gel tray is fitted with gasket, allowing it to fit snugly into caster and providing a leakproof seal without tape
- Electrode placement allows gel to be run quickly without compromising resolution

Includes: Buffer chamber, SuperSafe* lid with attached power supply leads, EasyCast gasketed UVT gel tray, external multiple gel caster, four combs (two 30-well and two 40-well, 1.5mm thick).
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
D2	Wide	14.4 × 10.2cm	19 × 20 × 10cm (7.38 × 7.75 × 4in.)	600mL	10 to 80
D2-BP	Wide w/buffer exchange ports	14.4 × 10.2cm	19 × 20 × 10cm (7.38 × 7.75 × 4in.)	600mL	10 to 80

Thermo Scientific Owl D2 Wide-Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape
- Comb slots are positioned so you can arrange up to 12 sample sets on the same gel

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
D2-UVT	EasyCast gasketed UVT gel tray
D2-GK	Replacement gaskets (1 pair)
D2-CST	External caster (no trays/combs)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl D2 Wide-Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
D1-10C	Standard 10-tooth comb	1.0mm / 12.2mm	9µL	32µL	55µL	78µL
D1-10D	Standard 10-tooth comb	1.5mm / 12.2mm	14µL	48µL	82µL	117µL
D1-20C	Standard 20-tooth comb	1.0mm / 5.2mm	4µL	14µL	23µL	33µL
D1-20D	Standard 20-tooth comb	1.5mm / 5.2mm	6µL	20µL	35µL	50µL
D1-30C‡	Micro well 30-tooth (2X) comb	1.0mm / 2.7mm	5µL	19µL	32µL	46µL
D1-30D‡	Micro well 30-tooth (2X) comb	1.5mm / 2.7mm	8µL	28µL	49µL	69µL
D1-40C	Standard 40-tooth comb	1.0mm / 1.7mm	1µL	4µL	8µL	11µL
D1-40D	Standard 40-tooth comb	1.5mm / 1.7mm	2µL	7µL	11µL	16µL
D1-MTC‡	Micro well 15-tooth (1X) comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
D1-MTD‡	Micro well 15-tooth (1X) comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
D2-RL-9C‡	Rapid load 9-tooth (1X) comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
D2-RL-9D‡	Rapid load 9-tooth (1X) comb	1.5mm / 7.2mm	8µL	28µL	48µL	69µL
D2-RL-25C‡	Rapid load 25-tooth (2X) comb	1.0mm / 2.5mm	2µL	7µL	12µL	17µL
D2-RL-25D‡	Rapid load 25-tooth (2X) comb	1.5mm / 2.5mm	3µL	11µL	18µL	26µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and 2X) combs.

Thermo Scientific Owl D3-14 Horizontal Electrophoresis System

Ideal for screening PCR products, plasmid preps, restriction mapping and cloning

- System screens 25 to 200 samples on a single agarose gel in less than 30 minutes, producing clear, tight banding patterns with no “smiling”
- With special combs and a multichannel pipetter, samples are loaded directly from a 96-well plate, 8 or 12 at a time
- Incorporates our Owl™ EasyCast* casting design with external caster — gel tray is fitted with gasket, allowing it to fit snugly into caster and providing a leakproof seal without tape
- Sample loading with multichannel pipetter speeds up transfer
- Electrode placement allows gel to be run quickly without compromising resolution
- Bubble level ensures casting of flat, uniformly thick gels

Includes: Buffer chamber, SuperSafe* lid with attached power cords, EasyCast* gasketed UVT gel tray, external caster, four combs (50 micro well, 1.5mm thick).
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
D3-14	Wide	14 × 23cm	30 × 27 × 11cm (11.8 × 10.6 × 4.3in.)	800mL	25 to 200

Thermo Scientific Owl D3-14 System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape
- Comb slots are positioned so you can arrange up to 12 sample sets on the same gel

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
D3-UVT-14	EasyCast* gasketed UVT Gel Tray
D3-GK	Replacement gaskets (1 pair)
D3-CST-14	External caster (no trays/combs)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-23	Chameleon casting dam; 23cmW

Thermo Scientific Owl D3-14 Horizontal Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
D3-MTC‡	Micro well 25 (1X)-tooth comb	1.0mm / 7.5mm	6µL	20µL	34µL	48µL
D3-MTD‡	Micro well 25 (1X)-tooth comb	1.5mm / 7.5mm	8µL	30µL	51µL	72µL
D3-MT2C‡	Micro well 50 (2X)-tooth comb	1.0mm / 3mm	2µL	8µL	14µL	19µL
D3-MT2D‡	Micro well 50 (2X)-tooth comb	1.5mm / 3mm	3µL	12µL	20µL	29µL
D3-WALL	Wall comb, 1 tooth	1.5mm / 230mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A6 Horizontal Electrophoresis System

Ideal for high-throughput laboratories

- System screens 25 to 500 samples on a single agarose gel, producing clear, tight banding patterns with no “smiling”
- Gel tray’s unique comb-slot design allows use of up to 10 evenly spaced combs
- With special combs and a multichannel pipetter, samples are loaded directly from a 96-well plate, 8 or 12 at a time
- Incorporates unique end-gate casting design — gel tray is fitted with gasketed end gates which provide a leakproof seal without tape
- Sample loading with multichannel pipetter speeds up transfer
- Bubble level ensures casting of flat, uniformly thick gels

Includes: Buffer chamber with three-point leveling base, SuperSafe* lid with attached power supply leads, UVT gel tray with gasketed end gates, four combs (two 25-well and two 50-well, 1.5mm thick)
Warranty¥: Three years

Cat. No.	Horizontal System Description	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A6	Wide	25 × 23cm	35 × 38 × 11cm (13.75× 14.94 × 4.38in.)	3.0L	25 to 500

Thermo Scientific Owl A6 Wide Gel Electrophoresis System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
A6-UVT	UVT gel tray with gasketed end gates
A3-GK-1	Replacement gaskets (1 pair)
A3-1-EG	Replacement end gates (1 pair)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-23	Chameleon casting dam; 23cmW

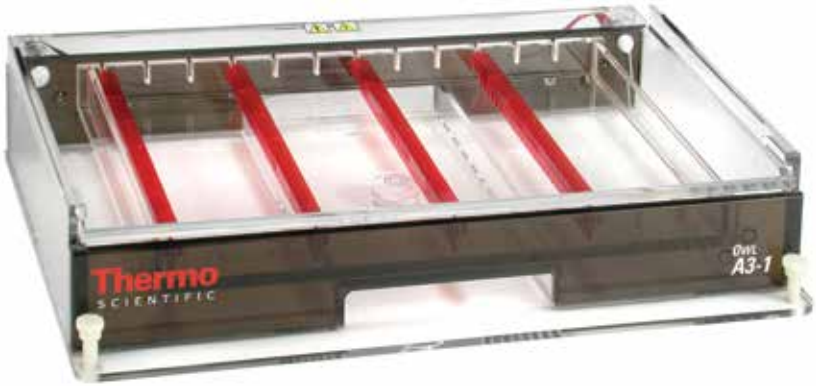
Thermo Scientific Owl A6 Horizontal Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
D3-MTC‡	Microwell 25 (1X)-tooth comb	1.0mm / 7.5mm	6µL	20µL	34µL	48µL
D3-MTD‡	Microwell 25 (1X)-tooth comb	1.5mm / 7.5mm	8µL	30µL	51µL	72µL
D3-MT2C‡	Microwell 50 (2X)-tooth comb	1.0mm / 3mm	2µL	8µL	14µL	19µL
D3-MT2D‡	Microwell 50 (2X)-tooth comb	1.5mm / 3mm	3µL	12µL	20µL	29µL
D3-WALL	Wall comb, 1 tooth	1.5mm / 230mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A3-1 Large-Gel Electrophoresis System

Well-suited for plant genomics studies



- Horizontal system can run from 25 to 600 samples on one gel
- Gel can be cast in varying lengths to help conserve agarose when fewer samples need to be run
- Built-in buffer exchange ports allow for buffer recirculation on extended runs
- UVT gel tray has gasketed end gates for leakproof seal without tape
- Built-in leveling ensures flat, uniformly thick gels
- Large number of comb slots provides sample number and resolving distance flexibility
- Microwell-format combs provide fast, error-free sample loading with a multichannel pipetter
- Samples may be loaded directly from a 96-well plate, 8 or 12 at a time

Includes: Buffer chamber with three-point leveling base, SuperSafe* lid with attached power supply leads, UVT gel tray, four combs
(two 25- and two 50-well), built-in buffer exchange ports and bubble level
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A3-1	Large	40 × 23cm	53 × 32 × 11cm (20.63 × 12.5 × 4.25in.)	4.5L	25 to 600

Thermo Scientific Owl A3-1 Large Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includs one black and one red lead)
A3-UVT-1	UVT gel tray with gasketed end gates
A3-1-EG	Replacement end gates (1 pair)
A3-GK-1	Replacement gaskets (1 pair)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-23	Chameleon casting dam; 23cmW

Thermo Scientific Owl A3-1 Horizontal Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
D3-MTC‡	Microwell 25 (1X)-tooth comb	1.0mm / 7.5mm	6µL	20µL	34µL	48µL
D3-MTD‡	Microwell 25 (1X)-tooth comb	1.5mm / 7.5mm	8µL	30µL	51µL	72µL
D3-MT2C‡	Microwell 50 (2X)-tooth comb	1.0mm / 3mm	2µL	8µL	14µL	19µL
D3-MT2D‡	Microwell 50 (2X)-tooth comb	1.5mm / 3mm	3µL	12µL	20µL	29µL
D3-WALL	Wall comb, 1 tooth	1.5mm / 230mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A1 Large Gel Systems

Smallest footprint of a large format device, and is ideal for detailed RNA/DNA analysis

- Gel can be cast in varying lengths to help conserve agarose when fewer samples need to be run
- Optional built-in buffer exchange ports allow for buffer recirculation on extended runs
- Programmable power inverter may be used for field reversal electrophoresis
- UVT gel tray has gasketed end gates for leakproof seal without tape
- Built-in leveling ensures flat, uniformly thick gels
- Comb slots allow two, three or four sample sets of equal lengths to be run on the same gel
- Microwell-format combs provide fast, error-free sample loading with a multichannel pipetter
- Samples may be loaded directly from a 96-well plate, 8 or 12 at a time

Includes: Buffer chamber with three-point leveling base, SuperSafe* lid with attached power supply leads, UVT gel tray, gasketed end gates, three combs (12, 16 and 20-well), 1.5mm thick
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A1	Large	25 × 13cm	37.5 × 21.5 × 11cm (14.8 × 8.5 × 4.3in.)	1.6L	8 to 150
A1-BP	Large, w/buffer exchange ports	25 × 13cm	37.5 × 21.5 × 11cm (14.8 × 8.5 × 4.3in.)	1.6L	8 to 150

Thermo Scientific Owl A1 Large Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- Unique electrode placement allows this gel to be run quickly without compromising the resolution
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
A1-UVT	UVT gel tray with gasketed end gates
A1-GK	Replacement gaskets (1 pair)
A1-EG	Replacement end gates (1 pair)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-13	Chameleon casting dam; 13cmW

Thermo Scientific Owl A1 Large Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
A1-8C	Standard 8-tooth comb	1.0mm / 13.9mm	10µL	36µL	63µL	89µL
A1-8D	Standard 8-tooth comb	1.5mm / 13.9mm	16µL	55µL	95µL	133µL
A1-12C	Standard 12-tooth comb	1.0mm / 8.7mm	7µL	23µL	39µL	55µL
A1-12D	Standard 12-tooth comb	1.5mm / 8.7mm	10µL	34µL	59µL	83µL
A1-16C	Standard 16-tooth comb	1.0mm / 6.1mm	5µL	16µL	27µL	39µL
A1-16D	Standard 16-tooth comb	1.5mm / 6.1mm	7µL	24µL	41µL	58µL
A1-20C	Standard 20-tooth comb	1.0mm / 4.5mm	3µL	12µL	20µL	29µL
A1-20D	Standard 20-tooth comb	1.5mm / 4.5mm	5µL	18µL	30µL	43µL
A1-24C	Standard 24-tooth comb	1.0mm / 3.5mm	3µL	9µL	16µL	22µL
A1-24D	Standard 24-tooth comb	1.5mm / 3.5mm	4µL	14µL	24µL	33µL
A1-MTC‡	Micro well 14 (1X) tooth comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
A1-MTD‡	Micro well 14 (1X) tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A1-RL-9C‡	Rapid load 9 (1X) tooth comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
A1-RL-9D‡	Rapid load 9 (1X) tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A1-RL-25C‡	Rapid load 25 (2X) tooth comb	1.0mm / 2.5mm	2µL	7µL	12µL	17µL
A1-RL-25D‡	Rapid load 25 (2X) tooth comb	1.5mm / 2.5mm	3µL	11µL	18µL	26µL
A1-PREP	Prep 2-tooth comb	1.5mm / 117 / 5mm	130 / 6µL	455 / 20µL	775 / 34µL	1100 / 48µL
A1-WALL	Wall 1-tooth comb	1.5mm / 130mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A2 Large Gel Systems

Ideal for detailed RNA/DNA analysis and handle high throughput with consistent, reliable results

- Gel can be cast in varying lengths to help conserve agarose when fewer samples need to be run
- Optional built-in buffer exchange ports allow for buffer recirculation on extended runs
- UVT gel tray has gasketed end gates for leakproof seal without tape
- Built-in leveling ensures flat, uniformly thick gels
- Comb slots allow two, three or four sample sets of equal lengths to be run on the same gel
- Microwell-format combs provide fast, error-free sample loading with a multichannel pipetter
- Samples may be loaded directly from a 96-well plate, 8 or 12 at a time
- Offers the greatest variety of comb options

Includes: Buffer chamber with three-point leveling base, SuperSafe* lid with attached power supply leads, UVT gel tray, gasketed end gates, three combs (16, 24 and 36-well), 1.5mm thick
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A2	Large	25 × 20cm	37.5 × 32.5 × 10.5cm (14.8 × 12.8 × 4.1in.)	2.3L	8 to 432
A2-BP	Large, w/buffer exchange ports	25 × 20cm	37.5 × 32.5 × 10.5cm (14.8 × 12.8 × 4.1in.)	2.3L	8 to 432

Thermo Scientific Owl A2 Large Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)
A2-UVT	UVT gel tray with gasketed end gates
A2-GK	Replacement gaskets (1 pair)
A2-EG	Replacement end gates (1 pair)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-20	Chameleon casting dam; 20cmW

Thermo Scientific Owl 24-slot Rapid Load UVT Gel Trays

- Enable multiple sample loading

Cat. No.	Description
A2-RL-UVT	24-slot rapid load UVT gel tray with gasketed end gates
A2-RL-12	24-slot rapid load UVT gel tray with (12) 18-well combs
A2-RL-24	24-slot rapid load UVT gel tray with (24) 18-well combs

Thermo Scientific Owl A2 Large Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
A2-8C	Standard 8-tooth comb	1.0mm / 22.7mm	17µL	59µL	102µL	144µL
A2-8D	Standard 8-tooth comb	1.5mm / 22.7mm	25µL	89µL	153µL	217µL
A2-12C	Standard 12-tooth comb	1.0mm / 14.5mm	11µL	38µL	65µL	92µL
A2-12D	Standard 12-tooth comb	1.5mm / 14.5mm	16µL	57µL	98µL	138µL
A2-16C	Standard 16-tooth comb	1.0mm / 10.5mm	8µL	27µL	47µL	67µL
A2-16D	Standard 16-tooth comb	1.5mm / 10.5mm	12µL	41µL	70µL	100µL
A2-20C	Standard 20-tooth comb	1.0mm / 8.0mm	6µL	21µL	36µL	51µL
A2-20D	Standard 20-tooth comb	1.5mm / 8.0mm	9µL	32µL	54µL	77µL
A2-24C	Standard 24-tooth comb	1.0mm / 6.5mm	5µL	17µL	29µL	41µL
A2-24D	Standard 24-tooth comb	1.5mm / 6.5mm	7µL	25µL	43µL	61µL
A2-28C	Standard 28-tooth comb	1.0mm / 5.0mm	4µL	14µL	23µL	33µL
A2-28D	Standard 28-tooth comb	1.5mm / 5.0mm	6µL	20µL	35µL	50µL
A2-32C	Standard 32-tooth comb	1.0mm / 4.0mm	3µL	11µL	19µL	27µL
A2-32D	Standard 32-tooth comb	1.5mm / 4.0mm	5µL	17µL	29µL	41µL
A2-36C	Standard 36-tooth comb	1.0mm / 3.5mm	3µL	10µL	17µL	24µL
A2-36D	Standard 36-tooth comb	1.5mm / 3.5mm	4µL	15µL	25µL	35µL
A2-MTC‡	Micro well 21 (1X)-tooth comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
A2-MTD‡	Micro well 21 (1X)-tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A2-MT2C‡	Micro well 42 (2X)-tooth comb	1.0mm / 2.7mm	2µL	7µL	12µL	17µL
A2-MT2D‡	Micro well 42 (2X)-tooth comb	1.5mm / 2.7mm	3µL	11µL	18µL	26µL
A2-RL-18D‡	Rapid Load 18 (1X)-tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A2-PREP	Prep comb with 2 teeth	1.5mm / 187 / 5mm	211 / 5.5µL	736 / 20µL	1263 / 34µL	1789 / 48µL
A2-WALL	Wall comb with 1 tooth	1.5mm / 130mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A5 Large Gel System

Features built-in recirculation, and are ideal for long runs, multiple sample sets or RNA gels

- Prevent the formation of pH and ionic gradients
- Provide high resolution and uniform, reproducible results
- Deliver clear results for samples run over long time periods
- Do not require external pumps, tubing or stir bars, because recirculation system is built into buffer chamber
- Eliminate uneven migration, band distortion or disassociation of pH-dependent glyoxylated RNA molecules that can result when ionic depletion occurs

Includes: Large gel system that consists of buffer chamber with three-point leveling base, Supersafe lid with attached power supply leads, UVT gel tray with gasketed end gates, as well as 16-, 24-, and 36-well, 1.5m thick combs.
Warranty[¥]: Three years

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A5	Large	25 × 20cm	37.5 × 32.5 × 15cm (14.8 × 12.8 × 5.9in.)	2.0L	8 to 432

Thermo Scientific Owl A5 Large Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)
A2-UVT	UVT gel tray with gasketed end gates
A2-GK	Replacement gaskets (1 pair)
A2-EG	Replacement end gates (1 pair)

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl Casting Dams

- Seal agarose on contact, eliminating the need for tape
- Do not attach to gel tray, enabling gels of any length to be poured
- Easily handled and maneuvered using knob or finger depressions
- High-quality aluminum dam blocks off a portion of UVT gel tray, allowing shorter gels to be cast and run in one device

Cat. No.	Description
DAM-20	Chameleon casting dam; 20cmW

Thermo Scientific Owl 24-slot Rapid Load UVT Gel Trays

- Enable multiple sample loading

Cat. No.	Description
A2-RL-UVT	24-slot rapid load UVT gel tray with gasketed end gates
A2-RL-12	24-slot rapid load UVT gel tray with (12) 18-well combs
A2-RL-24	24-slot rapid load UVT gel tray with (24) 18-well combs

Thermo Scientific Owl A5 Large Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
A2-8C	Standard 8-tooth comb	1.0mm / 22.7mm	17µL	59µL	102µL	144µL
A2-8D	Standard 8-tooth comb	1.5mm / 22.7mm	25µL	89µL	153µL	217µL
A2-12C	Standard 12-tooth comb	1.0mm / 14.5mm	11µL	38µL	65µL	92µL
A2-12D	Standard 12-tooth comb	1.5mm / 14.5mm	16µL	57µL	98µL	138µL
A2-16C	Standard 16-tooth comb	1.0mm / 10.5mm	8µL	27µL	47µL	67µL
A2-16D	Standard 16-tooth comb	1.5mm / 10.5mm	12µL	41µL	70µL	100µL
A2-20C	Standard 20-tooth comb	1.0mm / 8.0mm	6µL	21µL	36µL	51µL
A2-20D	Standard 20-tooth comb	1.5mm / 8.0mm	9µL	32µL	54µL	77µL
A2-24C	Standard 24-tooth comb	1.0mm / 6.5mm	5µL	17µL	29µL	41µL
A2-24D	Standard 24-tooth comb	1.5mm / 6.5mm	7µL	25µL	43µL	61µL
A2-28C	Standard 28-tooth comb	1.0mm / 5.0mm	4µL	14µL	23µL	33µL
A2-28D	Standard 28-tooth comb	1.5mm / 5.0mm	6µL	20µL	35µL	50µL
A2-32C	Standard 32-tooth comb	1.0mm / 4.0mm	3µL	11µL	19µL	27µL
A2-32D	Standard 32-tooth comb	1.5mm / 4.0mm	5µL	17µL	29µL	41µL
A2-36C	Standard 36-tooth comb	1.0mm / 3.5mm	3µL	10µL	17µL	24µL
A2-36D	Standard 36-tooth comb	1.5mm / 3.5mm	4µL	15µL	25µL	35µL
A2-MTC‡	Micro well 21 (1X)-tooth comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
A2-MTD‡	Micro well 21 (1X)-tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A2-MT2C‡	Micro well 42 (2X)-tooth comb	1.0mm / 2.7mm	2µL	7µL	12µL	17µL
A2-MT2D‡	Micro well 42 (2X)-tooth comb	1.5mm / 2.7mm	3µL	11µL	18µL	26µL
A2-RL-18D‡	Rapid Load 18 (1X)-tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL
A2-PREP	Prep comb with 2 teeth	1.5mm / 187 / 5mm	211 / 5.5µL	736 / 20µL	1263 / 34µL	1789 / 48µL
A2-WALL	Wall comb with 1 tooth	1.5mm / 130mm	—	—	—	—

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl A2-OK Multiple Gel Electrophoresis System

Ideal for teaching labs or labs that need to run multiple gels simultaneously

- Up to six 7 x 8cm minigels can be run on one system
- Screen up to 120 samples at once with supplied combs
- EasyCast* casting design permits casting without tape or plugs
- UV-transmissible (UVT) gel trays may be placed directly on the transilluminator for easy photodocumentation
- Teacher can instruct up to 12 students using one system and one power supply

Includes: Buffer chamber with three-point leveling base; SuperSafe* lid with attached power supply leads; Six EasyCast UVT gasketed gel trays; Twelve 10-well, double-sided combs, 1.0/1.5mm thick; Two external multiple gel casters; Gel tray holder
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
A2-OK	Teaching	8 × 7cm	37.5 × 32.5 × 10.5cm (14.8 × 12.8 × 4.1in.)	2.3L	5 to 144

Thermo Scientific Owl A2-OK Multi Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
B1A-UVT	EasyCast gasketed UVT gel tray
B1A-GK	Replacement gaskets (1 pair)
B1A-CST	External caster (trays & combs not included)
A2-OT	Gel tray holder for A2-OK large gel system

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type
BBL-1	Bubble Level

Thermo Scientific Owl A2-OK Multi Gel Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
B1A-5C	Standard comb; 5 teeth	1.0mm / 11.3mm	8µL	30µL	51µL	72µL
B1A-5D	Standard comb; 5 teeth	1.5mm / 11.3mm	13µL	44µL	76µL	108µL
B1A-6	Double-sided comb; 6 teeth	1.0 / 1.5mm / 9.1 / 9.1mm	7 / 10µL	24 / 36µL	41 / 61µL	58 / 87µL
B1A-8	Double-sided comb; 8 teeth	1.0 / 1.5mm / 6.4 / 6.4mm	5 / 7µL	17 / 25µL	29 / 43µL	41 / 61µL
B1A-10	Double-sided comb; 10 teeth	1.0 / 1.5mm / 4.8 / 4.8mm	4 / 5 µL	13 / 19µL	21 / 32µL	30 / 46µL
B1A-12	Double-sided comb; 12 teeth	1.0 / 1.5mm / 3.7 / 3.7mm	3 / 4µL	10 / 14µL	16 / 25µL	23 / 35µL
B1A-PREP	Prep comb; 2 teeth	1.5mm / 57 / 5 mm	64 / 6µL	225 / 19µL	385 / 32µL	550 / 46µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl D4 Horizontal Electrophoresis System

Optimal flexibility while conserving valuable bench space

- Designed to provide flat, even banding patterns and consistent results with hassle-free gel casting — no tape, grease, agarose seals, or other accessories are required
- Run one gel tray (51 samples) in the buffer chamber, or to save bench space, two stacked trays (102 samples)
- Two 16 x 17cm UV Transmissible (UVT) gel trays accommodate up to three combs each, allowing the user to run up to three series of samples equal distances
- Stand-alone casting platform included for casting two gels simultaneously
- A single gel can be cast right in the buffer chamber or in the external caster

Includes: Buffer chamber (buffer volume, 1.8L); three-point leveling base; SuperSafe* lid with attached power supply leads; two UVT gel trays; six 1.5mm thick combs; external gel caster; bubble level
Warranty¥: Three years

Cat. No.	Horizontal System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume	Sample Range
D4	Space saving	17 × 16cm	23 × 27 × 14cm (9.1 × 10.6 × 5.5in.)	1.8L	17 to 102

Thermo Scientific Owl D4 Horizontal Electrophoresis System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage
- UVT gel tray incorporates gasketed end gates which provide a leakproof seal without tape

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
D4-UVT	EasyCast* gasketed UVT gel tray
D4-GK	Replacement gaskets (1 pair)
D4-CST	External caster

Thermo Scientific Owl Leveling Platform

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Type	Dimensions
BBL-1	Bubble Level	N/A
B-LP	Leveling Platform	36 x 46cm

Thermo Scientific Owl D4 Horizontal Electrophoresis System Combs

Cat. No.†	Description	Thickness / Width of Teeth	RECOMMENDED LOADING VOLUMES Calculated at 75% of total well volume			
			0.25cm gel thickness	0.5cm gel thickness	0.75cm gel thickness	1.0cm gel thickness
D4-17C‡	Micro well 17-tooth comb	1.0mm / 7.2mm	5µL	19µL	32µL	46µL
D4-17D‡	Micro well 17-tooth comb	1.5mm / 7.2mm	8µL	28µL	49µL	69µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.
‡ 8 and 12-channel pipette format (1X) and (2X) combs.

Thermo Scientific Owl P81 Single-Sided Vertical Electrophoresis System

Economical system for quick protein runs

- Simple, rugged system provides excellent results
- Upper buffer chamber extends the length of the gel to distribute heat evenly across the entire gel surface
- Side clamps press glass plates against silicone gasket to provide uniform pressure and form a leakproof seal resulting in flat, even banding patterns
- Notched alumina ceramic plate (included) may be used in front of notched glass for cooler, faster runs

Includes: Upper and lower buffer chambers, SuperSafe* lid with attached power supply leads, blank glass plate, notched glass plate, notched alumina plate, two combs (10 well, 0.8mm thick), spacer set (0.8mm thick)
Warranty¥: Three years
Certifications: CE marked

Cat. No.	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume		
				Upper Buffer	Lower Buffer	Total Buffer
P81	Single Sided	10 × 10cm	18 × 8 × 13cm (7.1 × 3.1 × 5.1in.)	100mL	50mL	150mL

Thermo Scientific Owl P81 System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description	Dimensions
PSL-5	Power supply leads, 3 ft. (one black and one red lead)	—
P81-009	Supersafe* lid with attached power supply leads	—
P8-GK	Orange replacement gaskets (1 pair)	—
P8-CL	Side clamps (1 pair)	—
R10446	Wing knob	—
P7-SA	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.5mm thickness
P7-SC	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.8mm thickness
P7-SD	Spacer Set (2 sides, 1 bottom)	0.5cmW x 1.5mm thickness
P7-10R	Notched glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10G	Blank Glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10FR	Frosted notched glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10FG	Frosted blank glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10RA	Notched alumina plate	10cmL x 10cmW x 1.0mm thickness

Thermo Scientific Owl P8-Series Vertical Electrophoresis System Accessories

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)
JGC-4	Gel Casting System; Compatible with P8DS	10 × 10cm	13 × 13 × 11cm
P7-CST	Gradient Gel Caster	10 × 10cm	13 × 15 × 13cm

Thermo Scientific Owl P8-Series System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
MP-6A	Standard 6-tooth comb	0.5mm	11.1mm	89µL
MP-6C	Standard 6-tooth comb	0.8mm	11.1mm	142µL
MP-6D	Standard 6-tooth comb	1.5mm	11.1mm	266µL
MP-8A	Standard 8-tooth comb	0.5mm	7.7mm	62µL
MP-8C	Standard 8-tooth comb	0.8mm	7.7mm	99µL
MP-8D	Standard 8-tooth comb	1.5mm	7.7mm	185µL
MP-10A	Standard 10-tooth comb	0.5mm	5.7mm	46µL
MP-10C	Standard 10-tooth comb	0.8mm	5.7mm	73µL
MP-10D	Standard 10-tooth comb	1.5mm	5.7mm	134µL
MP-12A	Standard 12-tooth comb	0.5mm	4.3mm	34µL
MP-12C	Standard 12-tooth comb	0.8mm	4.3mm	55µL
MP-12D	Standard 12-tooth comb	1.5mm	4.3mm	103µL
MP-15A	Standard 15-tooth comb	0.5mm	2.9mm	23µL
MP-20A	Standard 20-tooth comb	0.5mm	1.6mm	13µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl P82 Dual-Gel Electrophoresis System

Easy to use system produces flat, even banding and crisp resolution

- Runs two 10 x 10cm gels or one gel when used with blocking plate; accommodates 8 x 10cm gels utilizing the provided adapter
- Allows gels to easily be placed into the device
- Wedge placed in front of the cassettes provides even pressure against the leakproof gasket, places the cassettes in proper running position
- Two sizes of wedges accommodate varying thickness of precast gels
- Flexible — use precast polyacrylamide gels or hand cast gels
- No cooling required

Includes: Inner buffer chambers, buffer tank, SuperSafe* lid with attached power supply leads, two wedges (1.27cm thick), two wedges (1.59cm thick), adapter plates for 10 × 8 gels (2) and blocking plate
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Runing Buffer Volume		
				Upper Buffer Chamber Vol.	Lower Buffer Chamber Max. Vol.	Lower Buffer Chamber Min. Vol. (8cm / 10cm gel)
P82	Double Sided	8-10 × 10cm	15.2 × 12.4 × 17cm (5.88 x 4.75 x 6.69")	150mL	300mL	150mL

Thermo Scientific Owl P82 Dual Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description	Dimensions
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)	—
OG-PL1	Blocking plate	—
R12009	Replacement gaskets (1 pair)	—
P82DS-016	Adapter plate	—
P82DS-012	Thick replacement wedge; 1.59cm	—
P82DS-013	Thin replacement wedge; 1.27cm	—
P82DS-GK	Replacement gasket (1 pair)	—
P7-SA	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.5mm thickness
P7-SC	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.8mm thickness
P7-SD	Spacer Set (2 sides, 1 bottom)	0.5cmW x 1.5mm thickness
P7-10R	Notched glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10G	Blank glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10FR	Frosted notched glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10FG	Frosted blank glass	10cmL x 10cmW x $^{3}/_{32}$" thickness
P7-10RA	Notched alumina plate	10cmL x 10cmW x 1.0mm thickness

Thermo Scientific Owl P8-Series Vertical Electrophoresis System Accessories

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)
JGC-4	Gel Casting System; Compatible with P8DS	10 × 10cm	13 × 13 × 11cm
P7-CST	Gradient Gel Caster	10 × 10cm	13 × 15 × 13cm

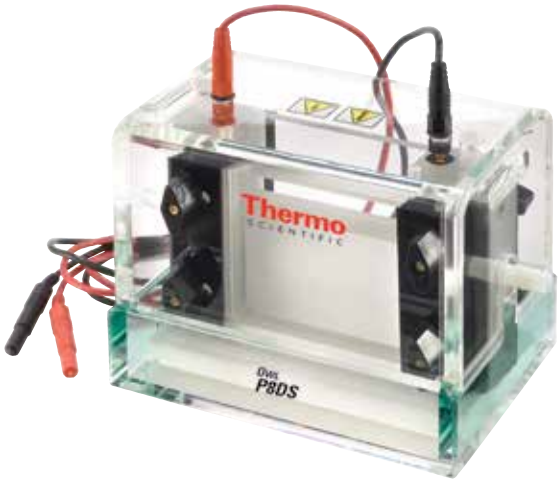
Thermo Scientific Owl P8-Series System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
MP-6A	Standard 6-tooth comb	0.5mm	11.1mm	89µL
MP-6C	Standard 6-tooth comb	0.8mm	11.1mm	142µL
MP-6D	Standard 6-tooth comb	1.5mm	11.1mm	266µL
MP-8A	Standard 8-tooth comb	0.5mm	7.7mm	62µL
MP-8C	Standard 8-tooth comb	0.8mm	7.7mm	99µL
MP-8D	Standard 8-tooth comb	1.5mm	7.7mm	185µL
MP-10A	Standard 10-tooth comb	0.5mm	5.7mm	46µL
MP-10C	Standard 10-tooth comb	0.8mm	5.7mm	73µL
MP-10D	Standard 10-tooth comb	1.5mm	5.7mm	134µL
MP-12A	Standard 12-tooth comb	0.5mm	4.3mm	34µL
MP-12C	Standard 12-tooth comb	0.8mm	4.3mm	55µL
MP-12D	Standard 12-tooth comb	1.5mm	4.3mm	103µL
MP-15A	Standard 15-tooth comb	0.5mm	2.9mm	23µL
MP-20A	Standard 20-tooth comb	0.5mm	1.6mm	13µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl P8DS Dual-Gel Vertical Electrophoresis System

Ideal for two-dimensional electrophoresis



- Quickly and easily casts and runs 1 or 2 gels in the same device
- Perfect tool for second dimension protocols of 2-D electrophoresis, SDS and agarose gels, and native PAGE electrophoresis
- Unique agarose plug method makes casting gel simple and quick. Gel assemblies do not have to be moved once set-up. Two individual steps of casting and running in different devices are now combined. Simply secure the glass cassettes, pour the agarose plug in the specially designed trough, cast polyacrylamide solution in the cassettes, load samples, and run the gel. Manufactured using a time-tested acrylic fabrication technology, providing a durable, long-lasting system
- Central cooling core provides even cooling across the gel surface for outstanding resolution and clear banding
- Cooling is achieved by circulating fluid through the core with external circulator or cool tap water
- Very simple clamping mechanism makes loading glass cassettes and most manufacturers' precast gels trouble free

Includes: Complete System consist of Upper Buffer Chamber with Internal Cooling Core, Lower Buffer Chamber, SuperSafe Lid with Attached Power Supply Leads, 4 Blank Glass Plates, 2 Notched Glass Plates, 2 Notched Alumina Plates, 2 Spacer Sets: 0.8 mm Thick, Blocking Plate for Single Gel Operation, Spacer Placer, 2 Combs: 10 Well, 0.8 mm Thick
Warranty[¥]: Three years

Cat. No.	Description	Vertical System	Gel Size L × W	Footprint (L × W × H)	Running Buffer		
					Lower Buffer	Upper Buffer	Total
P8DS-1	P8DS Complete System plus Caster	Double-sided	8–10 × 10cm	17 × 13 × 14cm (6.7 × 5.1 × 5.5")	150mL	150mL	300mL
P8DS-2	P8DS Complete System	Double-sided	8–10 × 10cm	17 × 13 × 14cm (6.7 × 5.1 × 5.5")	150mL	150mL	300mL
P8DS-3	P8DS Apparatus Only	Double-sided	8–10 × 10cm	17 × 13 × 14cm (6.7 × 5.1 × 5.5")	150mL	150mL	300mL

Thermo Scientific Owl P8DS Gel System Replacement Parts

- Three-point leveling platform ensures flat casting and running surface
- Includes bubble level

Cat. No.	Description	Dimensions
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)	—
P8DS-016	Blocking Plate	—
P8DS-012	Super Safe Lid with Attached Power Supply Leads	—
R12009	Replacement gaskets (1 pair)	—
P8-CL	Side clamps (1 pair)	—
R10446	Wing knob	—
ST-10	Sponge Tips (Pack of 10)	—
P7-SA	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.5mm thickness
P7-SC	Spacer Set (2 sides, 1 bottom)	0.5cmW x 0.8mm thickness
P7-SD	Spacer Set (2 sides, 1 bottom)	0.5cmW x 1.5mm thickness
P7-10R	Notched glass	10cmL x 10cmW x 3/32" thickness
P7-10G	Blank Glass	10cmL x 10cmW x 3/32" thickness
P7-10FR	Frosted notched glass	10cmL x 10cmW x 3/32" thickness
P7-10FG	Frosted blank glass	10cmL x 10cmW x 3/32" thickness
P7-10RA	Notched alumina plate	10cmL x 10cmW x 1.0mm thickness

Thermo Scientific Owl P8-Series Vertical Electrophoresis System Accessories

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)
JGC-4	Gel Casting System; Compatible with P8DS	10 × 10cm	13 × 13 × 11cm
P7-CST	Gradient Gel Caster	10 × 10cm	13 × 15 × 13cm

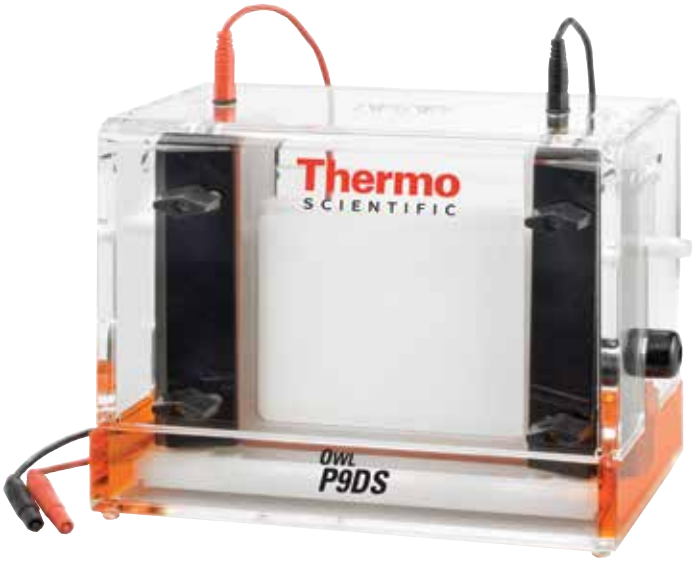
Thermo Scientific Owl P8-Series System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
MP-6A	Standard 6-tooth comb	0.5mm	11.1mm	89µL
MP-6C	Standard 6-tooth comb	0.8mm	11.1mm	142µL
MP-6D	Standard 6-tooth comb	1.5mm	11.1mm	266µL
MP-8A	Standard 8-tooth comb	0.5mm	7.7mm	62µL
MP-8C	Standard 8-tooth comb	0.8mm	7.7mm	99µL
MP-8D	Standard 8-tooth comb	1.5mm	7.7mm	185µL
MP-10A	Standard 10-tooth comb	0.5mm	5.7mm	46µL
MP-10C	Standard 10-tooth comb	0.8mm	5.7mm	73µL
MP-10D	Standard 10-tooth comb	1.5mm	5.7mm	134µL
MP-12A	Standard 12-tooth comb	0.5mm	4.3mm	34µL
MP-12C	Standard 12-tooth comb	0.8mm	4.3mm	55µL
MP-12D	Standard 12-tooth comb	1.5mm	4.3mm	103µL
MP-15A	Standard 15-tooth comb	0.5mm	2.9mm	23µL
MP-20A	Standard 20-tooth comb	0.5mm	1.6mm	13µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl P9DS Dual-Gel Vertical Electrophoresis Systems

Ideal for two-dimensional electrophoresis



- Quickly and easily casts and runs 1 or 2 gels in the same device
- Perfect tool for second dimension protocols of 2-D electrophoresis, SDS and agarose gels, and native PAGE electrophoresis
- Unique agarose plug method makes casting gel simple and quick. Gel assemblies do not have to be moved once set-up. Two individual steps of casting and running in different devices are now combined. Simply secure the glass cassettes, pour the agarose plug in the specially designed trough, cast polyacrylamide solution in the cassettes, load samples, and run the gel. Manufactured using a time-tested acrylic fabrication technology, providing a durable, long-lasting system
- Central cooling core provides even cooling across the gel surface for outstanding resolution and clear banding
- Cooling is achieved by circulating fluid through the core with external circulator or cool tap water
- Very simple clamping mechanism makes loading glass cassettes and most manufacturers' precast gels trouble free

Includes: Complete System consists of Upper Buffer Chamber with Internal Cooling Core, Lower Buffer Chamber, SuperSafe Lid with Attached Power Supply Leads, 4 Blank Glass Plates, 2 Notched Glass Plates, Spacer Set: 1.5mm Thick, Blocking Plate for Single Gel Operation, 2 Combs: (2) 10-Well and (2) 15-Well, 1.5mm Thick
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Description	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume		
					Lower Buffer	Upper Buffer	Total
P9DS-1	P9DS Complete System plus Caster	Double-sided	14–16 × 16cm	25 × 13 × 19.5cm (9.8 × 5.1 × 7.7in.)	350mL	200mL	550mL
P9DS-2	P9DS Complete System	Double-sided	14–16 × 16cm	25 × 13 × 19.5cm (9.8 × 5.1 × 7.7in.)	350mL	200mL	550mL
P9DS-3	P9DS Apparatus Only	Double-sided	14–16 × 16cm	25 × 13 × 19.5cm (9.8 × 5.1 × 7.7in.)	350mL	200mL	550mL

Thermo Scientific Owl P9DS Dual Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description	Dimensions
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)	
P9DS-006	Blocking Plate	—
P9DS-012	Super Safe Lid with Attached Power Supply Leads	—
P9-GK	Orange replacement gaskets (1 pair)	—
P9-CL	Side clamps; pack of 2	—
R10446	Wing knob	—
ST-10	Sponge Tips (Pack of 10)	—
P1-SC	Spacer set (2 sides, 1 bottom)	1.0cmW x 0.8mm thickness
P1-SD	Spacer set (2 sides, 1 bottom)	1.0cmW x 1.5mm thickness
P1-14R	Notched glass	14cmL x 16cmW x 1/8" thickness
P1-14G	Blank glass	14cmL x 16cmW x 1/8" thickness
P1-14FR	Frosted notched glass	14cmL x 16cmW x 1/8" thickness
P1-14FG	Frosted blank glass	14cmL x 16cmW x 1/8" thickness
P1-12G	Offset glass	12cmL x 16cmW x 1/8" thickness

Thermo Scientific Owl P9-Series Vertical Electrophoresis System Accessories

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)
JGC-2	Gel Casting System	14 × 16cm	17 × 18 × 15cm
P1-CST	Multiple Gradient Gel Caster	14 × 16cm	13 × 20 × 18cm

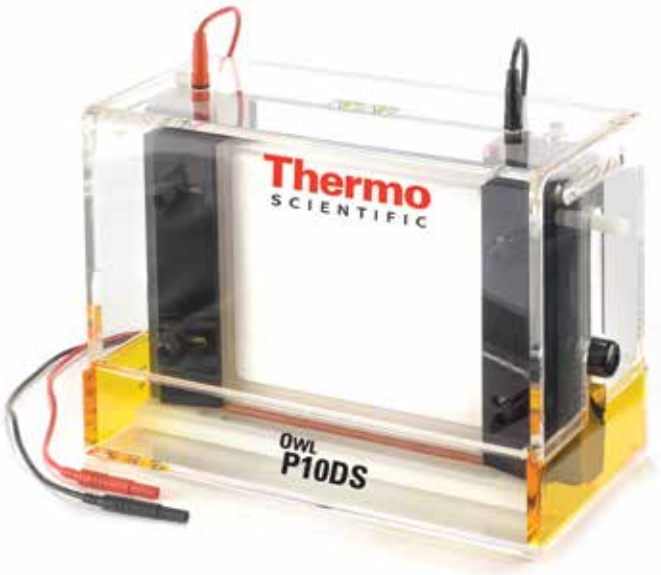
Thermo Scientific Owl P9DS System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
P1-10C	Standard 10-tooth comb	0.8mm	10.4mm	138µL
P1-10D	Standard 10-tooth comb	1.5mm	10.4mm	343µL
P1-15C	Standard 15-tooth comb	0.8mm	6.1mm	107µL
P1-15D	Standard 15-tooth comb	1.5mm	6.1mm	201µL
P1-20C	Standard 20-tooth comb	0.8mm	3.9mm	69µL
P1-20D	Standard 20-tooth comb	1.5mm	3.9mm	129µL
P1-24C	Standard 24-tooth comb	0.8mm	2.9mm	51µL
P1-24D	Standard 24-tooth comb	1.5mm	2.9mm	96µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl P10DS Dual-Gel Vertical Electrophoresis Systems

Ideal for second dimension protocols of 2-D electrophoresis applications



- Optimal device for a large number of samples that need extended separation and mobility shift assays
- Casts and runs one or two 20 × 20cm gels in the upper buffer chamber
- Larger size cassette gives the maximum number of samples and separation length
- Manufactured using a time-tested acrylic fabrication technology, providing a durable, long-lasting system
- Central cooling core provides even cooling across the gel surface for outstanding resolution and clear banding
- Cooling is achieved by circulating fluid through the core with external circulator or cool tap water
- Very simple clamping mechanism makes loading glass cassettes and most manufacturers' precast gels trouble free

Applications: SDS electrophoresis, the second dimension of two-dimensional (2-D) electrophoresis, agarose electrophoresis and native electrophoresis
Includes: Complete System consists of Upper Buffer Chamber with Internal Cooling Core, Lower Buffer Chamber, SuperSafe* Lid with Attached Power Supply Leads, 4 Blank Glass Plates, 4 Notched Glass Plates, 4 Combs: (2) 15 Well and (2) 20 Well, 1.5mm Thick, 4 Spacer Sets: 1.5mm Thick, Blocking Plate for Single Gel Operation, and Spacer Placer
Warranty[Y]: Three years

Cat. No.	Description	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume		
					Lower Buffer	Upper Buffer	Total
P10DS-1	P10DS Complete System plus Caster	Double-sided	20 × 20cm	30.5 × 16.5 × 23cm (12 × 6.5 × 9in.)	600mL	650mL	1250mL
P10DS-2	P10DS Complete System	Double-sided	20 × 20cm	30.5 × 16.5 × 23cm (12 × 6.5 × 9in.)	600mL	650mL	1250mL
P10DS-3	P10DS Apparatus Only	Double-sided	20 × 20cm	30.5 × 16.5 × 23cm (12 × 6.5 × 9in.)	600mL	650mL	1250mL

Thermo Scientific Owl P10DS Dual Gel System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description	Dimensions
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)	—
P10DS-006	Blocking Plate	—
P10DS-012	Super Safe Lid with Attached Power Supply Leads	—
P10-GK	Orange replacement gaskets (1 pair)	—
P10-CL	Side Clamps (1 pair)	—
R10446	Wing knob	—
ST-10	Sponge Tips (Pack of 10)	—
P2-SC	Spacer Set (2 sides, 1 bottom)	1.0cmW × 0.8mm thickness
P2-SD	Spacer Set (2 sides, 1 bottom)	1.0cmW × 1.5mm thickness
P2-20R	Notched glass	20cmL × 20cmW × 3/16" thickness
P2-20G	Blank glass	20cmL × 20cmW × 3/16" thickness
P2-20FR	Frosted notched glass	20cmL × 20cmW × 3/16" thickness
P2-20FG	Frosted blank glass	20cmL × 20cmW × 3/16" thickness
P2-18G	Offset glass	18cmL × 20cmW × 3/16" thickness
P10-20R	Notched glass	20cmL × 20cmW × 1/8" thickness
P10-20G	Blank glass	20cmL × 20cmW × 1/8" thickness
P10-18G	Offset glass	20cmL × 18cmW × 1/8" thickness

Thermo Scientific Owl P10-Series Vertical Electrophoresis System Accessories

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)
JGC-3	Gel Casting System	20 × 20cm	23 × 17 × 17cm
P2-CST	Gradient Gel Caster	20 × 20cm	13 × 25 × 23cm

Thermo Scientific Owl P10-Series System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
P2-10C	Standard 10-tooth comb	0.8mm	13.6mm	239µL
P2-10D	Standard 10-tooth comb	1.5mm	13.6mm	449µL
P2-15C	Standard 15-tooth comb	0.8mm	8.2mm	144µL
P2-15D	Standard 15-tooth comb	1.5mm	8.2mm	271µL
P2-20C	Standard 20-tooth comb	0.8mm	5.5mm	97µL
P2-20D	Standard 20-tooth comb	1.5mm	5.5mm	182µL
P2-25C	Standard 25-tooth comb	0.8mm	3.9mm	69µL
P2-25D	Standard 25-tooth comb	1.5mm	3.9mm	129µL
P2-PREP	Prep comb with 2 teeth	1.5mm	151 / 5.0mm	4604 / 162µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl S4S Aluminum-Backed Sequencers

Easy setup with even heat distribution for "smile"-free results

- Floating aluminum heat sink reduces chance of plates cracking during runs
- Upper buffer chamber (UBC) requires minimal buffer and is easily drained via inline drain port into removable bottle
- Lower buffer chamber (LBC) is removable for simple buffer disposal
- Full-length side clamps press gel plates against gasket seated on UBC, applying even pressure across the entire plate providing a reliable, leakproof seal between the plate and gasket
- Clamps slide over glass plates for easy setup and removal of gels

Includes: UBC with removable drain bottle (with safety interlocking lid and attached power supply lead), removable LBC, anodized aluminum heat sink, two side clamps, two blank glass plates, two notched glass plates, two sharktooth combs (39 teeth, 0.4mm thick), Well comb (20 well, 0.4mm thick), 2 spacer sets (0.4mm), adhesive temperature indicator
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume		
				Lower Buffer	Upper Buffer	Total
S4S	Sequencing system	45 × 20cm	27 × 23 × 50cm	500mL	300mL	800mL

Thermo Scientific Owl S4S Aluminum Backed Sequencer System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
S3S-CL	Side Clamp (1 pair)
R10384	Buffer Drain Bottle
S4S-GK	Replacement Gasket
ST-10	Sponge Tips (Pack of 10)
TEMP-5	Adhesive Temperature Indicator (Pack of 5)
STK-10	Stopcocks (1 pair)
S3S-KNOB	Replacement Knob (Pack of 6)

Thermo Scientific Owl Sequencing System Spacer Sets and Glass Plates

Cat. No.	Description	Dimensions
S2S-SA4	Spacer Set (2 sides, 1 bottom)	1.0cmW × 0.4mm thickness
S2S-SA2	Spacer Set (2 sides, 1 bottom)	1.0cmW × 0.2mm thickness
S2S-SAW	Wedge (Pack of 2)	1.0cmW × 0.4 - 0.8mm thickness
S1S-45R	Notched Glass	45cmL × 20cmW × 3/16" thickness
S1S-45G	Blank Glass	45cmL × 20cmW × 3/16" thickness
S1S-43G	Offset Glass	43cmL × 20cmW × 3/16" thickness

Thermo Scientific Owl SGC-1 Sequencing Gel Casters

- Simple method permits bubble-free gels to be cast in less than three minutes
- Horizontal plate sliding procedure, capillary action drawing gel between plates, and surface tension keeps the gel from leaking.
- No taping or special assembly required
- Exposure to hazardous acrylamide is decreased, reducing cleanup time
- Fully adjustable to accommodate glass plates from 20 to 42cm wide

Includes: Adjustable casting platform, width adjustment knobs, 12 binder clamps

Cat. No.	Gel Size (L × W)	Footprint (L x W x H)
SGC-1	48 × 20-42cm	71 x 21 x 12.2cm (28 x 8.25 x 4.75in.)

Thermo Scientific Owl S4S System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
S1S-40A	20-tooth Well Comb	0.4mm	6.8mm	15µL
S1S-60A	30-tooth Well comb	0.4mm	4.1mm	9µL
S1S-SHARK4	39-tooth Sharktooth Comb	0.4mm	—	9µL
S1S-SHARK2	39-tooth Sharktooth Comb	0.2mm	—	5µL
S1S-MT2	36 (2X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	10µL
S1S-MT3	55 (3X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	5.5µL
S1S-MT44	73 (4X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	3.7µL
S1S-MT42	73 (4X)-tooth Sharktooth Micro-Well Comb	0.2mm	—	2.0µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl S3S Aluminum-Backed Sequencers

Most common size for manual sequencing, providing the optimal size for separation

- Floating aluminum heat sink reduces chance of plates cracking during runs
- Upper buffer chamber (UBC) requires minimal buffer and is easily drained via inline drain port into removable bottle
- Lower buffer chamber (LBC) is removable for simple buffer disposal
- Side clamps press gel plates against gasket seated on UBC applying even pressure across plate, forming a leakproof seal resulting in flat, even banding patterns
- Clamps slide over glass plates for easy setup and removal of gels

Includes: UBC with removable drain bottle (with safety interlocking lid and attached power supply lead), removable LBC, heat sink, two side clamps, two blank glass plates, two notched glass plates, two sharktooth combs (78 teeth, 0.4mm thick), well comb (40 well, 0.4mm thick), 2 spacer sets (0.4mm), Adhesive temperature indicator
Warranty[¥]: Three years
Certifications: CE marked

Cat. No.	Vertical System	Gel Size (L × W)	Footprint (L × W × H)	Running Buffer Volume		
				Lower Buffer	Upper Buffer Chamber	Total
S3S	Sequencing System	45 × 35cm	44 × 23 × 50cm	450mL	500mL	950mL

Thermo Scientific Owl S3S Sequencer System Replacement Parts

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (Includes one black and one red lead)
S3S-CL	Side Clamp (1 pair)
R10383	Buffer drain bottle
S3S-GK	Replacement Gasket
ST-10	Sponge Tips (Pack of 10)
TEMP-5	Adhesive Temperature Indicator (Pack of 5)
STK-10	Stopcocks (1 pair)
S3S-KNOB	Replacement Knob (Pack of 6)

Thermo Scientific Owl Sequencing System Spacer Sets and Glass Plates

Cat. No.	Description	Dimensions
S2S-SA4	Spacer Set (2 sides, 1 bottom)	1.0cmW × 0.4mm thickness
S2S-SA2	Spacer Set (2 sides, 1 bottom)	1.0cmW × 0.2mm thickness
S2S-SAW	Wedge (Pack of 2)	1.0cmW × 0.4 - 0.8mm thickness
S2S-45R	Notched Glass	45cmL × 35cmW × 3/16" thickness
S2S-45G	Blank Glass	45cmL × 35cmW × 3/16" thickness
S2S-43G	Offset glass	43cmL × 35cmW × 3/16" thickness

Thermo Scientific Owl SGC-1 Sequencing Gel Casters

- Simple method permits bubble-free gels to be cast in less than three minutes
- Horizontal plate sliding procedure, capillary action drawing gel between plates, and surface tension keeps the gel from leaking, no taping or special assembly required
- Exposure to hazardous acrylamide is decreased, reducing cleanup time
- Fully adjustable to accommodate glass plates from 20 to 42cm wide

Cat. No.	Gel Size (L × W)	Footprint (L x W x H)
SGC-1	48 × 20-42cm	71 x 21 x 12.2cm (28 x 8.25x 4.75in.)

Thermo Scientific Owl S3S System Combs

Cat. No.†	Description	Thickness of teeth	Width of teeth	EST Well Volume
S2S-20A	40-tooth Well Comb	0.4mm	6.8mm	15µL
S2S-30A	60-tooth Well Comb	0.4mm	4.1mm	9µL
S2S-SHARK4	78-tooth Sharktooth Comb	0.4mm	—	9µL
S2S-SHARK2	78-tooth Sharktooth Comb	0.2mm	—	5µL
S2S-MT2	72 (2X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	10µL
S2S-MT3	110 (3X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	5.5µL
S2S-MT44	146 (4X)-tooth Sharktooth Micro-Well Comb	0.4mm	—	3.7µL
S2S-MT42	146 (4X)-tooth Sharktooth Micro-Well Comb	0.2mm	—	2µL

† Customized combs are available (Order SKU # XCM). Please contact your Customer Service Representative for further details.

Thermo Scientific Owl JGC-4, JGC-3, JGC-2 Gel Casting Systems

Fast, unique way to cast polyacrylamide gels

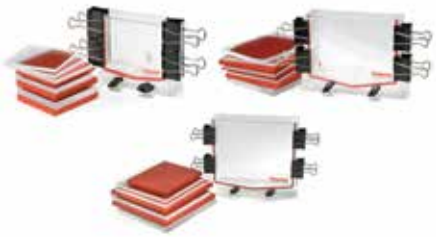
- Pouch collects excess polyacrylamide and seals bottom of gel, eliminating need for tape or bottom spacers
- Design allows storage of gels without dehydration by adding buffer and heat sealing
- Casts from one to four gels
- Few moving parts result in outstanding durability and extra long life

Includes: Casting stand with three-point leveling base, blocking plate, spacer placer, 25 gel pouches, clamping screws, bubble level and leveling screws

Cat. No.	Compatible With	Gel Size	L x W x H
JGC-4	Owl P8DS, P82, P81	10 × 10cm	13 × 13 × 11cm
JGC-3	Owl P10DS	20 × 20cm	23 × 17 × 17cm
JGC-2	Owl P9DS	14 × 16cm	17 × 18 × 15cm

Thermo Scientific Owl JGC Gel Casting System Replacement Parts

Cat. No.	Description	Dimensions	For Use With
GP4-100	Gel Pouches; Pack of 100	10 × 10cm	JGC-4 Systems
GP4-25	Gel Pouches; Pack of 25	10 × 10cm	JGC-4 Systems
JG4-PL	Spacer Placer; Pack of 3	—	JGC-4 Systems
JGC4-006	Blocking Plate; Each	10 × 10cm	JGC-4 Systems
GP3-100	Gel Pouches; Pack of 100	20 × 20cm	JGC-3 Systems
GP3-25	Gel Pouches; Pack of 25	20 × 20cm	JGC-3 Systems
JG3-PL	Spacer Placer; Pack of 3	—	JGC-3 Systems
JGC-003	Blocking plate; Each	20 × 20cm	JGC-3 Systems
GP2-100	Gel Pouches; Pack of 100	14 × 16cm	JGC-2 Systems
GP2-25	Gel Pouches; Pack of 25	14 × 16cm	JGC-2 Systems
JG2-PL	Spacer Placer; Pack of 3	—	JGC-2 Systems
JGC2-003	Blocking Plate; Each	14 × 16cm	JGC-2 Systems
R10013	Leveling screws	1"L	JGC-4, JGC-3, JGC-2 Systems
R10014	Clamping screws	2"L	JGC-4, JGC-3, JGC-2 Systems



Thermo Scientific Owl Gradient Gel Casters

Simultaneously casts from 1 to 5 gels

- Use external gradient maker to cast gels with ease and great reproducibility
- Gradient gels may be pumped in through port in base of caster—requires no external pump due to gravity pull
- Design and format of unit will provide years of service

Includes: Casting stand with base port, spacer placer, foam, acrylic spacer plates, four binder clamps, front plate, 2 wing knobs and blocking plate

Cat. No.	Description	Gel Size (L × W)	Footprint (L × W × H)	Compatible Owl Units
P7-CST	Gradient Gel Caster	10 × 10cm	15 × 13 × 13cm (5.8 × 5.1 × 5.1in.)	P81, P82, P8DS
P1-CST	Gel Caster	14 × 16cm	20 × 13 × 18cm (7.9 × 5.1 × 7in.)	P9DS
P2-CST	Gel Caster	20 × 20cm	25 × 13 × 23cm (9.8 × 5.1 × 9in.)	P10DS

Thermo Scientific Owl SGC Sequencing Gel Casters

Simple method that allows bubble-free gels to be cast in less than three minutes

- Horizontal plate sliding procedure, capillary action drawing gel between plates, and surface tension, keeps the gel from leaking, no taping or special assembly required
- Exposure to hazardous acrylamide is decreased, reducing cleanup time
- Available in two lengths: 48 or 65.5cm
- Fully adjustable to accomodate glass plates from 20 to 42cm wide

Includes: Adjustable casting platform, width adjustment knobs, 12 binder clamps

Cat. No.	Plate Size (L × W)	L x W x H	Compatible Owl Units
SGC-1	48 × 20-42cm	71 x 21 x 12.2cm (28 x 8.25x 4.75in.)	S4S, S3S
SGC-2	65.5 × 20-42cm	102 x 21 x 12.2cm (40 x 8.25 x 4.75in.)	S4S, S3S

Thermo Scientific Owl Accessories for CST Multiple Gradient Gel Casters

Cat. No.	Description
CL-12	Binder clamps (pk. of 12)
CL-125	Stainless-steel clamps (pk. of 12)

Thermo Scientific Owl Gel-Drying Kits

Convenient method of preserving protein gels by air drying them between two sheets of cellophane

- Preserves protein gels easily and economically, while eliminating distortion problems common in other drying procedures
- Available in minigel and large format sizes
- Beveled-edge design of gel-drying frame makes assembly easy

Includes: Complete kits include two sets of gel-drying frames, 50 sheets of precut cellophane, two solid back plates, and eight side clips; frames and cellphane are also available separately

Cat. No.	Description	L x W
GDF-10	Gel-Drying Kit, Minigel Format	14 × 14cm
GDF-20	Gel-Drying Kit, Large Format	24 × 24cm

Thermo Scientific Owl Gel Drying Kit Accessories

Cat. No.	Description	L × W
GDF-3	Gel drying frame, Minigel	14 × 14cm
GDF-1	Gel drying frame, Large	24 × 24cm
CM10	Precut Cellophane; 50 sheets	14 × 14cm
CM20	Precut Cellophane; 50 sheets	24 × 24cm

Thermo Scientific Owl Gel Staining Box

Permits staining, fixing and destaining in the same container

- Resistant to most organic dyes, silver and other stains.
- Holds up to 125mL of liquid and one gel when used on a shaking platform
- Grooved lid enables proper orientation and stability when stacking
- Made of clear plastic, so gels can be viewed directly in the tray

Ordering Information: Package of 5

Cat. No.	Exterior DimensionL × W × H	Capacity
GSB-3	11 × 11 × 3cm	125mL

Thermo Scientific Owl Blotting Paper

High-quality blotting paper ideal for wicking and blotting applications

- Provides sufficient thickness to absorb adequate amounts of buffer for semi-dry electroblotting without the loss of mechanical stability
- Available in pre-cut mini gel and large format gel sizes
- Compatiable with Owl electroblotting systems

Cat. No.			Material	Weight	Thickness	Flowrate
FP-1	20 × 20cm	HEP-1	100% cotton fiber	183g/m2	0.83mm	35mL/min.
FP-3	46 × 57cm	—				
FP-4	10 × 10cm	HEP-1, VEP-2				
FP-5	18 × 20cm	HEP-1, VEP-3				
FP-6	9 × 9cm	HEP-1, VEP-3				
FP-7	12 × 16cm	HEP-1				

Thermo Scientific Owl Transfer Membranes

Hydrophobic membranes that are ideal for Western blotting

- Thermo Scientific offers Immobilon*-P, PVDF transfer membrane
- This membrane provides the highest signal-to-noise ratio, which allows the use of mild blocking procedures
- Immobilon-P has high protein retention; is compatible with all standard visualization methods; and can be used for protein sequencing
- Immobilon is available in minigel and large-format gel sizes

Cat. No.	Format	Membrane Size
TM151-1	Roll, 26.5cm × 3.75m	26.5cm × 3.75m
TM151-4	Sheets (Pack of 10)	15 × 15cm
TM151-5	Sheets (Pack of 10)	10 × 10cm

Thermo Scientific Owl RF-3 Filing System

Ideal for organizing your refrigerator, coldroom, freezer or benchtop

- Eight compartments constructed of durable 0.64cm thick acrylic
- No skid rubber feet prevent sliding
- Use either vertically or horizontally

Notes: Microtube racks are not included

Cat. No.	Array	Compartments	Material	Exterior L × W × H	Interior L × W × D
RF-3	2 × 4	8	Sturdy 0.25" thick acrylic	6 × 9 × 12"	2.625 × 2.625 × 8.875"

Thermo Scientific Owl Pipet Holder

Designed to hold standard glass and disposable pipets in square or round cans

Cat. No.	Description	Material	Exterior L × W × H	Interior L × W × H
PCH-1	Pipet Holder	Sturdy 0.25" thick acrylic	13.5 × 11.5 × 16"	3 × 3 × 11.25"

Thermo Scientific Owl EC-105 Compact Power Supply

Ideal for DNA and RNA electrophoresis

- Equipped with an over current detector for maximum safety
- Easy-to-use power supply operates in constant voltage
- The adjustment knob and hi-lo range switch control the output, which is variable in 10V increments from 20V to 250V
- Two-position switch toggles the bright LED display from indicating output voltage to output current
- The supply is also equipped with an over current detector for maximum safety and has two jacks

Warranty¥: 1 year

Cat. No.	Maximum Voltage	Max. Current	No. of Jacks	Display Modes	L × W × H	Electrical
105ECA-115	250V	300mA @ 150-250V; 500mA below 150V	1	Voltage or current	15 × 20 × 11cm (6 x 8 x 4.5in.)	115V/60Hz
105ECA-LVD	250V	300mA @ 150-250V; 500mA below 150V	1	Voltage or current	15 × 20 × 11cm (6 x 8 x 4.5in.)	230V/50Hz

Cat. No.	Description
112ECA	250V Power Supply Timer

Thermo Scientific Owl EC-300XL2 Compact Power Supply

Simple-to-use, multi-purpose, lightweight and great for DNA/RNA and Pprotein electrophoresis

- Power-off memory retains settings after shut-down
- Stackable design saves benchtop space
- Soft-touch key pad allows quick set-up
- Designed for safety
- Non-skid rubber feet provide stability

Warranty¥: 1 year

Cat. No.	Output Voltage	Max. Current	No. of Jacks	Display Modes	Timer	L × W × H	Electrical
EC300XL	300V	400mA	3	Voltage or current	0-999 min.	26 × 14 × 13.3cm (10.25 × 5.5 × 5.25in.)	120V 50/60Hz
EC300XL2	300V	400mA	3	Voltage or current	0-999 min.	26 × 14 × 13.3cm (10.25 × 5.5 × 5.25in.)	230V 50/60Hz

Thermo Scientific Owl EC-200XL High Current Power Supply

Simple-to-use, multi-purpose, lightweight and great for DNA/RNA, protein and blotting electrophoresis

- Power-off memory retains settings after shut-down
- Stackable design saves benchtop space
- Soft-touch key pad allows quick set-up
- Designed for safety
- Non-skid rubber feet provide stability

Warranty¥: 1 year

Cat. No.	Output Voltage	Max. Current	No. of Jacks	Display Modes	Timer	L × W × H	Electrical
EC200XL	200V	2000mA	4	Voltage or current	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	120V 50/60Hz
EC200XL2	200V	2000mA	4	Voltage or current	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	230V 50/60Hz

Thermo Scientific Owl EC-1000XL Programmable Power Supply

Great for DNA/RNA, protein and blotting electrophoresis

- Power-off memory retains settings after shut-down
- Offers constant power mode
- Stackable design saves benchtop space
- Soft-touch key pad allows quick set-up
- Designed for safety
- Non-skid rubber feet
- Easy to operate

Warranty¥: 1 year

Cat. No.	Output Voltage	Max. Current	No. of Jacks	Display Modes	Timer	L × W × H	Electrical
EC1000XL	1000V	500mA	4	Voltage, current, or power	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	120V 50/60Hz
EC1000XL2	1000V	500mA	4	Voltage, current, or power	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	230V 50/60Hz

Thermo Scientific Owl EC-3000XL Programmable Power Supply

Simple-to-use, multi-purpose and lightweight

- Power-off memory retains settings after shut-down
- Offers constant power mode
- Stackable design saves benchtop space
- Soft-touch key pad allows for quick set-up
- Designed for safety
- Non-skid rubber feet

Warranty[¥]: 1 year

Cat. No.	Output Voltage	Max. Current	No. of Jacks	Display Modes	Timer	L × W × H	Electrical
EC3000XL	3000V	400mA	4	Voltage, current, or power	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	120V 50/60Hz
EC3000XL2	3000V	400mA	4	Voltage, current, or power	0-99 hr. 59 min.	31 × 27 × 13.3cm (12 × 10.75 × 5.25in.)	230V 50/60Hz

Thermo Scientific Owl Power Supply Leads

- Power supply leads include a retractable sheath end for convenience and safety
- Power supply leads are manufactured with strain relief cord to prevent breakage

Cat. No.	Description
PSL-5	Power supply leads, 3 ft. (includes one black and one red lead)

furnaces

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Thermo Scientific Thermolyne Small Benchtop Muffle Furnaces

Fast heatup and excellent energy efficiency — ideal for ashing most types of organic and inorganic samples, heat treating small steel parts, performing ignition tests, conducting gravimetric analysis and for the determination of volatile and suspended solids

- Available in two capacities and reaches a maximum temperature of 1100°C
- Digital single setpoint temperature control to 1100°C
- Single display shows actual temperature or setpoint
- Ceramic fiber insulation permits faster heatup, reducing energy consumption
- Embedded heating element on top and both sides improves temperature uniformity
- Drop-down door doubles as a shelf for loading and unloading
- Door safety switch stops power to heating elements when door is opened
- Thermocouple break protection cuts power to heating elements, preventing failure runaway condition
- 0.95cm (0.38in.) diameter port in chamber rear for monitoring temperatures with independent measuring devices

Ordering Information: Replacement heating elements and thermocouples available separately
Includes: Thermocouple, line cord, and 1 hearth tray
Warranty¥: 1 year (parts and labor)
Certifications: All units CSA approved, -33 units also CE marked

Cat. No.	Capacity	Temp. Range	Temp. Stability (Uniformity)	Interior D x W x H	Exterior L x W x H	Electrical	Shipping Weight
FB1315M	1.3L (0.04 cu. ft.)	100° to 1100°C	±0.3°C at 1000°C (±7.8°C at 1000°C)	13 x 10.3 x 9.8cm (5 x 4 x 3.8in.)	33 x 23 x 36cm (13 x 9 x 14in.)	120V 50/60Hz 1060w	9kg (20 lb.)
FB1318M	1.3L (0.04 cu. ft.)	100° to 1100°C	±0.3°C at 1000°C (±7.8°C at 1000°C)	13 x 10.3 x 9.8cm (5 x 4 x 3.8in.)	33 x 23 x 36cm (13 x 9 x 14in.)	208V 50/60Hz 1060w	9kg (20 lb.)
FB1310M	1.3L (0.04 cu. ft.)	100° to 1100°C	±0.3°C at 1000°C (±7.8°C at 1000°C)	13 x 10.3 x 9.8cm (5 x 4 x 3.8in.)	33 x 23 x 36cm (13 x 9 x 14in.)	240V 50/60Hz 1060w	9kg (20 lb.)
FB1314M	1.3L (0.04 cu. ft.)	100° to 1100°C	±0.3°C at 1000°C (±7.8°C at 1000°C)	13 x 10.3 x 9.8cm (5 x 4 x 3.8in.)	33 x 23 x 36cm (13 x 9 x 14in.)	100V 50/60Hz 1060w	9kg (20 lb.)
FB1310M-33	1.3L (0.04 cu. ft.)	100° to 1100°C	±0.3°C at 1000°C (±7.8°C at 1000°C)	13 x 10.3 x 9.8cm (5 x 4 x 3.8in.)	33 x 23 x 36cm (13 x 9 x 14in.)	240V 50/60Hz 1060w	9kg (20 lb.)
FB1415M	2.1L (0.07 cu. ft.)	100° to 1100°C	±0.5°C at 1000°C (±5.0°C at 1000°C)	15.2 x 12.7 x 10.8cm (6 x 5 x 4.25in.)	40 x 25 x 37cm (15.8 x 10 x 14.5in.)	120V 50/60Hz 1450w	12.7kg (28 lb.)
FB1418M	2.1L (0.07 cu. ft.)	100° to 1100°C	±0.5°C at 1000°C (±5.0°C at 1000°C)	15.2 x 12.7 x 10.8cm (6 x 5 x 4.25in.)	40 x 25 x 37cm (15.8 x 10 x 14.5in.)	208V 50/60Hz 1520w	12.7kg (28 lb.)
FB1410M	2.1L (0.07 cu. ft.)	100° to 1100°C	±0.5°C at 1000°C (±5.0°C at 1000°C)	15.2 x 12.7 x 10.8cm (6 x 5 x 4.25in.)	40 x 25 x 37cm (15.8 x 10 x 14.5in.)	240V 50/60Hz 1520w	12.7kg (28 lb.)
FB1410M-33	2.1L (0.07 cu. ft.)	100° to 1100°C	±0.5°C at 1000°C (±5.0°C at 1000°C)	15.2 x 12.7 x 10.8cm (6 x 5 x 4.25in.)	40 x 25 x 37cm (15.8 x 10 x 14.5in.)	240V 50/60Hz 1520w	12.7kg (28 lb.)
FB1414M	2.1L (0.07 cu. ft.)	100° to 1100°C	±0.5°C at 1000°C (±5.0°C at 1000°C)	15.2 x 12.7 x 10.8cm (6 x 5 x 4.25in.)	40 x 25 x 37cm (15.8 x 10 x 14.5in.)	100V 50/60Hz 1450w	12.7kg (28 lb.)

-33 units available with plug for China: please add "**CN**" at the end of the Cat. No.

Hearth Trays

Cat. No.	For Use With
PH44X1	FB1300 Furnace
PH48X1	FB1400 Muffle Furnace

Thermo Scientific Thermolyne Industrial Benchtop Muffle Furnaces

Rugged design with multiple safety features and choice of two temperature control options

Industrial benchtop muffle 2.2L / 0.08 cu. ft

Includes: Furnace, Platinel® II thermocouple and a ceramic hearth tray (Cat No. PHX2) to protect the bottom heating element
Warranty¥: 1 year (parts and labor)
Certifications: All units cUL, UL listed
Notes: 120V models require power cord and hardwiring. 240V models include a power cord

NOT AVAILABLE IN EUROPE

- Reaches 1200°C maximum temperature
- Heavy-duty firebrick insulation surrounds the opening for added durability
- Adjustable alarm or Over-temperature Protection (OTP) setting can be used to protect the furnace or loaded chamber from excessive heat
- Thermocouple break protection cuts power to the heating elements, preventing a thermocouple failure runaway condition
- Counter-weighted door swings upward, directing heat away from operator
- Four individual embedded elements in special refractory cement permit excellent heat distribution in the chamber
- Door safety switch protects operator by removing power to the heating elements upon opening the door
- Rear-mounted 0.38in. (0.95cm) diameter port for monitoring chamber temperatures with independent measuring devices
- LED display simultaneously shows both setpoint and actual furnace temperatures in either °C or °F (programmable models only)

Single-setpoint Controller (B1)

- Single ramp to setpoint and a dwell
- Single display shows actual temperature or setpoint

8-step Programmable Controller (C1)

- Ramps to vary heat-up rate and dwell cycles to hold temperature at set levels from 0.1 to 999.9 minutes
- "Holdback" feature "holds" program until furnace temperature heats up or cools down to preprogrammed parameters — program will never outrun furnace performance

Cat. No.	Capacity	Temp. Range	Control	Interior D x W x H	Exterior L x W x H	Electrical	Shipping Weight
FD1535M	2.2L (0.08 cu. ft.)	100° to 1200°C	B1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	120V 50/60Hz, 18.6A 2230w	23.5kg (52 lb.)
FD1530M*	2.2L (0.08 cu. ft.)	100° to 1200°C	B1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	240V 50/60Hz, 9.3A 2230w	23.5kg (52 lb.)
FD1545M	2.2L (0.08 cu. ft.)	100° to 1200°C	C1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	120V 50/60Hz, 18.6A 2230w	23.5kg (52 lb.)
FD1540M*	2.2L (0.08 cu. ft.)	100° to 1200°C	C1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	240V 50/60Hz, 9.3A 2230w	23.5kg (52 lb.)
FD1530M-33	2.2L (0.08 cu. ft.)	100° to 1200°C	B1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	240V 50/60Hz, 6.5A 1560w	23.5kg (52 lb.)
FD1540M-33	2.2L (0.08 cu. ft.)	100° to 1200°C	C1	22.8 x 10.1 x 9.5cm (9 x 4 x 3.75in.)	45.7 x 27.9 x 41.9cm (18 x 11 x 16.5in.)	240V 50/60Hz, 6.5A 1560w	23.5kg (52 lb.)

*available with plug for China: please add "**CN**" at the end of the Cat. No.

Hearth Trays

Cat. No.	D x W x H
PHX1	8.2 x 10.1 x 1.27cm (3.25 x 4 x 0.5in.)
PHX2	20.3 x 9.6 x 1.9cm (8 x 3.8 x 0.75in.)

Thermo Scientific Thermolyne Benchtop Muffle Furnaces

Ideal for general laboratory use, including gravimetric analysis, sintering, quantitative analysis and heat treating

Benchtop muffle 5.8L / 0.2 cu.ft

- Reaches a 1200°C maximum temperature
- Available in two capacities for added flexibility
- Built-in vent port removes contaminants and moisture to extend the life of the heating element and furnace
- For added protection, the door safety switch stops power to heating elements when door opens
- Thermocouple break protection cuts power to heating elements, preventing a thermocouple failure runaway condition
- Two open coil heating elements on chamber sides assure fast heat-up with minimum temperature gradient
- Thermal-efficient ceramic insulation surrounds chamber for maximum energy efficiency
- 0.312in. dia. port for monitoring chamber temperatures with independent measuring device at rear of chamber

F47900, F48000 Models

- F47900 models have 2L chamber capacity, F48000 models have 5L chamber capacity

Choice of Temperature Controllers

- Furnaces that use B, C or D control also use a mechanical over-temperature protection relay
- **A1:** Digital single setpoint control; single display shows actual temperature or setpoint
- **B1:** Digital single setpoint control with a single ramp to setpoint and a dwell; single display shows actual temperature or setpoint; mechanical over-temperature protection relay is included
- **C1:** Digital programmable control with one stored program of 8 segments; mechanical over-temperature protection relay is included
- **D1:** Digital programmable control with 4 stored programs, 16 segments per program, and RS-232 communications interface; mechanical over-temperature protection relay is included

Includes: Power cord and one hearth tray, F48000 models also include a ceramic shelf (SH480X1)
Warranty[¥]: 1 year (parts and labor)
Certifications: CSA approved, CE marked as indicated

Accessories

Cat. No.	Description	For Use With
PH479X1	Hearth Tray, 15.2 x 14.3 x 0.95cm	F47900 Muffle Furnace
SH480X1	Ceramic Shelf, 17.4 x 17.3 x 1.2cm	F48000 Muffle Furnace (one shelf position at center)
PH480X1	Hearth Tray, 25.4 x 19.3 x 0.95cm	F48000 Muffle Furnace
AY408X1A	Stainless Steel Exhaust Tubing Kit, 2.5in. ID x 60in. L	Atmosphere Controlled Ashing and Muffle Furnaces

Cat. No.	Capacity	Temp. Range	Interior D x W x H	Exterior L x W x H	Control	Electrical	Shipping Weight
F47910‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	A1	240V 50/60Hz 1000w 4.2 A	18.5kg (41 lb.)
F47910-33†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	A1	240V 50/60Hz 1000w 4.2 A	18.5kg (41 lb.)
F47914	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	A1	100V 50/60Hz 750W 7.5A	18.5kg (41 lb.)
F47915‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	A1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48010‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	A1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48010-33†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	A1	240V 50/60Hz 1560w 6.5A	27.2kg (60 lb.)
F48015-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	A1	120V 50/60Hz 1800w 15A	27.2kg (60 lb.)
F48018‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	A1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)
F47920‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	B1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47920-33†	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	B1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47924	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	B1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47925	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	B1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48020 -DB‡	5.8L (0.2 cu. ft.)	100° to 1200°C 212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	B1	240V 50/60Hz 1800w 7.5A	18.5kg (41 lb.)
F48020-33†	5.8L (0.2 cu. ft.)	100° to 1200°C 212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	B1	240V 50/60Hz 1560w 6.5A	27.2kg (60 lb.)
F48028‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	B1	208V 50/60Hz 1560W 7.5A	27.2kg (60 lb.)
F48025-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	B1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F47920-80	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	C1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47920-33-80†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	C1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47924-80	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	C1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47925-80	2L (0.07 cu. ft.)	100° to 1200°C 212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	C1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48020-80	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	C1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48020-33-80†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	C1	240V 50/60Hz 1800w 6.5A	27.2kg (60 lb.)
F48025-60-80‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	C1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F48028-80	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	C1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)
F47950‡	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	D1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47950-33†	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	D1	240V 50/60Hz 1000w 4.2A	18.5kg (41 lb.)
F47954	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	D1	100V 50/60Hz 750w 7.5A	18.5kg (41 lb.)
F47955	2L (0.07 cu. ft.)	100° to 1200°C (212° to 2192°F)	15 x 13.7 x 10cm (6 x 5 x 4in.)	39 x 28.5 x 47cm (15.5 x 11.3 x 18.5in.)	D1	120V 50/60Hz 1000w 8.3A	18.5kg (41 lb.)
F48050-33†	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	D1	240V 50/60Hz 1800w 6.5A	27.2kg (60 lb.)
F48050‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	D1	240V 50/60Hz 1800w 7.5A	27.2kg (60 lb.)
F48055-60‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	D1	120V 50/60Hz 1800w 15.0A	27.2kg (60 lb.)
F48058‡	5.8L (0.2 cu. ft.)	100° to 1200°C (212° to 2192°F)	25 x 18 x 13cm (10 x 7 x 5in.)	50 x 34 x 19cm (19.5 x 13.3 x 19in.)	D1	208V 50/60Hz 1560w 7.5A	27.2kg (60 lb.)

† CE marked; ‡ CSA listed; -60 models include 20-amp cord.
-33 units available with plug for China: please add "CN" at the end of the Cat. No.
-60 models having a 20-amp power cord.

Thermo Scientific Thermolyne Premium Large Muffle Furnaces

Robust design and choice of four temperature controllers, ideal for industrial applications including ashing organic and inorganic samples and conducting gravimetric analysis

Premium large muffle furnace - 14L / 0.5 cu. ft

Includes: Models F6010 and F6018 include a cord and plug set
Required Accessories: All models except F6010 and F6018 require hardwiring
Warranty¥: 1 year (parts and labor)
Certifications: All units CSA approved, -33 units also CE marked

- Spacious 14L (0.5 cu. ft.) capacity and reaches a maximum of 1200°C
- Four heating elements are located on the chamber top, bottom and sides for enhanced temperature uniformity
- Built-in vent port removes undesirable contaminants and moisture to extend the life of the element and unit
- Rear of the chamber incorporates a 0.312 in. diameter port for monitoring chamber temperatures with independent measuring devices
- Optional stainless-steel shelf doubles load capacity (maximum temperature of 900°C)
- Door safety switch stops power to heating elements when door opens
- Thermocouple break protection cuts power to the heating elements, preventing a thermocouple failure runaway condition
- Furnaces with B1, C1, and D1 control also use a mechanical over-temperature protection relay

Choice of Temperature Controllers

- **A1:** Digital single setpoint control; single display shows actual temperature or setpoint
- **B1:** Digital single setpoint control with single ramp to setpoint and a dwell; single display shows actual temperature or setpoint
- **C1:** Digital programmable control with one stored program of eight segments
- **D1:** Digital programmable control with four stored programs, 16 segments per program and Controller includes RS-232 communications

Cat. No.	Capacity	Temp. Range	Temp. Stability/ Uniformity at 1000°C	Interior D x W x H	Exterior L x W x H	Control	Electrical	Shipping Weight
F6018	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±0.3°C ±2.2°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	A1	208V 50/60Hz 11.2A 2325w	60.8kg (134 lb.)
F6010*	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±0.3°C ±2.2°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	A1	240V 50/60Hz 12.9A 3095w	60.8kg (134 lb.)
F6028C	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	B1	208V 50/60Hz 19.2A 4000w	60.8kg (134 lb.)
F6020C	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	B1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)
F6020C-33	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	B1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)
F6028C-80	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	C1	208V 50/60Hz 19.2A 4000w	60.8kg (134 lb.)
F6020C-80	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	C1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)
F6020C-33-80	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	C1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)
F6038CM	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	D1	208V 50/60Hz 19.3A 4000w	60.8kg (134 lb.)
F6030CM	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	D1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)
F6030CM-33	14L (0.5 cu.ft.)	100° to 1200°C (212° to 2192°F)	±1.5°C ±4.5°C	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 48.5 x 53.3cm (20.1 x 19.1 x 21in.)	D1	240V 50/60Hz 18.3A 4400w	60.8kg (134 lb.)

* Available with plug and cord for China: order F6010CN

Accessories

Cat. No.	Description
JSX16	Shelf Pegs (4 required)
PH177X1	Hearth Tray, 22.9 x 27.3 x 1.9cm (one per chamber floor)
PHX1	Hearth Tray, 8.2 x 10.1 x 1.27cm (up to 9 per chamber floor in 3x3 pattern)
SH408X1	Stainless-steel shelf (requires 4 shelf pegs), max. temperature: 900°C, number of shelf positions: 7

Thermo Scientific Thermolyne Largest Tabletop Muffle Furnaces

Ideal for safe operation with a range of applications including annealing glass, determinations of volatiles, catalyst research and ashing organic and inorganic samples

Largest tabletop muffle furnace
45L / 1.6 cu. ft

Warranty[Y]: 1 year (parts and labor)
Certifications: All units CSA approved, -33 units also CE marked
Required power cord and hardwiring not included.

- Triple the usable working area using two supplied accessory refractory shelves (number of shelf positions: 5)
- Advanced LED digital-set/digital-display temperature controller is microprocessor-controlled
- LED display simultaneously shows both setpoint and actual furnace temperatures in °C or °F
- User-selectable over-temperature protection
- Open thermocouple protection
- Chamber has five shelf positions

Safety and Design Features

- Heating elements are on chamber top, bottom and sides for enhanced temperature uniformity
- Built-in vent port removes undesirable contaminants and moisture to extend the life of the element and unit
- Rear of chamber incorporates a 0.25in. diameter port for monitoring chamber temperatures with independent measuring devices
- Critical electronic components and heating elements are protected by a 35A circuit breaker
- Door safety switch stops power to the heating elements when door opens

Choice of Temperature Controllers

- Furnaces that use B1, C1 or D1 control also use a mechanical Over-temperature Protection relay
- **B1:** Digital single setpoint control with a single ramp to setpoint and dwell; single display shows actual temperature or setpoint
- **C1:** Digital programmable control with one stored program of 8 segments
- **D1:** Digital programmable control with 4 stored programs, 16 segments per programl, and RS-232 communications interface

Cat. No.	Capacity	Temp. Range	Temp. Stability and Uniformity	Interior D x W x H	Exterior L x W x H	Control	Electrical	Shipping Weight
F30428C	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	B1	208V 50/60Hz 26.4A 5500w	117.9kg (260 lb.)
F30420C	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	B1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)
F30420C-33	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	B1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)
F30428C-80	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	C1	208V 50/60Hz 26.4A 5500w	117.9kg (260 lb.)
F30420C-80	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	C1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)
F30420C-33-80	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	C1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)
F30438CM	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	D1	208V 50/60Hz 26.4A 5500w	117.9kg (260 lb.)
F30430CM	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	D1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)
F30430CM-33	45L (1.6 cu. ft.)	100° to 1093°C	±1.2°C at 1000°C ±3.45°C	36 x 36 x 36cm (14 x 14 x 14in.)	64.7 x 54.6 x 74.9cm (25.5 x 21.5 x 29.5in.)	D1	240V 50/60Hz 22.9A 5500w	117.9kg (260 lb.)

Accessories

Cat. No.	Description	D x W x H
PH146X1	Hearth Tray	17.1 x 14.9 x 1.9cm (6.75 x 5.9 x 0.75in.)
SH412X1	Shelf - max weight 11.3 kg (25 lbs), 5 shelf positions	35.2 x 25.4 x 1.27cm (13.87 x 10 x 0.56in.)
AY408X1A	Exhaust Tubing Kit	—

Thermo Scientific Thermolyne Atmosphere Controlled Ashing Furnaces

Ideal for coal and coke ashing procedures

Type F6000-60 with SS shelf and handle

Warranty¥: 1 year (parts and labor)
Certifications: CSA certified, CE marked as indicated
Required power cord and hardwiring not included.

- Reaches 975°C with the standard stainless-steel manifold and 1093°C with the optional inconel manifold
- Adjustable gas flowmeter/valve (0-80L/min.) on front for easy access when adjusting the airflow rate
- Stainless-steel manifold at rear chamber prewarms incoming gases, provides a maximum temperature gradient of only ±3°C at 750°C
- Chamber rear has a 0.25in. diameter port for monitoring chamber temperatures with independent measuring devices
- Includes hose barb (in back of chamber) for inert gas line with tubing 0.64cm (0.25 in.) I.D. and 0.96cm (0.375in.) O.D

Type F6000

- Includes two dual-purpose stainless-steel trays and one handle. Each tray can accommodate 24 (30mL) porcelain crucibles or 38 (10mL) quartz crucibles

Type F6000-80 programmable models

- Meet ASTM® D3174 specifications: 3 to 4 air exchanges per min.
- Can be programmed to norm: "Heating rate of 8°C/min. to 500°C, 6°C/min. from 500° to 750°C, Hold at 750°C for two hours, then turn off automatically"

Cat. No.	Capacity	Maximum Temp.	Holds	Interior D x W x H	Exterior L x W x H	Control	Electrical
F6020C-33-60‡	14L (0.5 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 49 x 53cm (20 x 19.1 x 21in.)	Digital single setpoint with ramp and dwell (B1)	240V, 18.3A 4400w
F6028C-60†	14L (0.5 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 49 x 53cm (20 x 19.1 x 21in.)	Digital single setpoint with ramp and dwell (B1)	208V, 19.2A 4000w
F6020C-33-60-80‡	14L (0.5 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 49 x 53cm (20 x 19.1 x 21in.)	Digital programmable with 1 program, 8 segments (C1)	240V, 18.3A 4400w
F6028C-60-80	14L (0.5 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 49 x 53cm (20 x 19.1 x 21in.)	Digital programmable with 1program, 8 segments (C1)	208V, 19.2A 4000w
F6030CM-33-60‡	14L (0.5 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	25 x 33 x 18cm (10 x 12.8 x 6.8in.)	51 x 49 x 53cm (20 x 19.1 x 21in.)	Digital programmable with 4 programs, 16 segments each (D1)	240V, 18.3A 4400w
F30420C-60-80†	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 1 program, 8 segments (C1)	240V, 22.9A 5500w
F30420-33-60-80‡	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 1 program, 8 segments (C1)	240V, 22.9A 5500w
F30428C-60-80†	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 1 program, 8 segments (C1)	208V, 23.4A 5500w
F30430CM-60†	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 4 programs, 16 segments each (D1)	240V, 22.9A 5500w
F30430CM-33-60‡	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 4 programs, 16 segments each (D1)	240V, 22.9A 5500w
F30438CM-60†	45L (1.6 cu.ft.)	975°C	24 (30mL) porcelain or 38 (10mL) quartz crucibles	36 x 36 x 36cm (14 x 14 x 14in.)	65 x 55 x 75cm (25.5x 21.5 x 29.5in.)	Digital programmable with 4 programs, 16 segments each (D1)	208V, 23.4A 5500w

† CSA approved. ‡ CE marked.

Accessories

Cat. No.	Description	For Use with
TY408X2A	Crucible Trays	Atmosphere Controlled Ashing Furnace
SH408X1	Stainless-steel shelf (requires 4 shelf pegs JSX16), max. temperature: 900°C, number of shelf positions: 7	F6000-60 Atmosphere Controlled Ashing Furnace; Premium Large Muffle Furnaces
HN408X2A S	Shelf Handle	Atmosphere Controlled Ashing Furnaces
SH412X1	Refractory Shelf, number of shelf positions: 5	F30400-60 Atmosphere Controlled Ashing Furnaces
AY408X1	Inconel Manifold - increases maximum temperature to 1093°C	F6000 Furnace
AY408X1A	Exhaust Tubing Kit	Atmosphere Controlled Ashing and Muffle Furnaces
AY718X1	Inconel Manifold - increases maximum temperature to 1093°C	F30400 Furnace

Thermo Scientific Lindberg/Blue M Moldatherm Box Furnaces

Versatile selection of chamber box furnaces in several popular chamber sizes to meet a variety of demanding industrial and laboratory applications

Ordering Information: Factory-installed Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units.
Includes: 10ft. power cord except 1.5 cu. ft. models which require customer-supplied power cord or hardwiring
Warranty¥: 1 year (parts and labor)
Certifications: UL

NOT AVAILABLE IN EUROPE

- Unique insulation and heating element composites to minimize outer surface temperatures while maintaining uniform heat distribution within the chamber
- Advanced engineering and specialized construction techniques include variable density insulation, double shell cabinets, long-life heating elements and horizontal side swing doors
- Selectable self-tuning feature sets best control parameters for the thermal process
- PID control (proportional, integral, derivative) prevents overshoot
- Main power ON/OFF switch on control panel
- Controlled heat-up rate eliminates thermal shock to materials
- Quick heat-up and cool-down rates
- Adjustable high-limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint (°C or °F)

Advanced Construction

- Advanced double wall minimizes exterior surface temperatures for operator safety and energy efficiency
- Side-hinge door for convenient operation and full chamber access
- Long-life Type K thermocouple
- Air vent (1in. dia., top) and air inlet (0.375in. dia., rear) for inert atmosphere exchange; note: door is not gas-tight
- Removable and replaceable Moldatherm® hearth plate supports load and prevents damage due to spillage
- Energy efficient Moldatherm insulation with embedded heating elements
- Safety door switch to interrupt power to heating element when door is opened; protects heating element and minimizes exposure to end-user

Controller choices, with over-temperature protection:

- **A:** Digital single segment, single setpoint, one ramp to setpoint
- **B:** Digital single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control

Cat. No.	Capacity	Temp. Range	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Control	Electrical	Shipping Weight
BF51748A-1	1.99L (0.07 cu. ft.)	100° to 1100°C	20.3 x 10.2 x 10.2cm (4 x 8 x 4in.)	50.8 x 38.1 x 44.4cm (20 x 15 x 17.5in.)	A/OTP	120V 50/60Hz 1800w	25kg (55 lb.)
BF51748C-1	1.99L (0.07 cu. ft.)	100° to 1100°C	20.3 x 10.2 x 10.2cm (4 x 8 x 4in.)	50.8 x 38.1 x 44.4cm (20 x 15 x 17.5in.)	A/OTP	208/240V 50/60Hz 1800w	25kg (55 lb.)
BF51848A-1	1.99L (0.07 cu. ft.)	100° to 1100°C	20.3 x 10.2 x 10.2cm (4 x 8 x 4in.)	50.8 x 38.1 x 44.4cm (20x 15 x 17.5in.)	B/OTP	120V 50/60Hz 1800w	25kg (55 lb.)
BF51848C-1	1.99L (0.07 cu. ft.)	100° to 1100°C	20.3 x 10.2 x 10.2cm (4 x 8 x 4in.)	50.8 x 38.1 x 44.4cm (20 x 15 x 17.5in.)	B/OTP	208/240V 50/60Hz 1800w	25kg (55 lb.)
BF51766A-1	5.3L (0.19 cu. ft.)	100° to 1100°C	22.9 x 15.2 x 15.2cm (9 x 6 x 6in.)	53.3 x 43.1 x 54.6cm (21 x 17 x 21.5in.)	A/OTP	120V 50/60Hz 1800w	50kg (110 lb.)
BF51766C-1	5.3L (0.19 cu. ft.)	100° to 1100°C	22.9 x 15.2 x 15.2cm (9 x 6 x 6in.)	53.3 x 43.1 x 54.6cm (21 x 17 x 21.5in.)	A/OTP	208/240V 50/60Hz 1800w	50kg (110 lb.)
BF51866A-1	5.3L (0.19 cu. ft.)	100° to 1100°C	22.9 x 15.2 x 15.2cm (9 x 6 x 6in.)	53.3 x 43.1 x 54.6cm (21 x 17 x 21.5in.)	B/OTP	120V 50/60Hz 1800w	50kg (110 lb.)
BF51866C-1	5.3L (0.19 cu. ft.)	100° to 1100°C	22.9 x 15.2 x 15.2cm (9 x 6 x 6in.)	53.3 x 43.1 x 54.6cm (21 x 17 x 21.5in.)	B/OTP	208/240V 50/60Hz 1800w	50kg (110 lb.)
BF51794C-1	18.4L (0.65 cu. ft.)	100° to 1100°C	35.6 x 22.9 x 22.9cm (14 x 9 x 9in.)	65.4 x 53.3 x 66cm (25.75 x 21 x 26in..)	A/OTP	208/240V 50/60Hz 3500w	59kg (130 lb.)
BF51894C-1	18.4L (0.65 cu. ft.)	100° to 1100°C	35.6 x 22.9 x 22.9cm (14 x 9 x 9in.)	65.4 x 53.3 x 66cm (25.75 x 21 x 26in.)	B/OTP	208/240V 50/60Hz 3500w	59kg (130 lb.)
BF51728C-1	42.5L (1.5 cu. ft.)	100° to 1100°C	45.7 x 30.5 x 30.5cm (18 x 12 x 12in.)	76.2 x 60.9 x 71.1cm (30 x 24 x 28in.)	A/OTP	208/240V 50/60Hz 5600w	84kg (185 lb.)
BF51828C-1	42.5L (1.5 cu. ft.)	100° to 1100°C	45.7 x 30.5 x 30.5cm (18 x 12 x 12in.)	76.2 x 60.9 x 71.1cm (30 x 24 x 28in.)	B/OTP	208/240V 50/60Hz	84kg (185 lb.)

To add RS-485 Digital Communications Port to Furnace model, add "**COM**" to model number before last letter in cat. no. – e.g., BF51748**COM**A-1

Thermo Scientific Lindberg/Blue M LGO Box Furnaces

Latest technical advances in heating elements, insulation and temperature control, all integrated into a self-contained cabinet

- Feature exclusive LGO™ (light gauge overbend) heating elements and Moldatherm insulation for efficient and economical transfer of heat to chamber, with low exterior temperatures
- Variable heat-up rate eliminates thermal shock to materials with quick heat-up and cool-down rates
- Choice of side hinge or vertical lift door
- Air vent (1in. dia., top) and air inlet (0.375in. dia., rear) for inert atmosphere exchange (note: door is not gas-tight)
- Self-tuning, digital instrumentation for precise temperature setpoint and display
- Platinel II thermocouple for long-term stability
- 0.6 cu. ft. models feature vertical lift door; 2 cu. ft. models feature horizontal side swing door, hot side facing away from operator for protection

Microprocessor Control

- Microprocessor-based self-tuning PID control (proportional, integral, derivative) provides optimum thermal process, prevents overshoot
- Control panel designed for easy access and maintenance
- Main power ON/OFF switch on control panel
- Adjustable high-limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint in °C or °F
- Safety door switch interrupts power to heating element when door is opened; protects heating elements and minimizes exposure to end-user
- Removable shelves for versatility: all units include 1 two-part shelf; 16.4L has 1 center position; 55.3 L models have 3 shelf positions
- Moldatherm hearthplate supports load and prevents damage due to spillage

Digital, Single-Setpoint Controller (A)

- Single segment, single setpoint, one ramp to setpoint

Digital Single-Program, Multiple-Segment Programmable Controller (B)

- Single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control

Digital Multiple-Program, Multiple-Segment Programmable Controller (C)

- Available on models with P designation
- Multiple programs , 4 programs with up to 300 steps, and segments for ramp (up and down) and dwell (timed hold) temperature control

Over-temperature Control (OTC)

- Adjustable digital over-temperature control, available on selected models with B suffix designation
- Protects furnace and load in the event of primary control circuit failure
- Overrides main controller and shuts off power to furnace if high limit is reached
- Manual reset required for safety
- Operates via magnetic contacts through signal from independent thermocouple

Flowmeter Option (FM) (Inert Atmosphere Only)

- Available on selected models with FM designation
- Gas flowmeter, adjustable, located on front control panel
- Adjustable flowrate, range 1.0 to 10.0 cu. ft./hr. standard
- Suitable for inert gas or airflow to chamber
- Allows fresh air exchange for ashing applications
- Not suitable for combustible or volatile gases

Ordering Information: Required power cord and hardwiring not included. Factory-installed Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units
Includes: One two-part shelf (0.6 cu. ft. models have one shelf position at center position; 2.0 cu. ft. models have three shelf positions)
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Temp. Range	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Control	Electrical	Shipping Weight
BF51731C-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	A	208/240V 50/60Hz 4500w	75kg
BF51731BC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	A/OTC	208/240V 50/60Hz 4500w	75kg
BF51732C-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	B	208/240V 50/60Hz 4500w	75kg
BF51732BC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	B/OTC	208/240V 50/60Hz 4500w	75kg
BF51732PC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	C	208/240V 50/60Hz 4500w	75kg
BF51732PBC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	C/OTC	208/240V 50/60Hz 4500w	75kg
BF51732PFMC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	C/FM	208/240V 50/60Hz 4500w	75kg
BF51732PBFMC-1	16.4L (0.6 cu. ft.)	100° to 1200°C	27.9 x 33.0 x 17.8cm (11 x 12 x 11in.)	58.4 x 61 x 68.6cm (23 x 24 x 27in.)	C/OTC/FM	208/240V 50/60Hz 4500w	75kg
BF51841C-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	A	208/240V 50/60Hz 5800w	127kg
BF51841BC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	A/OTC	208/240V 50/60Hz 5800w	127kg
BF51842C-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	B	208/240V 50/60Hz 5800w	127kg
BF51842BC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	B/OTC	208/240V 50/60Hz 5800w	127kg
BF51842PC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.	C	208/240V 50/60Hz 5800w	127kg
BF51842PBC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	C/OTC	208/240V 50/60Hz 5800w	127kg
BF51842PFMC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	C/FM	5800w	127kg
BF51842PBFMC-1	55.3L (2.0 cu. ft.)	100° to 1200°C	38.1 x 38.1 x 38.1cm (15 x 15 x 15in.)	71.1 x 73.7 x 83.8cm (28 x 29 x 33in.)	C/OTC/FM	5800w	127kg

A, B, C: see details of control options, previous page
OTC: Over-temperature Control
FM: Flowmeter option
To add RS-485 Digital Communications Port to Furnace model, add "**COM**" to model number before last letter in cat.no. - e.g., BF51731**COM**C-1

Thermo Scientific Lindberg/Blue M Heavy-Duty 1200°C Box Furnaces

Unique internal construction and outer shell design that reduces external surface temperatures without compromising interior temperature uniformity

- Features individual heating elements at chamber top, bottom and sides for uniform heat distribution
- Unique Moldatherm ceramic fiber insulation to allow rapid heatup, recovery and cooldown rates. Swing-down door provides convenient loading platform
- Helically coiled, high-temperature alloy wire elements for extended service life
- High-temperature insulation in vestibule and floating plug door to minimize heat loss and improve temperature control
- Spring-loaded door holds door securely shut; door rests in horizontal position when open
- Sight glass for convenient observation of heated load during operation
- Refractory plate heating unit
- Long-life Platinel II thermocouple with 10ft. compensated lead wire and polarized plug
- Rugged, heavy-duty Inconel® hearthplate supports load and protects the furnace from damage due to spillage (Model BF51542C)
- Heating element imbedded in Moldatherm insulation (Model BF51542C)

Note: Independent control is sold separately; see next page.

Ordering Information: Choice of controllers available, including 1200°C digital single-program/multiple-segment programmable controller and over-temperature control
Required Accessories: Independent control console CC58114C. Required power cord and hardwiring not included.
Warranty¥: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Temp. Range	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Description	Electricial	Shipping Weight
BF51442C	9L (0.32 cu. ft.)	100° to 1200°C	35.6 x 19.5 x 13.3cm (14 x 7.5 x 5.25in.)	50.8 x 50.8 x 62.2cm (20 x 20 x 24.5in.)	With refractory plate heating element	208/240V 50/60 Hz 4800w	66kg (145 lb.)
BF51542C	23L (0.81 cu. ft.)	100° to 1200°C	36.8 x 26.7 x 24.1cm (14.5 x 10.5 x 9.5in.)	78.7 x 71.1 x 72.4cm (31 x 28 x 28.5in.)	With Moldatherm Heating Element (Four Sides)	208/240V 50/60 Hz 6200w	152kg (335 lb.)

Thermo Scientific Controllers for Lindberg/Blue M Heavy-Duty 1200°C Box Furnaces

Temperature accuracy and offer options for over-temperature control and multiple segment configuration

Ordering Information: Factory-installed Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units Required power cord and hardwiring not included.

NOT AVAILABLE IN EUROPE

1200°C Digital, Single Setpoint Controller

- Control console is fully wired and includes a solid-state power module, ON/OFF circuit breaker and thermocouple input jack
- Microprocessor-based PID control (proportional, integral, derivative), single segment, single setpoint, one ramp to setpoint
- Built-in adjustable high limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint in °C or °F
- Designed for operation on 208, or 240V 50/60Hz, single-phase line

Over-temperature Control on selected control consoles with "B" suffix designation

- Adjustable digital control is factory installed
- Protects furnace and load in the event of primary control circuit failure
- Overrides main controller and shuts off power to furnace if high limit is reached
- Must be manually reset for safety
- Operates via magnetic contacts through a signal from an independent thermocouple

Cat. No.	Description	Electricial
CC58114C-1	Single-Setpoint	208/240V 50/60Hz 30A
CC58114PC-1	Single-zone Console, Digital, Programmable	208/240V 50/60Hz 30A
CC58114BC-1	Single Setpoint with Over Temperature Control	208/240V 50/60Hz 30A
CC58114PBC-1	Single-zone Console, Digital, Programmable, with Over Temperature Control	208/240V 50/60Hz 30A

To add RS-485 Digital Communications Port to Furnace model, add "**COM**" to model number before last letter in cat. no. – e.g., CC58114**COM**C-1

Thermo Scientific Lindberg/Blue M 1700°C Box Furnaces, Large Chamber, Integral Control

Designed for efficient, high-temperature use with minimal maintenance

- Fast heatup to high temperatures, unique door design and control sophistication ranging from solid-state, single setpoint to more versatile microprocessor-based systems with programming and communications options
- Designed for efficient high-temperature use with minimal maintenance
- Choice of single setpoint or programmable control
- Side swing door provides full and easy access to chamber, protects user from heat surge
- Atmosphere port, 0.375in. diameter, for fresh air or inert gas inlet (located at back wall, bottom)
- Solid-state power module with ammeter, circuit breaker, transformer and front panel indicator lights for “Ready Element” and “Main Power Applied”
- Safety power disconnect switch cuts power to heating elements when door is opened
- Moldatherm high-temperature ceramic fiber insulation with advanced graded design for fast heat-up and resistance to thermal shock
- Moldatherm hearthplate supports load and protects chamber from spills or mishandling
- High-volume cooling fans move air between inner and outer chamber to reduce exterior shell temperatures and improve energy efficiency and operator safety
- Long-life type “B” thermocouples with 10ft. compensated lead wire and polarized plug for accurate high-temperature measurement
- Removable panels for easy access to replaceable heating elements and thermocouples

Smart Heating Elements

- Molybdenum disilicide elements with unique right-angle bend and sidewall mounting reduce maintenance usually associated with element termination and mounting
- Designed for easy replacement without matching resistance values
- Fast heat-up and recovery with excellent uniformity and energy efficiency
- Increased resistance to thermal shock, ideal for rapid cycling over extended periods

Over-temperature Protection (OTP)†

- Adjustable digital over-temperature control protects furnace and load in the event of primary control circuit failure
- Overrides main controller and shuts off power to furnace if high limit is reached
- Manual reset required for safety
- Operates via signal from independent thermocouple

Programmable Controller With Communications (COM Models)

- With RS-485 data port (communications card and port) for connection to remote computer
- Enables modification, interrogation and data transfer of instrument control and configuration parameters
- Up to 30 units can be connected to one PC
- Software not included (available as an option)
- Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units

Digital Multiple Program, Multiple Segment Programmable Controller

- Microprocessor-based PID control (proportional, integral, derivative) prevents overshoot
- Up to 30 programs and up to 300 segments for ramp (up and down) and dwell (timed hold) temperature control – up to 99 segments per program
- Simultaneous digital LED display of actual temperature vs. setpoint in either °C or °F
Digital Single-Setpoint Controller

Digital Single Setpoint Controller:

- Microprocessor-based PID control (proportional, integral, derivative) prevents overshoot
- Single segment, single setpoint, one ramp to setpoint
- Adjustable high limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint in either °C or °F

Ordering Information: Required power cord and hardwiring not included
Required Accessories: Power cord, hardwiring
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Maximum Temp.	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Controller	Electrical	Shipping Weight
BF51634PC-1	17L (0.6 cu. ft.)	1700°C	26.7 x 27.9 x 22.9cm (10.5 ×11 x 9in.)	61 x 71.1 x 78.7cm (24 x 28 x 31in.)	Multisegment/multiprogram	208/240V 50/60Hz 5900w	159kg (350 lb.)
BF51634PCOMC-1	17L (0.6 cu. ft.)	1700°C	26.7 x 27.9 x 22.9cm (10.5 ×11 x 9in.)	61 x 71.1 x 78.7cm (24 x 28 x 31in.)	Multisegment/multiprogram/ communications	208/240V 50/60Hz 5900w	159kg (350 lb.)
BF51664C-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Digital/1 setpoint	208/240V 50/60Hz 7100w	168kg (370 lb.)
BF51664PC-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Multisegment/multiprogram	208/240V 50/60Hz 7100w	168kg (370 lb.)
BF51664PCOMC-1	25.5L (0.9 cu. ft.)	1700°C	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	76.2 x 71.1 x 78.7cm (30 x 28 x 31in.)	Multisegment/multiprogram/ communications	208/240V 50/60Hz 7100w	168kg (370 lb.)

† For OTP specify Option B before last letter in cat. no. when ordering, e.g., BF51634P**B**C-1, or BF51634P**B**COMC-1
COM option requires communication Cable # 7043 for first unit and Communication Cable # 7044 for second and additional units

Thermo Scientific Lindberg/Blue M Multipurpose 1500°C Box Furnaces

Multipurpose furnaces feature integral control to 1500°C

- Double-wall construction with Moldatherm insulation for rapid heatup and cooldown, energy efficiency and cooler exterior surface temperatures
- Adjustable high-limit over-temperature protection
- Microprocessor-based PID control
- Choice of two controllers: single program with multiple segments for ramp (up and down) and dwell (timed hold) temperature control or multiple program with up to 300 segments
- Optional adjustable digital over-temperature control (OTC) protects furnace and load in the event of primary control circuit failure
- Simultaneous LED display of actual and setpoint temperatures in either °C or °F
- Silicon carbide heating elements for long-life, safety and reliable service with maximum energy savings
- Safety door switch interrupts power to heating elements when door is opened; protects elements and minimizes exposure to operator
- Moldatherm hearthplate (included) supports load and protects interior from spillage and mishandling
- Type “R” thermocouple (included) is integrated into chamber backwall
- 6L models with vertical lift door, 25L models with side swing door

Ordering information: Factory-installed Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace. Up to 30 units can be connected to one PC. Requires Communication Cable # 7043 for First unit and Communication Cable # 7044 for Second and additional units
Required power cord and hardwiring are not included.
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Maximum Temp.	Controller	Interior Dimensions (D x W x H)	Exterior Dimensions (L x W x H)	Electrical
BF51433C-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433BC-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog/OTC	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PBC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog/OTC	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF5143COMC-1	6L (0.21 cu. ft.)	1500°C	Multi Seg/1 Prog/ RS485 port	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51433PBCOMC-1	6L (0.21 cu. ft.)	1500°C	300 Seg/30 Prog/OTC/ RS485 port	30.5 x 15.2 x 12.7cm (12 x 6 x 5in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 6400w
BF51643C-1	25L (0.88 cu. ft.)	1500°C	300 Seg/30 Prog	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	208/240V 50/60Hz 14800w
BF51643BC-1	25L (0.88 cu. ft.)	1500°C	300 Seg/30 Prog/OTC	39.4 x 27.9 x 22.9cm (15.5 x 11 x 9in.)	73.7 x 63.5 x 66cm (29 x 25 x 26in.)	1 208/240V 50/60Hz 4800w

Thermo Scientific M104 Muffle Furnaces

Excellent protection against sample contamination with abrasion-resistant ceramic annealing chamber

- Designed for minimum space requirements and can be set up under the laboratory fume hood
- Environmentally friendly and economical — asbestos-free insulation minimizes energy consumption and keeps exterior temperature low
- Easy handling and loading via tilting door that also protects users from hot inside surface
- Reaches rated temperature of 1000°C in 110 min.*
- Working volume of 3.5L
- Standard model equipped with electronic controller, digital display and upper limit cut-out; deluxe models available with electronic or programmable controller, timer and exhaust fan

Ideal for applications including:

– Chemical analysis
– Annealing loss determination
– Materials testing
– Ashing processes

Ordering Alerts: Not availble in North America
Certifications: CE
Warranty¥: 2 years (parts and labor)

Cat. No.	Description	Capacity	Max. Temp.	Temp. Uniformity	Chamber Dimensions (D x W x H)	Exterior Dimensions (D x W x H)	Heat Output	Electrical	Shipping Weight
M104 Muffle Furnace									
50040485	With electronic controller and upper limit cut-out	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50040486	With electronic controller, upper limit cut-out and 24-hour timer	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50040487	With electronic controller, upper limit cut-out, 24-hour timer and exhaust fan	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50040488	With digital programmable temperature controller and upper limit cut-out	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50040489	With digital programmable temperature controller, upper limit cut-out and exhaust fan	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50049820	With adjustable fresh air supply for incinerating processes	3.5L (0.12 cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)
50040903	With electronic controller	3.5L (0.12cu. ft.)	1000°C	± 10°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm 22.4 x 18 x 25.4in)	2.5kW	230V 50/60Hz, 1040W	51kg (112.4 lb.)

* measured at ambient temperature of 23°C, with no load

Thermo Scientific K114 Chamber Furnaces

Ideal for use in crowded laboratories and for routine high temperature laboratory applications

- Extremely short heating and recovery times along with accurate temperature control
- Asbestos-free insulation for minimal energy consumption and low exterior temperature
- High temperature accuracy and optimised heating system layout ensure most efficient use of work space
- Easy temperature controls and easy handling and loading via tilting door
- Designed for minimum space requirements and can be set up under a laboratory fume hood
- Reaches 1100°C in 35 min.*

Ideal for applications including:

– Incineration
– Ashing
– Baking
– Annealing
– Analytical processes

Ordering Alerts: Not available in North America. Available options include choice of automatic upper limit cut-out (TWB), Digicon™ controller or Thermicon™ programmable controller, and timer
Certifications: CE
Warranty[¥]: 2 years (parts and labor)

Cat. No.	Description	Capacity	Max. Temp.	Temp. Uniformity	Chamber Dimensions (D x W x H)	Exterior Dimensions (D x W x H)	Heat Output	Electrical	Shipping Weight
50040491	With electronic controller and upper limit cut-out	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50040492	With electronic controller, upper limit cut-out, and 24-hr. timer	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50040493	With digital programmable temperature controller and upper limit cut-out	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50049812	With adjustable fresh air supply for incinerating purposes	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50040902	With electronic controller	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50047063	With electronic controller and exhaust fan	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)
50051059	With digital programmable controller and exhaust fan	3.5L (0.12 cu. ft.)	1100°C	± 6°K	16 x 17 x 13cm (6.3 x 6.7 x 5.1in)	57 x 45.6 x 64.6cm (22.4 x 18 x 25.4in)	1.7kW	230V 50/60Hz, 690W	79.4kg (36 lb.)

* measured at ambient temperature of 23°C, with no load

Thermo Scientific M110 Muffle Furnaces

Even heat distribution and economical operation in a small footprint

- Outstanding insulation and heating element arrangement give even heat distribution with minimal fluctuation
- Two-shell design with air pocket between annealing box and outside walls
- Requires only 0.41 sq m of bench space
- Rugged and flexible — for all types of lab applications, including heating of metals and drying at high temperatures
- Multiple layers of high-quality, asbestos-free ceramic fiber insulation
- Heating elements safely positioned in grooved blocks on side walls of the work space, covered with ceramic plates
- Hinged door designed with parallel forced guidance system — hot surface always faces away from user when door is open
- Adjustable upper limit cut-out protects samples and equipment
- Reaches 1100°C in 100 min.*

Ideal for applications including:

– Incineration and annealing processes
– Baking
– Heat treatment of metals
– Material testing

Cat. No.	Description	Capacity	Max. Temp.	Temp. Uniformity	Chamber Dimensions (D x W x H)	Exterior Dimensions (D x W x H)	Heat Output	Electrical	Shipping Weight
51010272	With electronic controller and upper limit cut-out	9L (0.32 cu. ft.)	1100°C	±7°K	30 x 20 x 15cm (11.8 x 7.9 x 5.9in)	72 x 57.6 x 75.2cm (28.4 x 22.7 x 29.6in)	2.9kW	230V 50/60Hz 1400W	78kg (172 lb.)
50057440	With electronic controller, upper limit cut-out and 24-hr. timer	9L (0.32 cu. ft.)	1100°C	±7°K	30 x 20 x 15cm (11.8 x 7.9 x 5.9in)	72 x 57.6 x 75.2cm (28.4 x 22.7 x 29.6in)	2.9kW	230V 50/60Hz 1400W	78kg (172 lb.)
51000808	With digital program controller, upper limit cut-out, exhaust fan and flue	9L (0.32 cu. ft.)	1100°C	±7°K	30 x 20 x 15cm (11.8 x 7.9 x 5.9in)	72 x 57.6 x 75.2cm (28.4 x 22.7 x 29.6in)	2.9kW	230V 50/60Hz 1400W	78kg (172 lb.)
50056360	With electronic controller, upper limit cut-out, 24-hour timer and exhaust fan	9L (0.32 cu. ft.)	1100°C	±7°K	30 x 20 x 15cm (11.8 x 7.9 x 5.9in)	72 x 57.6 x 75.2cm (28.4 x 22.7 x 29.6in)	2.9kW	230V 50/60Hz 1400W	78kg (172 lb.)
51000802	With digital program controller and upper limit cut-out	9L (0.32 cu. ft.)	1100°C	±7°K	30 x 20 x 15cm (11.8 x 7.9 x 5.9in)	72 x 57.6 x 75.2cm (28.4 x 22.7 x 29.6in)	2.9kW	230V 50/60Hz 1400W	78kg (172 lb.)

* measured at ambient temperature of 23°C, with no load

Accessories M104, K114, M110 Muffle Furnaces

Cat. No.	Description	For Use With
Accessories		
50040537	Exhaust Flue	K114 Chamber Furnace and M104 Muffle Furnace
50040492	Tray	K114 Chamber Furnace and M104 Muffle Furnace
50006394	Exhaust Flue	M110 Muffle Furnace
50006408	Tray	M110 Muffle Furnace
Factory-Installed Options		
50044447	Calibration Certificate for 900°C at center of work space	
50044188	Calibration, Additional Measuring Point	

Ordering Alerts: Not availble in North America; models available with optional 24 hr. timer, Thermicon P digital program controller with microprocessor, exhaust fan and/or exhaust flue. Exhaust flue (50006394) and tray (50006408) available separately
Certifications: CE
Warranty[¥]: 2 years (parts and labor)

Thermo Scientific Lindberg/Blue M Mini-Mite Tube Furnaces

Compact, portable single tube furnace insulated with Moldatherm for quick heatup and cooldown

- Microprocessor-based self-tuning PID control provides optimal thermal processes without overshoot
- Single segment, single setpoint, one ramp to setpoint
- Adjustable high-limit over-temperature protection
- Simultaneous LED display of temperature and setpoint in °C or °F
- Split-hinge design simplifies loading and unloading
- Safety switch disconnects power when furnace is opened
- Type K long-life thermocouple

Ordering information: Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace; up to 30 units can be connected to one PC. Process tubes not included and required. Purchase separately.
Includes: 9ft. (3m) power cord
Warranty¥: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

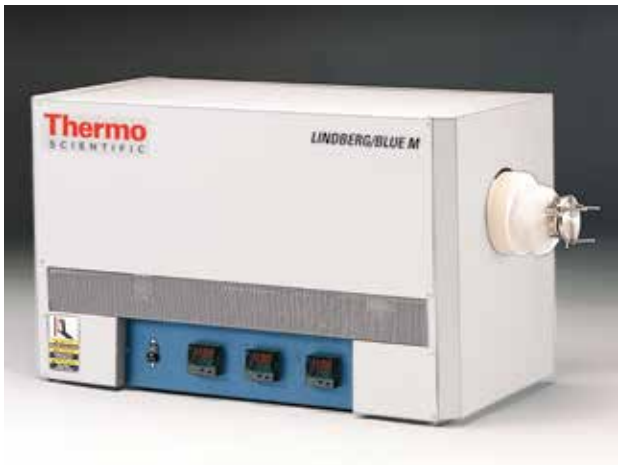
Cat. No.	Temperature Range	Heating Zone	Outside Dia. [Tube]	Overall L x W x H	Control Temperature	Electrical	Shipping Weight
TF55030A-1	100° to 1100°C	30.5cm (12in.)	2.5cm (1in.)	28 x 41 x 38cm (11 x 16 x 15in.)	Digital, Single Segment	120V 50/60Hz 800w	16kg (35 lb.)
TF55030C-1	100° to 1100°C	30.5cm (12in.)	2.5cm (1in.)	28 x 41 x 38cm (11 x 16 x 15in.)	Digital, Single Segment	208/240V 50/60Hz 800w	16kg (35 lb.)
TF55035A-1	100° to 1100°C	30.5cm (12in.)	2.5cm (1in.)	28 x 41 x 38cm (11 x 16 x 15in.)	Digital, Multisegment Programmable	120V 50/60Hz 800w	16kg (35 lb.)
TF55035C-1	100° to 1100°C	30.5cm (12in.)	2.5cm (1in.)	28 x 41 x 38cm (11 x 16 x 15in.)	Digital, Multisegment Programmable	208/240V 50/60Hz 800w	16kg (35 lb.)

To add RS-485 Digital Communications Port to Furnace model, add "COM" before last letter in cat. no. - e.g., TF55030COMA-1

208-240V units are available with cord and plug for China: please add "K" before last letter in cat.no. - e.g., TF55030KC-1 (note: no RS-485 port available for this version)

Thermo Scientific Lindberg/Blue M 1100°C Tube Furnaces

Three-zone 1100°C tube furnaces feature Moldatherm ceramic fiber insulation, excellent temperature uniformity, fast heatup and cooldown, and quick recovery with optimum power consumption



Ordering information: Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace; up to 30 units can be connected to one PC.
Required process tube not included. For information on process tubes contact your process tube supplier.
Includes: One set of two tube adapters (59545)
Required Accessories: Power cord and hardwiring
Warranty¥: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

- Ideal for a variety of process tubes including alumina, mullite, quartz and metallic
- Double-shell construction and variable density insulation combine to
- enhance performance over conventional furnaces
- Durable, high-strength hardware and a variety of control systems offer both convenience and versatility over a range of sophistication

Performance Features

- Three zones, three programmable controllers (one for each zone)
- Microprocessor-based self-tuning PID control (proportional, integral, derivative) provides optimum thermal process without overshoot
- Single program with multiple segments for ramp (up/down) and dwell (timed hold) temperature control
- Adjustable high-limit over-temperature protection
- Simultaneous LED display of temperature and setpoint in °C or °F

Design Features

- Flexible design—can be used for a variety of applications
- Innovative use of venting and insulating air spaces create lower exterior surface temperatures
- Long-life Type K thermocouple
- Accepts an array of tube adapters;largest specified tube size supplied.
- RS485 digital communications port available as an option; allows controller to be connected to a PC for remote monitoring and control

Cat. No.	Temperature Range	Heated Length	Heated Zone	Process Tube Diameter	Exterior L x W x H	Power Consumption	Shipping Weight
STF55346C-1	100° to 1100°C (212° to 2012°F)	61cm (24in.)	15.2/30.4/15.2cm (6/12/6in.)	2.5–7.5cm (1–3in.)	43.2 x 88.9 x 53.3cm (17 x 35 x 21in.)	208/240V, 50/60Hz 3800w	102kg (225 lb.)
STF55666C-1	100° to 1100°C (212° to 2012°F)	91.4cm (36in.)	22.3/45.7/22.3cm (9/18/9in.)	7.5–15.2cm (3–6in.)	55.9 x 137.2 x 66cm (22 x 54 x 16in.)	208/240V, 50/60Hz 11,000w	115kg (255 lb.)

To add RS-485 Digital Communications Port to Furnace model, add "COM" before last letter in cat. no. - e.g., STF55346COMC-1

Tube Adapters/Sleeves

Cat. No.	Description	For Use With
59541	1in. Adapter	STF55346C -1 Tube Furnace
59543	2in. Adapter	STF55346C -1 Tube Furnace
59545	3in. Adapter	STF55346C -1 Tube Furnace
59555	3in. Adapter	STF55666C -1 Tube Furnace
59556	4in. Adapter	STF55666C -1 Tube Furnace
59557	5in. Adapter	STF55666C -1 Tube Furnace
59558TA	6in. Adapter	STF55666C -1 Tube Furnace
59549	Blank (solid) Adapter	STF55346C -1 Tube Furnace
59559TA	Blank (Solid) Adapter	STF55666C -1 Tube Furnace

Note: Tube adapters sold individually (not as sets).

Thermo Scientific Lindberg/Blue M 1200°C Split-Hinge Tube Furnaces

Ease of observation and operation and configurable for horizontal or vertical use

Ordering information:
Independent digital temperature control module (ordered separately) are available in standard or programmable options
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE OPTIONAL IN EUROPE

- Moldatherm LGO™ heating element modules for excellent radial and linear temperature uniformity and fast heatup and cooldown
- Long-life, energy-efficient elements require little or no maintenance
- Unique cabinet design achieves lower exterior surface temperature
- Heat-reflecting element support assembly creates two highly effective insulating air spaces
- Compact cabinet with high temperature-resistant painted finish
- Accepts interchangeable Moldatherm tube adapters
- Long-life Platinel II thermocouple(s) with 10ft. compensated lead wire and polarized plug

Three Zone Models

- Three independent power circuits (zones) with independent thermocouples for control references
- Full adjustment of each zone over entire operating range to 1200°C
- Center zone uniformity achieved and operating length maximized through adjustable profiling of end zones by independent controller
- Temperature uniformity achieved with independent setpoint of end zones higher or lower than center

Note: Independent control is sold separately; see next page.

Cat. No.	Controller (Please order separately)	Temperature Range	Heated Zone	Exterior L x W x H	Tube O.D.	Electrical	Shipping Weight
Single Zone							
HTF55122A-1	Independent CC58114A	100° to 1200°C	30.5cm (12in.)	33.0 x 53.3 x 30.5cm (13 x 21 x 12in.)	1.9 to 2.54cm (0.75 to 1in.)	120V 50/60Hz	28kg (60 lb.)
HTF55322A-1	Independent CC58114A	100° to 1200°C	30.5cm (12in.)	43.2 x 58.4 x 40.6cm (17 x 23 x 16in.)	2.54 to 7.62cm (1 to 3in.)	120V 50/60Hz	55kg (120 lb.)
HTF55322C-1	Independent CC58114C	100° to 1200°C	30.5cm (12in.)	43.2 x 58.4 x 40.6cm (17 x 23 x 16in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	55kg (120 lb.)
HTF55342C-1	Independent CC58114C	100° to 1200°C	61.0cm (24in.)	43.2 x 88.9 x 40.6cm (17 x 35 x 16in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	80kg 175 lb.)
Three Zone							
HTF55347C-1	Independent CC58434C	100° to 1200°C	61.0cm (24in.)	43.2 x 88.9 x 40.6cm (17 x 35 x 16in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	89kg (195 lb.)
HTF55667C-1	Independent CC58434C	100° to 1200°C	91.4cm (36in.)	53.3 x 124.5 x 50.8cm (21 x 49 x 20in.)	76.2 to 152.4cm (3 to 6in.)	208/240V 50/60Hz	141kg (310 lb.)

Accessories

Cat. No.	Description	For Use with
59510	0.75in. Adapter	HTF55122 Tube Furnace
59511	1in. Adapter	HTF55122 Tube Furnace
59521	1in. Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
59522	1.5in. Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
59523	2in. Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
59524	2.5in. Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
59525	3in. Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
59535TA	3in. Adapter	HTF55667 Tube Furnace
59536TA	4in. Adapter	HTF55667 Tube Furnace
59537TA	5in. Adapter	HTF55667 Tube Furnace
59538TA	6in. Adapter	HTF55667 Tube Furnace
59539TA	Blank (solid) Adapter	HTF55667 Tube Furnace
59519	Blank (solid) Adapter	HTF55122 Tube Furnace
59529	Blank (solid) Adapter	HTF55322, HTF55342, HTF55347 Tube Furnaces
VFS551	Floor Stand, vertical	HTF55112A -1 Tube Furnace
VFS553	Floor Stand, vertical	HTF55322A -1, HTF55322C, HTF55342C -1, HTF55667C -1 and HTF55347C -1 Tube Furnaces
VFS556	Floor Stand, vertical	HTF55667C -1 Tube Furrnace

One set of (2) included with furnace:

- Model HTF55122A, (2) 1” dia. adapters; Models HTF55322A/C, (2) 2” dia. adapters;
- Model HTF55342C, (2) 3” dia. adapters.

Note: Tube adapters sold individually (not as sets).

Thermo Scientific Controllers for Lindberg/Blue M1200°C Tube Furnaces

Temperature accuracy and options for over-temperature control and multiple segment configuration

- Fully wired with advanced microprocessor-based digital control, solid-state power module, ON/ OFF circuit breaker and thermocouple input jacks for each zone
- Built-in adjustable high-limit over-temperature protection
- LED simultaneously displays actual temperature vs. setpoint in °C or °F
- Designed for operation on 120, 208, or 240V 50/60Hz, single-phase line

Over-temperature Control

- Adjustable digital control is factory installed
- Protects furnace and load in the event of primary control circuit failure
- Overrides main controller and shuts off power to furnace if high limit is reached
- Must be manually reset for safety
- Operates via magnetic contacts through a signal from an independent thermocouple

Ordering information: Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace; up to 30 units can be connected to one PC. Required power cord, hardwiring and interconnecting wiring are not included. For information on process tubes contact your process tube supplier.
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Description	For Use with	Electrical
CC58114A-1	Single-zone Console, Digital	1200°C Furnaces	120V 50/60Hz
CC58114C-1*	Single-Setpoint	1200°C Furnaces	208/240V 50/60Hz
CC58114BA*	Single-zone Console, Digital, with Over Temperature Control	1200°C Furnaces	120V 50/60Hz
CC58114PA-1	Single-zone, Multiple Segment	1200°C Split-hinge Tube Furnace	120V 50/60Hz
CC58114PBA-1	Single-zone, Multiple Segment	1200°C Split-hinge Tube Furnace	120V 50/60Hz
CC58114BC-1*	Single-zone Console, Digital, with Over Temperature Control	1200°C Furnaces	208/240V 50/60Hz
CC58114PBC-1	Single-zone Console, Digital, Programmable, with Over Temperature Control	1200°C Furnaces	208/240V 50/60Hz
CC58114PC-1	Single-zone Console, Digital, Programmable	1200°C Furnaces	208/240V 50/60Hz
CC58434C-1	Three-zone	1200°C Split-hinge Tube Furnace	208/240V 50/60Hz
CC58434BC-1	Three-zone Console, Digital, with Over Temperature Control	1200°C Furnaces	208/240V 50/60Hz
CC58434PC-1	Three-zone Console, Digital, Programmable Controller for Center Zone, with Over Temperature Control	1200°C Furnaces	208/240V 50/60Hz
CC584343PBC-1	Three-zone Console, Programmable, with Over Temperature Control	1200°C Furnaces	208/240V 50/60Hz
CC584343PC-1	Three-zone Console, Digital, Programmable	1200°C Furnaces	208/240V 50/60Hz
CC58434PBC-1	Three-zone, 16 Segment	1200°C Split-hinge Tube Furnace	208/240V 50/60Hz

* not available with RS585 port
To add RS-485 Digital Communications Port to Furnace model, add "**COM**" before last letter in cat. no. – e.g., CC58114**COM**A-1

Thermo Scientific Lindberg/Blue M 1500°C General-Purpose Tube Furnaces

Integral temperature control designed for a range of applications which require processing flexibility with fast heatup and recovery

- Energy-efficient Moldatherm insulation increases temperature uniformity, improves energy efficiency and helps to maintain low exterior cabinet temperatures during operation
- Accommodate 1in., 2in. and 3in. O.D. process tubes (customer supplied)
- Silicon carbide heating elements positioned above and below tube works with Type “R” thermocouple to stabilize temperature
- Integral microprocessor-based PID programmable control (proportional, integral, derivative) prevents overshoot
- Available with Single Program/Multiple Segment or Multiple Program/Multiple Segment Programmable Controller
- Program(s) and segment(s) for ramp (up and down) and dwell (timed hold) temperature control
- Adjustable high limit over-temperature protection
- Simultaneous LED display of actual temperature vs. setpoint
- Temperature display in °C or °F
- Optional Over-temperature Control (OTC) on Multi-Program/Multi-Segment model

Ordering information: Optional RS485 Digital Communications Port allows controller to be connected to a PC for remote monitoring and control of the furnace; up to 30 units can be connected to one PC. Required power cord, hardwiring and interconnecting wiring are not included. For information on process tubes contact your process tube supplier
Includes: 1 set of two 2” tube adapters
Warranty¥: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Type	Temperature Range	Heated Zone	Exterior L x W x H	Tube O.D.	Electrical	Shipping Weight
STF55433C-1	Multisegment (16)/single program	500° to 1500°C	30.5cm (12in.)	33.0 x 53.3 x 30.5cm (13 x 21 x 12in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	123kg (270 lb.)
STF55433PC-1	Multisegment (up to 99 segments)/ multiprogram	500° to 1500°C	30.5cm (12in.)	43.2 x 58.4 x 40.6cm (17 x 23 x 16in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	123kg (270 lb.)
STF55433PBC-1	Multisegment (up to 99 segments) multiprogram/OTC	500° to 1500°C	30.5cm (12in.)	43.2 x 58.4 x 40.6cm (17 x 23 x 16in.)	2.54 to 7.62cm (1 to 3in.)	208/240V 50/60Hz	123kg (270 lb.)

To add RS-485 Digital Communications Port to Furnace model, add “**COM**” before last letter in cat.no. – e.g., STF55433**COM**C-1

Accessories — Tube Adapters

Cat. No.	Description	For Use with
7100-2444-070	2.5cm (1in.)	STF55433C-1, STF55433PC-1, STF55433PBC-1
7100-2444-068	5cm (2in.)	STF55433C-1, STF55433PC-1, STF55433PBC-1
7100-2444-069	7.6cm (3in.)	STF55433C-1, STF55433PC-1, STF55433PBC-1

Note: Tube adapters sold individually (not as sets).

Thermo Scientific Lindberg/Blue M 1700°C Tube Furnaces

Rapid heatup, recovery and cooldown

- Feature heating elements with unique right-angle bend and sidewall mounting to deliver exceptional energy release, reduced thermal process cycle time, and cost savings through quicker throughput and energy efficiency
- Moldatherm graduated-density insulation provides safety, performance and outstanding radial and linear temperature uniformity with resistance to thermal shock
- Heating elements tolerate rapid cycling over extended periods; elements are easily replaceable without the need to match resistance values
- Type “B” thermocouples assure accurate temperature measurement and long thermocouple life; 10ft. compensated lead wire with polarized plug included
- Moldatherm graduated density insulation adds to safety and performance by forming enhanced insulation protection between the high-temperature chamber and exterior cabinet surface
- Double shell construction and convection cooling design reduces exterior surface temperature
- Removable louvered panels provide easier access to heating elements and thermocouple
- Temperature range: 500°C to 1700°C

Includes: 1 set of two 3” vestibules and sleeves.
Required Accessories: Independent digital temperature control module, available separately. Required power cord, hardwiring and interconnecting wiring are not included. For information on process tubes contact your process tube supplier.
Warranty¥: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Temp. Range and Control	Heated Zone	Exterior L x W x H	Tube O.D.	Electrical	Shipping Weight
STF54434C	500° to 1700°C Independent	30.5cm (12in.)	40.6 x 55.9 x 48.3cm (16 x 22 x 19in.)	7.6cm (3in.)	208/240V, 50/60Hz 5000w	43kg (95 lb.)
STF54454C	500° to 1700°C Independent	61.0cm (24in.)	40.6 x 86.4 x 48.3cm (16 x 34 x 19in.)	7.6cm (3in.)	208/240V, 50/60Hz 10,000w	75kg (165 lb.)

Note: Independent control is sold separately; see next page.

Accessories – Vestibules/Sleeves

Cat. No.	Description	For Use with
7219-2134-001	1in. Sleeve	STF54434C Tube Furnace
7219-2134-002	2in. Sleeve	STF54434C Tube Furnace
7219-2134-003	3in. Sleeve	STF54434C Tube Furnace
7219-2134-011	3in. Sleeve	STF54454C Tube Furnace
7219-2134-012	2in. Sleeve	STF54454C Tube Furnace
7219-2134-013	1in. Sleeve	STF54454C Tube Furnace
7219-2147-001	1in. Vestibule	STF54434C Tube Furnace
7219-2147-002	2in. Vestibule	STF54434C Tube Furnace
7219-2147-011	3in. Vestibule	S TF54454C Tube Furnace
7219-2147-003	3in. Vestibule	STF54434C Tube Furnace
7219-2147-012	2in. Vestibule	STF54454C Tube Furnace
7219-2147-013	1in. Vestibule	STF54454C Tube Furnace

- Optional Moldatherm vestibules permit operation with 1”, 2” and 3” O.D. process tubes for increased versatility. Two vestibules are required for each furnace
- Tube Sleeves may be placed over customer supplied process tubes to reduce thermal shock to the process tube. All tube sleeves are 3” long

Note: Tube adapters sold individually (not as sets).

Thermo Scientific Controllers for Lindberg/Blue M 1700°C Tube Furnaces

- Holdback feature allows the operator to set a "process vs. setpoint" temperature value which, when exceeded, holds the program to allow the process to catch up
- RS485 data port for connection to remote computer, allowing modification, interrogation and data transfer of all instrument control and configuration parameters
- Up to 30 units can be connected to one PC (software not included)

Required power cord, hardwiring and interconnecting wiring are not included.
Warranty[¥]: 1 year (parts and labor)

NOT AVAILABLE IN EUROPE

Cat. No.	Description	Electrical	For Use with
CC59256PCOMC-1	Digital, with Programmer, RS485 data port	208/240V 50/60 Hz	STF54434C
CC59256PBCOMC-1	Digital, with Programmer and Over Temperature Control, RS485 data port	208/240V 50/60 Hz	STF54434C
CC59256PCM2CTC-1	Digital, with Programmer	208/240V 50/60 Hz	STF54454C

hotplates & stirrers

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Thermo Scientific Cimarec+ Series

Our new Cimarec+ series digital stirrers, hotplates, and stirring hotplates are designed to provide precise stirring control, exceptional safety and temperature performance for your routine protocols. The Cimarec+ units are available in three sizes, providing flexibility from microscale chemistries to production operations.

Cimarec+ Digital Stirring Hotplate

Advanced technology

- StirTrac features innovative engineering for slow-speed stirring, consistent speed control, and strong magnetic coupling
- Temperature adjustable in 1 degree increments
- HOT TOP warning system designed to protect from accidental burns with prominent display when heating surface is above 50°C (122°F)
- Automatic over-temperature protection

Flexible, robust design

- Top plate choices in ceramic or aluminum
- Easy-to-read LED display for heating and stirring (except 4x4 model)
- Raised display design protects electronics from spills
- Optional temperature probe and splash guard protection shield
- Three sizes for different sample volumes
- Stir bar included with stirrer and stirring hotplate models

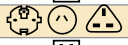
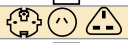
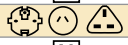
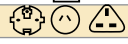
Simplicity. Safety. Value.

Heating Surface: 4.25" x 4.25" (10.8 x 10.8 cm) Overall Dimensions: 5" W x 10" D x 3.6" H (12.7 x 25.4 x 9.1 cm)

	Cat. No.	Description	Surface Type	Volts/Hz	Stir Range (RPM)	Max Surface Temp °C	Plug Configuration
4"x4"	**HP88854100**	Hotplate	Ceramic	100-120V 50/60Hz	N/A	540	
	HP88854105	Hotplate	Ceramic	230V 50/60Hz	N/A	540	
	S88854100	Stirrer	Ceramic	100-120V 50/60Hz	50-1500	N/A	
	S88854105	Stirrer	Ceramic	230V 50/60Hz	50-1500	N/A	
	SP88854100	Hotplate Stirrer	Ceramic	100-120V 50/60Hz	50-1500	540	
	SP88854105	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	540	

Note: 4"x 4" Hotplate Stirrer has digital temperature and analog stirring control.

Heating Surface: 7.25" x 7.25" (18.4 x 18.4 cm) Overall Dimensions: 8.2" W x 13" D x 3.8" H (20.8 x 33 x 9.7 cm)

	Cat. No.	Description	Surface Type	Volts/Hz	Stir Range (RPM)	Max Surface Temp °C	Plug Configuration
7"x7"	**HP88857100**	Hotplate	Ceramic	100-120V 50/60Hz	N/A	540	
	HP88857105	Hotplate	Ceramic	230V 50/60Hz	N/A	540	
	S88857100	Stirrer	Ceramic	100-120V 50/60Hz	50-1500	N/A	
	S88857105	Stirrer	Ceramic	230V 50/60Hz	50-1500	N/A	
	SP88857100	Hotplate Stirrer	Ceramic	100-120V 50/60Hz	50-1500	540	
	SP88857105	Hotplate Stirrer	Ceramic	230V 50/60Hz (EU Plug)	50-1500	540	
	SP88857106	Hotplate Stirrer	Ceramic	230V 50/60Hz (AUS/CN plug)	50-1500	540	
	SP88857107	Hotplate Stirrer	Ceramic	230V 50/60Hz (UK Plug)	50-1500	540	
	HP88857104	Hotplate	Aluminum	100-120V 50/60Hz	N/A	300	
	HP88857108	Hotplate	Aluminum	230V 50/60Hz	N/A	300	
	S88857104	Stirrer	Aluminum	100-120V 50/60Hz	50-1500	N/A	
	S88857108	Stirrer	Aluminum	230V 50/60Hz	50-1500	N/A	
	SP88857104	Hotplate Stirrer	Aluminum	100-120V 50/60Hz	50-1500	300	
	SP88857108	Hotplate Stirrer	Aluminum	230V 50/60Hz	50-1500	300	

Heating Surface: 10.25" x 10.25" (26.0 x 26.0 cm) Overall Dimensions: 11.3" W x 16.2" D x 4" H (28.7 x 41.1 x 10.2 cm)

	Cat. No.	Description	Surface Type	Volts/Hz	Stir Range (RPM)	Max Surface Temp °C	Plug Configuration
10"x10"	**HP88850100**	Hotplate	Ceramic	100-120V 50/60Hz	N/A	400	
	HP88850105	Hotplate	Ceramic	230V 50/60Hz	N/A	400	
	S88850100	Stirrer	Ceramic	100-120V 50/60Hz	50-1500	N/A	
	S88850105	Stirrer	Ceramic	230V 50/60Hz	50-1500	N/A	
	SP88850100	Hotplate Stirrer	Ceramic	100-120V 50/60Hz	50-1500	400	
	SP88850105	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	400	
	SP88850106	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	400	
	SP88850107	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	400	

Warranty: Three years **Certifications:** cCSAus (100-120V models), CE (230V models) **RoHS** compliant

Accessories for Thermo Scientific Cimarec+ and SuperNuova+ Series

Cat. No.	Description
CIC0001444	Splash guard / safety shield for all Cimarec+ and SuperNuova+ 4'' x 4'' Stirrers, Hotplates and Hotplate Stirrers
CIC0001445	Splash guard protection shield for all Cimarec+ and SuperNuova+ 7'' x 7'' Stirrers, Hotplates and Hotplate Stirrers
CIC0001446	Splash guard / safety shield for all Cimarec+ and SuperNuova+ 10'' x 10'' Stirrers, Hotplates and Hotplate Stirrers
CIC0001447	PT100 temperature probe, 0-400°C, Stainless steel for Cimarec+ (+/- 1.8°C @ 70°C) and SuperNuova+ (+/- 1.2°C @ 70°C) Hotplates
CIC0001448	PT1000 temperature probe, 0-400°C, Stainless steel, for Cimarec+ (+/- 1.0°C @ 70°C) and SuperNuova+ (+/- 0.5°C @ 70°C) Hotplates
CIC0001449	Hastelloy PT1000 temperature probe, 0-400°C, for Cimarec+ and SuperNuova+ Hotplates; Hastelloy is chemical and corrosion resistant.
CIC0001830	Supporting rod to be used with clamp and clamp holder to hold temperature probe and flask, suitable for all Cimarec+ and SuperNuova+ models
CIC0001831	Clamp and clamp holder to attach to supporting rod, suitable for all Cimarec+ and SuperNuova+ models

*When the probe is connected, the adjustable temperature range is 30-250°C.

Thermo Scientific SuperNuova+ Series

Our SuperNuova+ series stirrers, hotplates and stirring hotplates are designed to provide reliable performance, dependable safety and simple operation. SuperNuova+ units are available in two sizes and provide optimized controls and settings for applications that demand advanced precision.

Intuitive design

- Top plate choices in ceramic or aluminum
- Easy-to-read LED display for heating and stirring
- Raised display design protects electronics from spills
- Ability to save temperature settings
- Stainless steel PT100 temperature probe, supporting rod and clamp kit included with both hotplate and stirring hotplate
- Timer
- Stir bar comes standard with stirrer and stirring hotplate models
- Optional PT1000 temperature probe and splash guard protection shield

Advanced technology

- StirTrac features innovative engineering for slow-speed stirring, consistent speed control, and stronger magnetic coupling
- HOT TOP warning system designed to protect from accidental burns with prominent display when heating surface is above 50°C of set temperature (122°F)
- Temperature display resolution when connected with probe: <100°C: 0.1 degree; >100°C: 1 degree

Warranty: Three years
Certifications: cCSAus (100-120V models), CE (230V models) RoHS compliant

Heating Surface: 7.25" x 7.25" (18.4 x 18.4 cm) Overall Dimensions: 8.2" W x 13" D x 3.8" H (20.8 X 33 X 9.7 cm)

	Cat. No.	Description	Surface Type	Volts/Hz	Stir Range (RPM)	Max Surface Temp °C	Plug Configuration
7"x7"	**HP88857190**	Hotplate	Ceramic	100-120V 50/60Hz	N/A	450	
	HP88857195	Hotplate	Ceramic	230V 50/60Hz	N/A	450	
	S88857190	Stirrer	Ceramic	100-120V 50/60Hz	50-1500	N/A	
	S88857195	Stirrer	Ceramic	230V 50/60Hz	50-1500	N/A	
	SP88857190	Hotplate Stirrer	Ceramic	100-120V 50/60Hz	50-1500	450	
	SP88857195	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	450	
	HP88857194	Hotplate	Aluminum	100-120V 50/60Hz	N/A	300	
	HP88857198	Hotplate	Aluminum	230V 50/60Hz	N/A	300	
	SP88857194	Hotplate Stirrer	Aluminum	100-120V 50/60Hz	50-1500	300	
	SP88857198	Hotplate Stirrer	Aluminum	230V 50/60Hz	50-1500	300	

Heating Surface: 10.25" x 10.25" (26.0 x 26.0 cm) Overall Dimensions: 11.3" W x 16.2" D x 4" H (28.7 x 41.1 x 10.2 cm)

	Cat. No.	Description	Surface Type	Volts/Hz	Stir Range (RPM)	Max Surface Temp °C	Plug Configuration
10"x10"	**HP88850190**	Hotplate	Ceramic	100-120V 50/60Hz	N/A	400	
	HP88850195	Hotplate	Ceramic	230V 50/60Hz	N/A	400	
	S88850190	Stirrer	Ceramic	100-120V 50/60Hz	50-1500	N/A	
	S88850195	Stirrer	Ceramic	230V 50/60Hz	50-1500	N/A	
	SP88850190	Hotplate Stirrer	Ceramic	100-120V 50/60Hz	50-1500	400	
	SP88850195	Hotplate Stirrer	Ceramic	230V 50/60Hz	50-1500	400	

Thermo Scientific Nuova Hotplates, Stirring Hotplates & Stirrers

Excellent low end temperature control ideal for warming applications, culture media preparation and slow speed stirring of culture media

- Full stirring and heating capabilities, a compact design and low temperature stability for a wide range of warming applications requiring stir speeds as low as 100rpm
- Reaches maximum temperature in just 8 minutes.* Embedded heating element ensures even heat distribution
- Durable, die-cast aluminum case and corrosion-resistant porcelain-coated stainless-steel top
- Excellent low speed stirring (100rpm) can be achieved by turning knob to setting 1
- Topside drip edge protects internal components from spills
- Stirrer accommodates up to 20 lb. (9.1kg) load
- Porcelain coated stainless steel top gives excellent corrosion resistance

Includes: Integral ring stand holder accommodates a 0.5in. (1.3cm) diameter support rod, TFE stirbar
Warranty¥: Three years
Certifications: UL, CUL listed (S18520Q, S18525Q, SP18420Q, SP18425Q HP18320Q and HP18325Q only)
Notes: Recommended for use with glass vessels only.

Thermo Scientific Nuova Hotplates

Cat. No.	Surface Area	Temp. Range	Overall L x W x H	Shipping Weight	Electrical
HP18325Q	17.7 x 17.7cm (7.0 x 7.0in.)	38° to 371°C (100° to 700°F)	21.8 × 29.9 × 11.73cm (8.6 × 11.8 × 4.5in.)	4.5kg (10 lb.)	120V, 840w, 7.0A
HP18320Q	17.7 x 17.7cm (7.0 x 7.0in.)	38° to 371°C (100° to 700°F)	21.8 × 29.9 × 11.73cm (8.6 × 11.8 × 4.5in.)	4.5kg (10 lb.)	220 to 240V, 840w, 3.5A
HP18320-26Q	17.7 x 17.7cm (7.0 x 7.0in.)	38° to 371°C (100° to 700°F)	21.8 × 29.9 × 11.73cm (8.6 × 11.8 × 4.5in.)	4.5kg (10 lb.)	220 to 240V (supplied with European cord set), 840w, 3.5A

Thermo Scientific Nuova Stirring Hotplates

Cat. No.	Stirring Speed Range	Surface Area	Overall L x W x H	Temp. Range	Shipping Weight	Electrical
SP18425Q	100 to 1000rpm	17.7 x 17.7cm (7.0 x 7.0in.)	21.8 x 29.9 x 11.43cm (8.6 x 11.8 x 4.5in.)	38° to 371°C (100° to 700°F)	5kg (11 lb.)	120V, 858w, 7.0A
SP18420Q	100 to 1000rpm	17.7 x 17.7cm (7.0 x 7.0in.)	21.8 x 29.9 x 11.43cm (8.6 x 11.8 x 4.5in.)	38° to 371°C (100° to 700°F)	5kg (11 lb.)	240V, 851ww, 3.5A
SP18420-26Q	100 to 1000rpm	17.7 x 17.7cm (7.0 x 7.0in.)	21.8 x 29.9 x 11.43cm (8.6 x 11.8 x 4.5in.)	38° to 371°C (100° to 700°F)	5kg (11 lb.)	240V (with European cord set), 851w, 3.6A

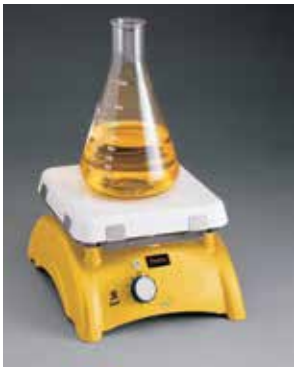
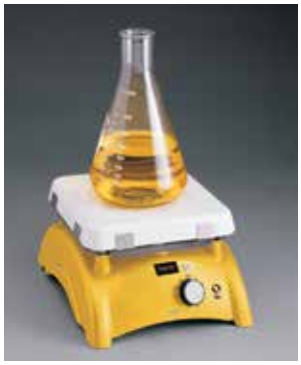
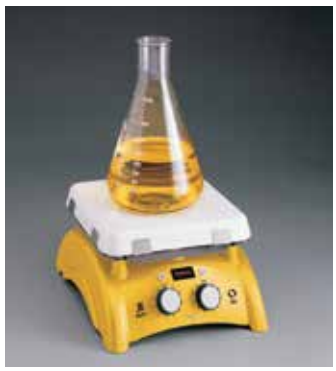
Thermo Scientific Nuova Magnetic Stirrers

Cat. No.	Stirring Speed Range	Surface Area	Overall L x W x H	Shipping Weight	Electrical
S18525Q	100 to 1000rpm	17.8 × 17.8cm (7 × 7in.)	21.8 × 29.9 × 11.43cm (8.6 × 11.8 × 4.5in.)	4.5kg (10lbs)	120V 50/60Hz, 18w, 0.3A
S18520Q	100 to 1000rpm	17.8 × 17.8cm (7 × 7in.)	21.8 × 29.9 × 11.43cm (8.6 × 11.8 × 4.5in.)	4.5kg (10lbs)	240V 50/60Hz, 11w, 0.1A
S18520-26Q	100 to 1000rpm	17.8 × 17.8cm (7 × 7in.)	21.8 × 29.9 × 11.43cm (8.6 × 11.8 × 4.5in.)	4.5kg (10lbs)	240V (with European cord set) 50/60Hz, 11w, 0.1A

*assumes ambient temperature of 23°C

Thermo Scientific Cimarec Basic Series

Sleek, rugged, no frills design combined with our renowned quality, performance

- Ideal for economical, general-purpose use
- Sleek, rugged design and construction promotes durability
- New top-plate design reduces chance of breakage
- Spill-away design diverts spills away from internal components
- Solid ceramic top plate cleans easily, resists acids and alkalis
- Integral ring-stand holder accommodates 0.5 in. (1.3cm) diameter support rod

Thermo Scientific Cimarec Basic Hotplates

Cat. No.	Surface Area	Top Plate Material	Temp. Range	Overall L x W x H	Electrical
HP194515	10.8 × 10.8cm (4.25 × 4.25in.)	Ceramic	150° to 538°C (302° to 1000°F)	20 × 14.5 × 12.7cm (7.9 × 5.7 × 5in.)	120V 60Hz, 3.21A, 385w
HP194825	18.4 × 18.4cm (7.25 × 7.25in.)	Ceramic	150° to 538°C (302° to 1000°F)	28.2 × 21.1 × 12.7cm (11.1 × 8.3 × 5in.)	120V 60Hz, 8.96A, 1062w

Thermo Scientific Cimarec Basic Stirring Hotplates

Cat. No.	Surface Area	Top Plate Material	Stirring Range	Temp. Range	Overall L × W × H	Electrical
SP194715	10.8 × 10.8cm (4.25 × 4.25in.)	Ceramic	250 to 2500rpm	150° to 538°C (302 to 1000°F)	20 × 14.5 × 12.7cm (7.9 × 5.7 × 5in.)	120V 60Hz, 3.45A, 405w
SP195025	18.4 × 18.4cm (7.25 × 7.25in.)	Ceramic	250 to 2500rpm	150° to 538°C (302 to 1000°F)	28.2 × 21.1 × 12.7cm (11.1 × 8.3 × 5in.)	120V 60Hz, 9.18A, 1086w

Thermo Scientific Cimarec Basic Stirrers

Cat. No.	Surface Area	Top Plate Material	Stirring Range	Overall L × W × H	Electrical
S194615	10.8 × 10.8cm (4.25 × 4.25in.)	Ceramic	250 to 2500rpm	20× 14.5 × 12.7cm (7.9 × 5.7× 5in.)	120V 60Hz, 0.45A, 21w
S194925	18.4 × 18.4cm (7.25 × 7.25in.)	Ceramic	250 to 2500rpm	28.2 × 21.1 × 12.7cm (11.1 × 8.3 × 5in.)	120V 60 Hz,0.48A, 23w

Includes: TFE-coated stir bar
Warranty[¥]: Three years
Certifications: cCSAus

Warranty¥: Three years

Thermo Scientific Student Hotplates

Small diameter heating surfaces, which provide high heat in a small footprint, ideal for quick sample testing

- Perforated stainless-steel case allows air to circulate to protect controls and countertop from excess heat
- Thermostatic temperature control provides excellent stability of the top plate temperature and the sample
- Hotplate reaches 260°C (500°F) in just 4.5 min.*
- Recommended for use with glass vessels

Cat. No.	Surface Material	Maximum Temp.	Electrical
HP2305BQ	Aluminum	371°C (700°F)	120V 50/60Hz, 325w, 2.7A
HP2310BQ	Aluminum	371°C (700°F)	240V 50/60Hz, 325w, 1.4A

Includes: TFE-coated stir bar
Warranty¥: Three years

Thermo Scientific StirBuddy Personal Stirrer

Compact and space-saving design with a large stirring surface to reduce risk of spills

- Solid-state speed control
- Direct-drive motor/magnet assembly stir solutions from water to viscous 50% glycerin
- Can recalibrate to accommodate viscous liquids and specialized vessels
- Top plate and base are made of molded thermoplastic polyester

Cat. No.	Stirring Speed	Dimensions	Shipping Weight	Electrical
S168515Q	200 to 2500rpm	15.2 x 7.6cm (6 x 3in.)	1.2kg (2.4 lb.)	120V 60Hz, 0.4A, 48w

Includes: TFE-coated stir bar
Warranty¥: Three years
Certifications: cCSAus

Thermo Scientific Stir Light 7 x 7 Stirrer

Illuminates hard-to-see titration end points, and ideal for general laboratory applications including reagent mixing and stirring bacteria cultures

- Lighted top allows easy viewing of samples while stirring
- Light and stirring functions can be used independently
- Large 7 × 7in. acrylic top plate surface accommodates 4L flasks
- Cool fluorescent bulbs minimize heat output
- Features built-in indicator light

Cat. No.	Stirring Speed	Top Plate Dimensions ,L x W	Shipping Weight	Electrical
SL194325	250 to 2500rpm	17.8 × 17.8cm (7 × 7in.)	2.7kg (6 lb.)	120V 60Hz, 37w

* with temperature setting at maximum and ambient temperature 23°C

Thermo Scientific Super-Nuova Multi-Position Digital Stirring Hotplates and Stirrers

Ideal for high-volume, high-performance processing and life science/biotechnology applications as well as labs with multiple users

Includes: Detachable line cord and plug, 6in. Type K probe. Stirring models also include stir bar
Warranty¥: Three years
Certifications: cCSAus (all models), CE (220-240V models)

Operating Features

- Features four independently controlled stirring positions
- Separate easy to read displays for heating and stirring are adjustable in 1°C and 1rpm increments.
- User programmable preset buttons can store 4 commonly used protocols at the touch of a button – excellent for labs with multiple users
- Microprocessor controlled feedback technology ensures accurate and stable setpoints
- Control either the top plate surface temperature or the liquid temperature (when using the included PTFE-coated probe)
- Calibration mode allows remote probe to the calibrated to external standards at a user selected temperature
- StirTrac technology with superb magnetic coupling provides smooth slow speed stirring and rapid braking.
- Walk away timer shuts off heating, stirring or both after preset user defined interval
- Integrated ring stand, single knob design and RS232 output

Safety Features

- Cast-aluminum base diverts spills from internal electronics
- Low-profile design and stable, rugged base prevent tipping and spillage
- User-adjustable over-temperature protection prevents overheating, short-circuiting and internal damage in case of sample overflow
- Red HOT TOP warning light activates when heating surface is above 50°C (122°F); unit flashes HOT OFF until surface temperature falls to 50°C or below, even when heat control is turned off
- Lock feature prevents accidental changes

Thermo Scientific Super-Nuova Multi-Position Digital Stirring Hotplates

Cat. No.	No. of Places	Stirring Range	Temp. Range	Overall L x W x H	Shipping Weight	Electrical
SP135935Q	4	50 to 1200rpm	RT +1° to 370° C (33.8° to 698°F)	41.1 × 28.7 × 10.2cm (16.2 × 11.3 × 4in.)	9.3kg (20.5 lb.)	120V 60Hz, 1400w, 11.8A
SP135930-33Q	4	50 to 1200rpm	RT +1° to 370° C (33.8° to 698°F)	41.1 × 28.7 × 10.2cm (16.2 × 11.3 × 4in.)	9.3kg (20.5 lb.)	220-240V 50-60Hz

Thermo Scientific Super-Nuova Multi-Position Digital Stirrers

Cat. No.	No. of Stirring Positions	Stirring Range	Overall L × W × H	Shipping Weight	Electrical
S136035Q	4	50 to 1200rpm	41.1 × 28.7 × 10.2cm (16.2 × 11.3 × 4in.)	9.3kg (20.5 lb.)	120V 60Hz
S136030-33Q	4	50 to 1200rpm	41.1 × 28.7 × 10.2cm (16.2 × 11.3 × 4in.)	9.3kg (20.5 lb.)	220-240V 50/60Hz

Thermo Scientific RT Basic Series Magnetic Stirrers

Experience the reliability of our plug-and-play stirrers, ideal for routine stirring applications

- Strong magnetic coupling to ensure consistent stirring during experimental procedures
- Three size options
- Low profile lightweight design with small footprint
- Speed Control: 150 to 2500rpm
- Two non-slip silicone plate covers included with all units (1 black, 1 white)

Cat. No.	88880007	88880008	88880009	88880010	88880011	88880012
Plug Configuration						
Mechanism	Brushless DC motor		Brushless DC motor		Brushless DC motor	
Stirring Capacity (H20)	2L		4L		5L	
Speed Range	150 to 2500rpm		150 to 2500rpm		150 to 2500rpm	
Maximum Load (vessel)	15kg / 33.07lbs		20kg / 44.09lbs		25kg / 55.12lbs	
Body Material	Polypropylene		Polypropylene		Polypropylene	
Top Plate Dimensions	120mm / 4.72in diameter		170mm / 6.69in diameter		220mm / 8.66in diameter	
Overall Dimensions (WxDxH)	130 x 130 x 65mm 5.12 x 5.12 x 2.56in		185 x 185 x 65mm 7.28 x 7.28 x 2.56in		230 x 230 x 65mm 9.06 x 9.06 x 2.56in	
Power Consumption	5W		6W		6W	
Power	100 – 240V, 50/60Hz		100 – 240V, 50/60Hz		100 – 240V, 50/60Hz	
Certifications	CE		CE		CE	
Warranty	2 Years		2 Years		2 Years	

Accessories for RT Basic Series Magnetic Stirrers	Cat. No.
Non-slip silicone plate cover for items 88880007 and 88880008 (White color, Silicone Ø120cm)	**88880144**
Non-slip silicone plate cover for items 88880009 and 88880010 (White color, Silicone Ø170cm)	**88880145**
Non-slip silicone plate cover for items 88880011 and 88880012 (White color, Silicone Ø220cm)	**88880146**

Non-slip Silicone Plate Covers

Thermo Scientific RT Touch Series Magnetic Stirrers

Stay in control with our low profile digital display stirrer, ideal for routine stirring applications where precise stir speed is required.

- Digital control
- Gradual start-up stirring to prevent splashing
- Threaded hole for support rod
- Low profile lightweight design with small footprint; two sizes available
- Strong magnetic coupling to ensure consistent stirring during experimental procedures
- Speed Control: 30 to 2000rpm
- Two non-slip silicone plate covers included with all units (1 black, 1 white)
- Timer: Run continuously or countdown
- Detachable Plug
- Programmable
- Includes stir bar

Cat. No.	88880013	88880014	88880015	88880016
Plug Configuration				
Speed Control	Digital		Digital	
Stirring Capacity (H_2O)	4L		5L	
Speed Range	30 to 2000rpm		30 to 2000rpm	
Maximum Load (vessel)	20kg / 44.09lbs		25kg / 55.12lbs	
Body and Top Plate Material	Polypropylene		Polypropylene	
Top Plate Dimensions	170mm / 6.69in diameter		220mm / 8.69in diameter	
Overall Dimensions (WxDxH)	210 x 280 x 72mm 8.27 x 11.02 x 2.82in		260 x 360 x 72mm 10.24 x 14.17 x 2.82in	
Power Consumption	6W		6W	
Power	100 – 240V, 50/60Hz		100 – 240V, 50/60Hz	
Certifications	CE		CE	
Warranty	2 Years		2 Years	

Accessories for RT Touch Series Magnetic Stirrers	Cat. No.
Non-slip silicone plate cover for items 88880013 and 88880014 (White color, Silicone Ø170cm)	**88880145**
Non-slip silicone plate cover for items 88880015 and 88880016 (White color, Silicone Ø220cm)	**88880146**

Non-slip Silicone Plate Covers

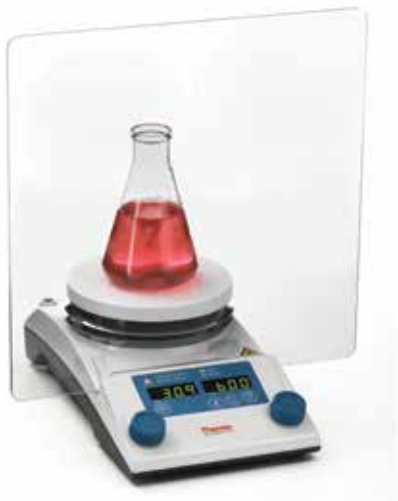
Thermo Scientific RT2 Digital Hotplate

Increase your confidence in safety and accuracy with our low-profile digital display hotplate. Equipped with hot top warning and built-in temperature shut-off to provide accurate heating of samples and safety to the laboratory.

- Precise digital control with 0.1C resolution
- Automatic over-temperature safety shut off at 450C
- Hot top warning indicator
- Microprocessor PID temperature control
- Non-slip heating bath (optional)
- Transparent safety shield (optional)
- Two threaded holes for Support Rods
- Keypad lock
- Heating rate can be set from 0 to 100% at 1% interval
- View current and set temperature simultaneously
- Timer can be set to start immediately, count down or start when top plate reaches desired set point
- Aluminum top provides excellent temperature uniformity while the thin ceramic coating provides excellent corrosion resistance and a white surface for optimal sample viewing.

Cat. No.	88880002	88880001
Plug Configuration		
Temperature Range	Max 350°C /662°F	
Heating Control	Feedback Control with PID	
Display	LED digital (0.1C resolution)	
Maximum Load (vessel)	25kg / 55.1lbs	
Body Material	Cast aluminum	
Top Plate Dimensions	140 mm / 5.5in diameter	
Top Plate Material	Ceramic coated aluminum	
Overall Dimensions (WxDxH)	161 x 290 x 100mm 6.34 x 11.42 x 3.94in	
Heating Power	600W	
Power	120V, 60Hz	230V, 50/60Hz
Certifications	CE, cCSAus	
Warranty	2 Years	

Accessories for RT2 Hotplate	Cat. No.
Heating Bath	**88880141**
Transparent Shield (PC)	**88880142**
Support Rod (Ø12mm, 400mm, M10)	**88880143**



RT2 with Transparent Shield

Thermo Scientific RT2 Basic Hotplate Stirrer

Rely on the accuracy of our low-profile analog hotplate stirrer for your routine applications. Each unit is equipped with hot top warning and built-in over-temperature safety shut-off.

- Automatic Over-temperature safety shut off at 450°C
- Hot top warning indicator
- Max temperature of 350°C
- Non-slip heating bath (optional)
- Transparent safety shield (optional)
- Supporting rod (optional)
- Two threaded holes for Support Rods
- Aluminum top provides excellent temperature uniformity while the thin ceramic coating provides excellent corrosion resistance and a white surface for optimal sample viewing.
- 20L stirring Capacity

Cat. No.	88880004	88880003
Plug Configuration		
Temperature Range	Max 350°C /662°F	
Heating Control	Scale	
Stirring Speed Range	50 to 2000rpm	
Maximum Load (vessel)	25kg / 55.1lbs	
Stirring Capacity (H20)	20L	
Body Material	Cast aluminum	
Top Plate Material	Ceramic coated aluminum	
Top Plate Dimensions	140 mm / 5.5in diameter	
Overall Dimensions (WxDxH)	161 x 290 x 100mm 6.34 x 11.42 x 3.94in	
Heating Power	600W	
Power	120V, 60Hz	230V, 50/60Hz
Certifications	CE, cCSAus	
Warranty	2 Years	

Accessories for the RT2 Basic Hotplate Stirrer	Cat. No.
Heating Bath	**88880141**
Transparent Shield (PC)	**88880142**
Support Rod (Ø12mm, 400mm, M10)	**88880143**

Heating Bath

Thermo Scientific RT2 Advanced Hotplate Stirrer

Experience precision with our low-profile digital display hotplatestirrer, equipped with PT100 sensor for precise temperature measurements for sensitive experimental procedures

- Precise digital control with 0.1C resolution
- Hot top warning indicator
- Microprocessor PID temperature control
- User configurable temperature limit setting
- Non-slip heating bath (optional)
- Transparent safety shield (optional)
- Two threaded holes for Support Rods
- Keypad lock
- Automatic Over-temperature safety shut off at 450C
- Heating rate can be set from 0 to 100% at 1% interval
- View current and set temperature simultaneously
- Timer: start immediately or when desired temperature is reached
- Aluminum top provides excellent temperature uniformity while the thin ceramic coating provides excellent corrosion resistance and a white surface for optimal sample viewing.
- 20L stirring Capacity
- Stir speed range: 30-2000RPM
- If stirring viscosity changes, the feedback function allows unit to maintain set speed.
- Temperature probe (included) when coupled, automatically changes to external sensor mode, user can check sample temperature also control via probe on digital display.

Cat. No.	88880006	88880005
Plug Configuration		
Temperature Range	Ambient 50°C to 350°C / 122°F to 662°F	
Heating Control	Feedback Control with PID / Scale	
Stirring Speed Range	30 to 2000rpm	
Maximum Load (vessel)	25kg / 55.1lbs	
Stirring Capacity (H_20)	20L	
Body Material	Aluminum	
Top Plate Material	Ceramic coated aluminum	
Top Plate Dimensions	140mm / 5.5in diameter	
Overall Dimensions (WxDxH)	161 x 290 x 100mm 6.34 x 11.42 x 3.94in	
Heating Power	600W	
Power	120V, 60Hz	230V, 50/60Hz
Certifications	CE, cCSAus	
Warranty	2 Years	

Accessories for RT2 Advanced Hotplate Stirrer	Cat. No.
Heating Bath	88880141
Transparent Shield (PC)	88880142
Support Rod (Ø12mm, 400mm, M10)	88880143
Temperature Probe (PT 100, SN-8-4 connector sensor)	88880147
C-5, Clamp Holder (PP body, Ø12 mm)	88880148
3 Prong Clamp (60mm grip)	88880149
Temperature Probe (PT100, A Class, 400°C)	88880150

Includes Temperature Probe
(PT 100, SN-8-4 connector sensor)

Thermo Scientific Cimarec i Magnetic Stirrers

No-Compromise Stirring Performance

Renowned for their outstanding quality and durability, Thermo Scientific Cimarec i stirrers are available in a range of sizes, with inductive drive systems to match the application or process need.

Powerful magnetic couplings ensure precise, reproducible stirring performance for both general and specialty applications. Cimarec i® stirrers are available with convenient built-in controllers or with versatile external controllers. All offer safe, low voltage operation. Many models feature hermetically-sealed drive housings that allow operation in challenging laboratory environments and facilitate cleaning.

Units with adjustable power settings, allow users to adjust the power to the lowest level necessary to maintain the desired speed, resulting in an environmentally friendly solution that decreases power consumption and lowers heat output.

Cimarec i Magnetic Stirrers – Maintenance-free, inductive-drive stirrers

Inductive-drive stirrers operate without moving parts, making them uniquely wear-free and maintenance-free.

- Hermetically-sealed drives for safe operation in demanding environments, easier cleaning and contamination prevention
- Single-point and multi-point stirring configurations

Cimarec i Stirrers

Thermo Scientific Cimarec i Mini & Micro Stirrer

Cimarec i Mini Stirrers

No larger than a thumbnail, perfect for stirring cuvettes

- Stir speeds up to 1400 rpm
- Stir volumes up to 5 mL

Cimarec i Micro Stirrers

Hermetically sealed housing resists dust and microorganisms

- Suitable for use in high humidity conditions, CO2, and refrigeration – and can be fully submerged in water baths up to 95°C
- Stainless-steel housing has excellent chemical resistance
- Stir speeds up to 1400 rpm; stir volumes up to 1L

Controller Choices

- The Cimarec i Micro and Mini series stirrers come standard with your choice of controller. Choose the Cimarec i standard Telemodul controller with its space saving design or the Cimarec i Telemodul 20C with microprocessor controls, adjustable power setting and programmability.

LINK & SYNC

Link and Sync up to 8 Mini or Micro stirrers using one controller with optional distributors (see page 102) and 50088140 Mini stirrers without controller or 50134760 Micro stirrers without controller.

Warranty[Y]: Five years
Certifications: CE

Cat. No.	Model	Stirring Speed	Power Setting	Protection Class (stirrer only)	Overall L x W x H	Weight	Electrical
50088130	Mini w/ Telemodul	130 to 1000rpm	0.1w	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	230V Euro
50088132	Mini w/ Telemodul	130 to 1000rpm	0.1w	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	230V UK
50088126	Mini w/ Telemodul	130 to 1000rpm	0.1w	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	100V Japan
50088118	Mini w/ Telemodul	130 to 1000rpm	0.1w	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	115V USA
50088120	Mini 20 w/ Telemodul 20C	130 to 1400rpm	0.5/0.1/0.15/0.2w	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	100-240V
50088140	Mini w/o Controller	–	–	IP67	12 × 12 × 5mm (0.47 × 0.47 × 0.19in.)	0.02kg	–
50088162	Micro w/Telemodul	130 to 1000rpm	3w	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	0.2kg	230V Euro
50088150	Micro w/Telemodul	130 to 1000rpm	3w	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	0.2kg	115V USA
50088151	Micro w/Standard Telemodul	130 to 1000rpm	3w	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	2.3kg	230V UK
50088149	Micro w/Standard Telemodul	130 to 1000rpm	3w	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	2.3kg	100V Japan
50088148	Micro 20 w/Telemodul 20C	130 to 1400rpm	2/4/6/8w	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	0.2kg	100-240V
50134760	Micro w/o Controller	–	–	IP68	48 × 48 × 15mm (1.8 × 1.8 × 0.6in.)	0.2kg	—

OPERATING CONDITIONS:
Mini: -10 to +56°C at 95% rH ; 100-240 V units contain a cord set with various plugs
Micro: -10 to 100°C at 95% rH, -10 to 120°C in dry air, 0-95°C submerged in water; 100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec i Maxi & Compact Stirrers

100% maintenance- and wear-free, hermetically sealed units designed for challenging stirring environments

- Powerful magnets and no moving parts, these inductive-drive stirrers are designed to go into water baths and incubators (including CO_2) and humid environments, as well as in refrigerators
- Outstanding mechanical, physical, thermal and chemical resistance
- Large, flat, easy-to-clean work surfaces
- Hermetically sealed chemically-resistant housing resists dust and microorganisms
- All models submersible for use in water baths up to 50°C
- Link and Sync up to 8 Compact stirrers or 4 Maxi stirrers using one controller with optional distributors (see page 102)

LINK & SYNC

Cimarec i Maxi Stirrer with External Control

- Stir speeds up to 2000rpm
- Stir volumes up to 5L

Cimarec i Compact Stirrer with External Control

- Stir speeds up to 1400rpm
- Stir volumes up to 1.5L

Controller Choices

- The Cimarec i Compact and Maxi stirrers come standard with your choice of controller. Choose the Cimarec i standard Telemodul controller with its space-saving design, the Cimarec i Telemodul 20C with microprocessor controls, adjustable power setting and programmability or the Cimarec i Telemodul 40C with higher speeds, more power settings and PC control. Adjustable power settings available on the Telemodul 20C and Telemodul 40C offer decreased power consumption and lower heat output

Warranty[Y]: Five years
Certifications: CE

Cat. No.	Model	Stirring Speed	Power Settings	Material	Protection Class (stirrer only)	L x W x H	Weight	Electrial
50088143	Maxi w/Standard Telemodul	130 to 2000rpm	6w	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	230V, Euro
50088145	Maxi w/Standard Telemodul	130 to 2000rpm	6w	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	230 V UK
50088146	Maxi w/Standard Telemodul	130 to 2000rpm	6w	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	100 V Japan
50088147	Maxi w/Standard Telemodul	130 to 2000rpm	6w	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	115V, USA
50088135	Maxi w/Telemodul 20C	130 to 4000rpm	4.5/9/13.5/18	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	100-240V
50088122	Maxi w/Telemodul 40C	130 to 5000rpm	3-36w	Stainless Steel	IP68	18 × 18 × 3.5cm (7.1 × 7.1 × 1.4in.)	2.3kg (5.1 lb.)	100-240V
50088152	Compact w/Standard Telemodul	130 to 1000rpm	5w	Stainless Steel	IP68	12 × 12 × 3.5cm (4.7 × 4.7 × 1.4in.)	1kg (2.2 lb.)	Euro 230V
50088142	Compact w/Standard Telemodul	130 to 1000rpm	5w	Stainless Steel	IP68	12 × 12 × 3.5cm (4.7 × 4.7 × 1.4in.)	1kg (2.2 lb.)	115V, USA
50088153	Compact w/Standard Telemodul	130 to 1000rpm	5w	Stainless Steel	IP68	12 × 12 × 3.5cm (4.7 × 4.7 × 1.4in.)	2.3kg (5.1 lb.)	230 V UK
50088154	Compact w/Standard Telemodul	130 to 1000rpm	5w	Stainless Steel	IP68	12 × 12 × 3.5cm (4.7 × 4.7 × 1.4in.)	2.3kg (5.1 lb.)	100 V Japan
50088133	Compact w/Telemodul 20C	130 to 1500rpm	3/6/9/12w	Stainless Steel	IP68	12 × 12 × 3.5cm (4.7 × 4.7 × 1.4in.)	1kg (2.2 lb.)	100-240V

OPERATING CONDITIONS: -10 to +56°C in air; 0 to 50°C submerged in water.
100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec i Mono & Maxi Direct Stirrers

With powerful magnets and no moving parts, these inductive-drive stirrers are the perfect choice for your general lab needs.

- 100% maintenance- and wear-free
- Compact, space-saving design with large, flat, easy-to-clean work surfaces
- Gradual start acceleration is gentle and ensures optimum magnetic coupling
- Adjustable power settings are separate from the speed control—decreasing power consumption and lowering heat output

Cimarec i Mono Direct Stirrer

- Easy-to-use rotary knob design
- Rugged powder-coated stainless-steel housing
- Stir volumes up to 3L

Cimarec i Maxi Direct Stirrers

- Precise microprocessor control with bright digital display
- Easy-to-clean, chemical resistant, sealed stainless-steel housing
- Easily recall last used settings
- Stir volumes up to 5L
- Smooth and even stirring as low as 80 rpm

Warranty¥: Five years
Certifications: CE

Cat. No.	Description	Overall L x W x H	Stirring Speed	Protection Class	Weight	Power Settings	Voltage/ Plug Type
50094711	Mono Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	130 to 1000rpm	IP32	1.4kg (3 lb.)	1/5W	230V Euro
50095601	Mono Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	130 to 1000rpm	IP32	1.4kg (3 lb.)	1/5W	115V USA
50096203	Mono Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	130 to 1000rpm	IP32	1.4kg (3 lb.)	1/5W	230V UK
50097289	Mono Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	130 to 1000rpm	IP32	1.4kg (3 lb.)	1/5W	230V Australia
50095921	Mono Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	130 to 1000rpm	IP32	1.4kg (3 lb.)	1/5W	100V Japan
50094713	Maxi Direct	215 × 180 × 35mm (8.5 × 7.1 × 1.4in.)	80 to 2000rpm	IP62	2.5kg (5.5 lb.)	5/10/15/20W	100-240V

OPERATING CONDITIONS are -10° to +40°C at 95% RH.
100-240V units contain a cord set with various plugs

Thermo Scientific Cimarec i Poly 15 & Multipoint Stirrers

100% maintenance and wear-free stirrers available in platforms with up to 15 positions

- Ideal for mass screening applications and other applications requiring multiple stirring points
- Inductive drive stirrers offer 100% maintenance and wear-free features in a fully synchronized multipoint platform
- Large, flat easy-to-clean work surfaces
- Precise microprocessor control with bright digital display
- Easily recall last used settings
- Gradual start acceleration is gentle and ensures good magnetic coupling

Cimarec i Poly 15 Stirrer

- Rugged powder-coated stainless-steel housing
- Stir speeds up to 990rpm
- Suitable for 15 × 250mL beakers or 6 × 1L flasks

Cimarec i Multipoint 6/15 Stirrers

- IP64 protection rated; easily cleaned with running water
- Easy-to-clean, chemical resistant, sealed stainless steel housing
- Chemical resistant, sealed stainless-steel housing
- Adjustable power settings are separate from the speed control that decreases power consumption and lowers heat output
- Smooth and even stirring as low as 80rpm and up to 2000rpm
- Stir volumes up to 3L per multipoint

Warranty[¥]: Five years
Certifications: CE

Cat. No.	Model	No. of Stirring Positions	Power Settings	Overall L x W x H	Stirring Speed	Protection Class	Weight	Electrical
50094596	Poly 15	15	10w	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	130 to 990rpm	IP32	6kg	100-240V
50093557	Multipoint 6	6	5/10/15/20w	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	80 to 2000rpm	IP62	7.5kg	100-240V
50093538	Multipoint 15	15	5/10/15/20w	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	80 to 2000rpm	IP62	7.5kg	100-240V

OPERATING CONDITIONS: -5 to +40°C at 95% rH; 100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec i Telesystem Multipoint Stirrers

Designed for use with aggressive media, in high humidity environments and for integration with incubators and controlled climate chambers

- All models submersible for use in water baths up to 50°C as well as incubators (including CO_2), and in refrigerators
- Inductive drive is 100% wear and maintenance free and ensures completely synchronized stirring at all positions
- 6-, 15- or 60-position stirrers
- IP68 protection rated; easily cleaned with running water
- Smooth and even stirring from 100rpm up to 2000rpm
- Stir volumes up to 2L per multipoint
- External controllers decrease power consumption and lower heat output
- Chemical resistant, sealed stainless-steel housing
- Easy recall of last used settings

Controller Choices

The Cimarec i Telesystem multipoint stirrers come standard with your choice of controller. Choose the Cimarec i Telemodul 20C contollers with microprocessor controls, adjustable power setting, and programmability or the Cimarec i Telemodul 40C controllers with higher speeds, more power settings, and PC control.

Warranty[¥]: Five years
Certifications: CE

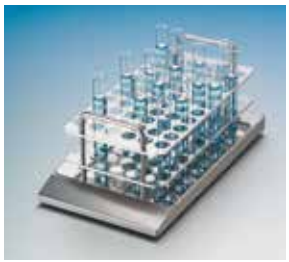
Cat. No.	Model	Protection Class	Power Setting	Stir Volume per point	Overall L x W x H	Stirring Speed	Weight	Electrical
50088077	Telesystem 6 Position w/Telemodul 20C	IP 68	5/10/15/20w	1-1500ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	130 to 1400rpm	7.5kg (16.5 lb.)	100-240V
50088078	Telesystem 6 Position w/Telemodul 40C	IP 68	4-40w	1-2000ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	100 to 2000rpm	8kg (17.6 lb.)	100-240V
50088034	Telesystem 15 Position w/Telemodul 20C	IP 68	5/10/15/20w	1-1000ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	130 to 1400rpm	7.5kg (16.5 lb.)	100-240V
50088036	Telesystem 15 Position w/Telemodul 40C	IP 68	4-40w	1-1200ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	100 to 2000rpm	8kg (17.6 lb.)	100-240V
50088009	Telesystem 60 Position w/Telemodul 20C	IP 68	5/10/15/20w	0.1-50ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	130 to 1400rpm	7.5kg (16.5 lb.)	100-240V
50088011	Telesystem 60 Position w/Telemodul 40C	IP 68	4-40w	0.1-100ml	420 × 240 × 35mm (16.5 × 9.4 × 1.4in.)	100 to 2000rpm	8kg (17.6 lb.)	100-240V

OPERATING CONDITIONS: -10° to +56°C at 100%RH in air; 0° to 50°C submerged in water.
100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec Stirrer Accesssories

Thermo Scientific Cimarec i Bath Mounts

Cat. No.	Material	Dimensions (L x W x H)	Capacity	Operating Temp.	For Use With
50087880	Transparent Acrylic	610 × 330 × 185mm (24 × 13 × 7.3in.)	15L (3.9 gal.)	0° to 60°C	Telesytem Cimarec i Stirrers
50087882	Stainless Steel	520 × 315 × 160mm (20.4 × 12.4 × 6.3in.)	15L (3.9 gal.)	-10 to +200°C	Telesytem Cimarec i Stirrers



Thermo Scientific Cimarec i Test Tube Racks

Cat. No.	Material	For Use With
50087960	Stainless Steel	25mm tubes in Telesytem Cimarec i Stirrers
50087955	Stainless Steel	16mm tubes in Telesytem Cimarec i Stirrers

Thermo Scientific Cimarec i Benchtop Distributors

LINK & SYNC

- Ensure identical operating conditions for multiple stirrer installations
- Even power distribution for synchronized stirring
- Benchtop distributors ensure identical operating conditions for multiple stirrer installations.
- Simultaneous control of 2, 4, 6 or 8 Mini, Micro or Compact series stirrers using a single Cimarec i Telemodul 20C or Cimarec i Telemodul 40C external controller
- Simultaneous control of 2 or 4 Maxi series stirrers using a single Cimarec i Telemodul 20C or Cimarec i Telemodul 40C external controller
- Even power distribution for synchronized stirring

Cat. No.	Model
50091720	4-Place Distributor
50091721	8-Place Distributor

Thermo Scientific Cimarec Extension Cables

Cat. No.	Model	Length	Compatibility
50088016	4-Pin Extension Cable	3m (9.8ft.)	Cimarec i Telmodul 20C, 40C and Cimarec Telemodul 10M Controllers
50088021	6-Pin Extension Cable	3m (9.8ft.)	Cimarec Telemodul Biosystem 40B Controller
50088102	8-Pin Extension Cable	3m (9.8ft.)	Cimarec Telemodul 40M and 80M Controllers

Thermo Scientific Cimarec i Telemodul Controllers

Included with the Cimarec i Micro, Mini, Compact, and Maxi Stirrers

- Order as replacement controller only.
- Single point stirring power for small to medium volumes (up to 250mL)

Cat. No.	Stirring Speed	Speed Control Accuracy	Stirring Power Relative to Rated Power	Ambient Temp. Range	Overall L x W x H	Weight	Electrical
50119115	130 to 1000rpm	±3	100%	0° to 40°C @ 80% relative humidity	96 × 63 × 50mm (3.7 × 2.4 × 1.9in.)	0.4kg (0.8 lb.)	230V/12V DC 7W
50119119	130 to 1000rpm	±3	100%	0° to 40°C @ 80% relative humidity	96 × 63 × 50mm (3.7 × 2.4 × 1.9in.)	0.4kg (0.8 lb.)	115V/12V DC 7W

Thermo Scientific Cimarec i Telemodul 40C and 20C Controllers

Included with the Cimarec i Micro, Mini, Compact, Maxi and Telesystems Stirrers

- Order as replacement controller only
- High speeds and power settings for more demanding stirring tasks
- Single-handed operation with straightforward turn and press adjustment wheel
- Three individual program, store and recall keys for rapid start-up
- Last used settings stored in memory
- Rocking/shake mode reverses stir bar direction for a gentle back and forth stirring motion
- Four power settings to decrease power consumption and lower heat output
- 10 power settings (40C model) and four power settings (20C model) to decrease power consumption and lower heat output
- RS-232 interface for data transfer and PC control (40C model only)

Cat. No.	Stirring Speed	Speed Control Accuracy	Rated Power	Stirring Power Relative to Rated Power	Ambient Temp. Range	Starting Times/ Pause Times	Output Voltage	Overall L x W x H	Weight
50090774	100 to 2000rpm	±1	40w	10 to 100 (10 levels)	0° to 40°C @ 80% relative humidity	5 sec. to 60 min.	36V DC	165 × 155 × 95mm (6.4 × 6.1 × 3.7in.)	0.7kg (1.5 lb.)
50090773	130 to 1400rpm	±1	20w	25/50/75/100 (4 levels)	0° to 40°C @ 80% relative humidity	5 sec. to 60 min.	20V DC	165 × 155 × 95mm (6.4 × 6.1 × 3.7in.)	0.6kg (1.3lb.)

Thermo Scientific Cimarec Biosystem Slow Speed Stirrer for Cell Culture

Gentle stirring of microcarrier cultures, culture broths and cell suspensions inside your CO_2 incubator

- Hermetically sealed housing resists microorganisms — separate external controller ensures only the hermetically sealed stirrer is exposed to the CO_2 environment
- Heatless operation will not compromise the incubator chamber conditions
- Stainless-steel housing is easy to clean and resists aggressive media
- Gradual low-shear acceleration on start-up
- Smooth and even stirring as low as 5rpm
- Adjustable controller power settings decrease power consumption and lower heat output
- Single position stirrers stir up to 20L; Four-position stirrers stir up to 5L per position

Required Cimarec Biosystem 40B Controller:

50118915 – 230V Germany
50118918 – 230V UK
50118921 – 230V China
50118916 – 230V Italy
50118919 – 230V Switzerland
50126086 – 115V US
50118917 – 230V Denmark
50118920 – 230V Australia

Cat. No.	Model	Dimensions (L x W x H)	Weight	Stir Speed	Protection Class	Power Setting
50119113	Biosystem w/o Controller	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP68	0.4 to 4w
50119114	Biosystem 4-Position w/o Controller	330 × 330 × 60mm (12.9 × 12.9 × 2.4in.)	9.4kg (20.7 lb.)	5 to 120rpm	IP68	0.4 to 4w

Thermo Scientific Cimarec Biosystem Direct Slow Speed Stirrer

Gentle stirring outside of a CO_2 incubator

- Heatless operation protects heat-sensitive cell culture
- Stainless-steel housing is easy to clean and resists aggressive media
- Gradual low-shear acceleration on start-up
- Smooth and even stirring as low as 5rpm
- Single position stirrers stir up to 5L: Four-position stirrers stir up to 2L per position
- Bulit-in controller

Warranty¥: Five years
Certifications: CE marked

Cat. No.	Model	Dimensions (L x W x H)	Weight	Stir Speed	Protection Class	Electrical	Power Setting
50088071	Biosystem 1-Position Direct	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP64	230V Euro	1w
50088058	Biosystem 1-Position Direct	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP64	115V USA	1w
50088057	Biosystem 1-Position Direct	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP64	230V UK	1w
50088064	Biosystem 1-Position Direct	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP64	230V Australia	1w
50101524	Biosystem 1-Position Direct	180 × 180 × 60mm (7 × 7 × 2.4in.)	3.4kg (7.5 lb.)	5 to 120rpm	IP64	100V Japan	1w
50088061	Biosystem 4-Position Direct	330 × 330 × 60mm (12.9 × 12.9 × 2.4in.)	11kg (24.3 lb.)	5 to 120rpm	IP64	100-240V	0.05w (×4)

OPERATING CONDITIONS: Biosytem: Operating conditions are -10 to +56°C at 100% rH; **Biosytem Direct:** -10 to +40°C at 95% rH; 100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec Mobil 10 and Mobil 25 Large Volume & Power Direct Stirrers

Ideal for hard to stir viscous liquids up to 10L or 40L depending on model with Quick Stop function to stop the drive within three seconds, minimizing after runs and reducing the risk of breakage

Cimarec Mobil 10

- Compact space-saving design
- Gradual low-shear acceleration on start-up
- Stirring volume: 100mL to 20L

Cimarec Mobil 25

- Ideal for high temperatures up to 121°C and high pressure applications up to 2 bars (29psi)
- Stirring volume: 100mL to 25L
- Can be used in autoclaves, water baths and climatic chambers
- Perfect for use on sterilized media ensuring even heating and cooling
- Easy-to-clean, chemical resistant, sealed stainless-steel housing
- Gradual low-shear acceleration on start-up

Cimarec Power Direct (no controller required)

- Ideal for high-capacity (up to 40L) stirring
- Integrated controller has an adjustable power setting that decreases power consumption and lowers heat output
- Sealed stainless-steel housing is easy to clean and chemical resistant

Required Accessories: Cimarec Telemodul 10M controller (#50019120 or #50019121) (Only required for Cimarec Mobil 10 and 25 models)
Warranty¥: Five years
Certifications: CE

Cat. No.	Model	Overall Dimensions	Stir Speed	Stir Capacity	Operating Temp.	Weight	Protection Class	Power Setting	Electrical
50119111	Mobil 10 w/o controller	128 × 32mm (5 × 1.3in.)	100 to 1000 rpm	20L	-10° to +56°C	0.7kg (1.5 lb.)	IP66	10w	–
50119112	Mobil 25 w/o controller	128 × 32mm (5 × 1.3in.)	100 to 1000 rpm	25L	-10° to +121°C	1.7kg (3.7 lb.)	IP68	10w	–
50098760	Power Direct	295 × 240 × 35mm (11.6 × 9.4 × 1.4in.)	100 to 2000 rpm	40L	-10° to +40°C	2.5kg (5.5lbs)	IP22	5/10/15/20w	100-240V

OPERATING CONDITIONS: Mobil 10: -10 to 56°C ; **Mobil 25:** -10 to 121°C; **Power Direct:** -10 to 40°C
100-240 V units contain a cord set with various plugs

Thermo Scientific Cimarec Telemodul 10M Controller

Cat. No.	Stir Speed	Stir Capacity	Electrical	For use with
50119120	100 to 1000 rpm	10L	230V	Mobil 10 and Mobil 25
50119121	100 to 1000 rpm	10L	115V US	Mobil 10 and Mobil 25

Thermo Scientific Cimarec Mobil Direct, Mobil 200 and Mobil 600 Large Volume Stirrers

Outstanding stirring power for high-volume applications

- For use in pilot plant or integrated with process equipment
- Quick Stop function stops the drive within three seconds, minimizing after runs and risk of vessel breakage
- Easy-to-clean, chemical resistant, sealed stainless-steel housing
- Maximum shaft torque is 30Ncm for the Mobil Direct and 50Ncm for the Mobil 200 and 600
- Mobil Direct can stir up to 150L and features an integrated controller with adjustable power settings
- Mobil 200 can stir up to 200L; Mobil 600 can stir up to 600L

Required Accessories: The Cimarec Mobil 200 and 600 require either the Cimarec Telemodul 40M or 80M controller (order separately).
Warranty[¥]: Five years
Certifications: CE

Cat. No.	Description	Stir Speed	Power Settings	Type	Dimensions	Weight	Electrical
50088131	Mobil Direct	100 to 1000rpm	40w	IP65	330 × 330 × 80mm (13 × 13 × 3.4in.)	16kg	115V USA
50088128	Mobil Direct	100 to 1000rpm	40w	IP65	330 × 330 × 80mm (13 × 13 × 3.4in.)	16kg	230V Euro
50088129	Mobil Direct	100 to 1000rpm	40w	IP65	330 × 330 × 80mm (13 × 13 × 3.4in.)	16kg	100V Japan
50100547	Mobil Direct	100 to 1000rpm	40w	IP65	330 × 330 × 80mm (13 × 13 × 3.4in.)	16kg	230V UK
50119109	Mobil 200 w/o Controller	100 to 1000rpm	80w	IP65	180 × 180 × 80mm (7 × 7 × 3.4in.)	6kg	–
50119110	Mobil 600 w/o Controller	100 to 1000rpm	80w	IP65	330 × 330 × 80mm (13 × 13 × 3.4in.)	16kg	–

OPERATING CONDITIONS: Mobil Direct: -10 to +40°C at 95% rH; **Mobil 200 & 600:** -10 to +56°C at 100% rH

Thermo Scientific Cimarec 40M and 80M Telemodul Controllers

- Constant speeds, even during viscosity changes
- High visibility digital display
- Thermal and electrical overload protection, with fault alert

Cat. No.	Stirring Range	Voltage
Cimarec 40M Controllers (40w)		
50118901	100 to 1000rpm	230V Germany
50118903	100 to 1000rpm	230V Denmark
50118904	100 to 1000rpm	230V UK
50118905	100 to 1000rpm	230V Swiss
50118906	100 to 1000rpm	230V Australia
50118907	100 to 1000rpm	230V China
50119122	100 to 1000rpm	110V Japan
50119123	100 to 1000rpm	115V US

Cat. No.	Stirring Range	Voltage
Cimarec 80M Controllers (80w)		
50118908	100 to 1000rpm	230V Germany
50118909	100 to 1000rpm	230V Italy
50118911	100 to 1000rpm	230V UK
50118912	100 to 1000rpm	230V Swiss
50118913	100 to 1000rpm	230V Australia
50119124	100 to 1000rpm	110V Japan
50119125	100 to 1000rpm	115V US

Thermo Scientific Explosion-Proof Series

Deliver the highest protection for hazardous applications, including Class I, Group C and D flammable gases or solvent vapors

- Features over-temperature safety monitors, precise thermostatic controls and sealed aluminum housing
- Corrosion-resistant steel case for easy cleaning and maintenance
- Sturdy construction allows maximum load capacity, 25 lb. (11.3kg) on top plate

SAFE-T HP6 Hotplates

- Thermostatic safety is set at 243°C (469.4°F) for added protection
- Maintains temperature within ±5.5°C (9.9°F)
- Sealed aluminum housing contains and protects controls
- Cast aluminum top plate maximizes heat transfer and uniformity (±6.5°C or 11.7°F)

SAFE-T SHP9 Stirring Hotplates

- Feature thermostatic control, over-temperature safety monitors and precise temperature stability
- Large, aluminum top plate surface provides efficient heat transfer
- Precise electronic heat control maintains temperature stability within ±2°C (±4°F)
- Stir solutions with a viscosity of 1200cp at 400rpm (at 21.5°C)
- Stainless-steel case is easily cleaned and maintained and accommodates a metal vessel

Safe-T S20 Stirrer

- Designed for stirring viscous solutions and suspensions
- Accommodates vessels with a capacity of 1.58 gal. (6L)
- Sturdy construction to handle a maximum load of 25 lb. (11.3kg) on the top plate

Includes: Stirrer unit and one 2 × 0.38 in. (5 × 1cm) PTFE–coated stir bar
Warranty¥: Three years
Compliance: Meets IEC1010 laboratory standards
Certifications: UL listed. Safe for Class 1, Group C and D flammable gases or solvent vapors

Cat. No.	Model	Surface Dimensions	Surface Material	Stirring Speed	Temp. Range	Overall Dimensions	Weight	Electrical
HP11515B	SAFE-T HP6 Hotplate	15.6 x 15.6cm (6.13 x 6.13in.)	Aluminum	–	38° to 220°C (100° to 428°F)	32.4 x 28.3 x 20cm (12.8 x 11.1 x 7.9in.)	13.6kg (30 lb.)	120V 50/60Hz; 600w; 5A
SP87325	SAFE-T SHP9 Stirring Hotplate	(23.2 x 23.2cm) (9.1 x 9.1in.)	Aluminum	60 to 1200rpm	38° to 220°C (100° to 428°F)	32.4 x 25.4 x 20.8cm (12.8 x 10 x 8.1in.)	13.6kg (30 lb.)	120V 50/60Hz, 1070w, 8.9A
S108525	SAFE-T S20 Stirrer	25.4 x 25.4cm (10 x 10in.)	Ceramic	60 to 1200rpm	–	32.4 x 28.3 x 20cm (12.8 x 11.1 x 7.9in.)	13.6kg (30 lb.)	120V 50/60Hz; 70w; 0.6A

Thermo Scientific Aluminum-Top Hotplates

Cast-aluminum top for maximum heat transfer, strength and corrosion resistance

- Equipped with thermostatic temperature control
- Baffle-vented welded stainless-steel case

Warranty¥: Three years
Certifications: UL listed (120V model)
Notes: Recommended for use with glass vessels only.

Cat. No.	Heating Surface Area	Temperature Range	Temp. Uniformity	Overall L x W x H	Volts
HPA1915BQ	15.9cm2 (6.25 sq.in.)	38° to 371°C (100° to 700°F)	±2.4°C at 100°C	19.4 x 16.8 x 11.1cm (7.63 x 6.63 x 4.38in.)	120V
HPA1910MQ	15.9cm2 (6.25 sq.in.)	38° to 371°C (100° to 700°F)	±2.4°C at 100°C	19.4 x 16.8 x 11.1cm (7.63 x 6.63 x 4.38in.)	240V

Thermo Scientific Large External-Controlled Hotplates

Uniform heating of large volumes and multiple vessels

- External controller operates outside fume hoods
- Robust design for safety; large capacity with excellent temperature stability
- Porcelain-coated, stainless-steel top and case offer chemical and stain resistance
- Chemical-resistant cover protects line cord
- Isolation of controls allows operation in hazardous environments
- Percentage input controller delivers infinite temperature selection
- Power light indicates when control is operating

Warranty¥: Three years
Includes: 5ft. (1.5m) 3-wire cord and plug

Cat. No.	Heating Surface	Temp. Range	Temp. Stability	Temperature Uniformity	Electrical Requirements
RC2235Q	30.5 x 30.5cm (12 x 12in.)	150° to 371°C (300° to 700°F)	±5°C (9°F)	±10°C (18°F) (at 150°C)	120V 50/60Hz, 1600w, 13.3A
RC2240Q	30.5 x 60.9cm (12 x 24in.)	150° to 371°C (300° to 700°F)	±5°C (9°F)	±10°C (18°F) (at 150°C)	240V 50/60Hz, 3200w, 13.3A

Thermo Scientific 2200 Series Aluminum Top Hotplates

Ideal for large-volume heating applications requiring precise temperature stability, including acid base digestion, sample drying, general reagent heating, heating TLC plates, and evaporations

- Large, aluminum heating surface, thermostatic temperature controls for outstanding temperature uniformity and stability
- Cycle light indicates when power is being supplied to heating element
- Stainless-steel case provides safe, reliable construction and optimal strength for heavy loads
- Epoxy-painted surface increases chemical resistance in corrosive environments

Warranty¥: Three years
Certifications: UL listed
Alert: Recommended for use with glass vessels only.

Cat. No.	Heating Surface Area	Temp. Range	Temp.Stability (at 100°C)	Temp.Uniformity (at 100°C)	Overall L x W x H	Electrical
HPA2235MQ	30.5 x 30.5cm (12 x 12in.)	38° to 371°C (100° to 700°F)	±3.0°C (5.4°F)	±4.0°C (7.2°F)	33 x 30.5 x 15.6cm (13 x 12 x 6.13in.)	120V 50/60Hz, 1600w, 13.3A
HPA2230MQ	30.5 x 30.5cm (12 x 12in.)	38° to 371°C (100° to 700°F)	±3.0°C (5.4°F)	±4.0°C (7.2°F)	33 x 30.5 x 15.6cm (13 x 12 x 6.13in.)	240V 50/60Hz, 1600w, 6.7A
HPA2245MQ*	30.5 x 60.9cm (12 x 24in.)	38° to 371°C (100° to 700°F)	±3.5°C (6.3°F)	±10°C (18°F)	34.9 x 60.9 x 15.9cm (13.75 x 24 x 6.25in.)	120V 50/60Hz, 3200w, 26.6A
HPA2240MQ	30.5 x 60.9cm (12 x 24in.)	38° to 371°C (100° to 700°F)	±3.5°C (6.3°F)	±10°C (18°F)	34.9 x 60.9 x 15.9cm (13.75 x 24 x 6.25in.)	240V 50/60Hz, 3200w, 13.3A

*12x24 top plate models not supplied with cord and plug due to high-wattage consumption requirements. Must be hard wired.

Thermo Scientific Large Volume Stirrer

Reach speeds up to 2400rpm

- Polished stainless-steel construction resists corrosion
- Digital speed settings
- Stirring capacity up to 200L
- Accommodates stir bars from 1.5 to 6in. (4 to 15cm); sold separately
- Top surface has ridged non-slip white rubber mat

Warranty[¥]: Three years

Cat. No.	Speed	Capacity	Top Plate Surface Area	Electrical
1295Q	Up to 2400rpm	Up to 200L	46 x 46cm (18 x 18in.)	120V, 50/60Hz

Thermo Scientific Cimarec Komet Stir Bars

Generate over three times the torque of conventional stirring bars

- Significantly enhance stirrer performance and applications versatility
- High-energy Samarium-Cobalt (SmCo) magnetic core
- Excellent mixing action at high speeds, and with viscous media
- Evenly coated PTFE surface prevents residue deposits
- Sterilize with steam to 249.8°F (121°C)

Cat. No.	Description	Shape	Outside Dia. x Length
50087902	Cimarec Komet Stir Bar 90, 1 pack	Round	25mm x 90mm
50087909	Cimarec Komet Stir Bar 50, 1 pack	Round	21mm x 50mm
50087930	Cimarec Komet Stir Bar 30, 1 pack	Round	13mm x 30mm
50087924	Cimarec Komet Stir Bar 15, 1 pack	Round	9mm x 15mm
50093336	Cimarec Komet Stir Bar 90 with glide ring, 1 pack	Round, with glide ring	31mm x 90mm
50093335	Cimarec Komet Stir Bar 50 with glide ring, 1 pack	Round, with glide ring	26mm x 50mm
50093334	Cimarec Komet Stir Bar 30 with glide ring, 1 pack	Round, with glide ring	17mm x 30mm

incubators

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Thermo Scientific Microbiological Incubators Selector Guide

Application	Material/Sample	Temp. Requirements	Recommended Heratherm Incubator
Bacterial research	Bacteria	Temperatures between 30 °C and 70 °C	General Protocol; Advanced Protocol for highest temperature accuracy, and time control
Microbiology	Microorganisms, cells	Temperatures between 30 °C and 50 °C	
Coliform determination	Bacteria	Temperature around 37 °C	
Histology	Tissue	Temperature around 37 °C	
Paraffin embedding	Paraffin	Temperatures of 37 °C to around 50 °C	
Egg incubation	Eggs	Temperature around 37 °C	General Protocol; Advanced Protocol for highest temperature accuracy, and time control
Heated storage	Media, samples	Temperature depends on material and specific application – between 30 °C and 105 °C	General Protocol for temperatures up to 75 °C; Advanced Protocol for highest temperature accuracy, and time control – up to 105 °C
Gene cloning	Bacteria, cells	Temperature around 37 °C	Advanced Protocol for highest temperature accuracy, and time control Advanced Protocol Security with additional safety features for peace of mind
Pharmaceutical stability testing	Various	Temperatures of 37 °C up to 105 °C	
Food and beverage testing	Various	Temperatures of 37 °C up to 105 °C	
BOD / water pollution testing	Water	Temperature around 20 °C	Compact
Yeast growth	Yeast	Temperatures between 10 °C and 37 °C	General Protocol for temperatures above ambient +5 °C Advanced Protocol for highest temperature accuracy or Compact for temperatures as low as 17 °C
Hatching of insects, fish	Insects	Temperature near or below ambient	

For lower temperatures: check the Thermo Scientific refrigerated models at: www.thermoscientific.com/incubators

Features	Heratherm Compact Incubator	Heratherm General Protocol Incubator	Heratherm Advanced Protocol Incubator	Heratherm Advanced Protocol Security Incubator
Temperature range	17 - 40 °C	ambient +5 °C - 75 °C	ambient +5 °C - 105 °C	ambient +5 °C - 105 °C
Convection technology	Mechanical	Gravity	Dual: fan off / adjust fan speed	Dual: fan off / adjust fan speed*
Rounded corners	✔	✔	✔	✔
Microprocessor control	✔	✔	✔	✔
Automatic over-temperature alarm		✔	✔	✔
Stackable		✔	✔	✔
Stainless steel interior		AISI 430/1.4016	AISI 304/1.4301	AISI 304/ 1.4301
RS232 interface		✔	✔	✔
Internal glass door		✔	✔	✔
Easy calibration routine		✔	✔	✔
Timer		on/off	choice of weekly / daily / real time	choice of weekly / daily / real time
Dry alarm contact for connection of alarm device			✔	✔
Access port		✔	✔	✔
Interior socket (120V models only)			✔	
Optional Stainless steel exterior			230V models only	✔
Certified decontamination cycle				✔
Automatic undertemperature alarm				✔
Door alarm				✔
Lockable door				✔**
Optional stainless steel exterior				✔
Connection for optional sample temperature sensor				✔

*Large capacity units: mechanical convection with 2 speeds
** No lockable door in large capacity units

Thermo Scientific Heratherm Compact Microbiological Incubators

Extremely small footprint, making it ideal for personalized workspace or for crowded labs with small sample volumes

- 18L capacity
- Mechanical convection technology
- High temperature accuracy
- Easy-to-use, LED display
- Internal light and window in door facilitates sample observation
- Temperature range: 17-40°C
- Peltier/Thermoelectric Technology

Ordering Alerts: Availability may vary by country
Warranty[Y]: 2 years (parts and labor)
Certifications: cCSAus, CE

Cat. No. (Model IMC18)	Chamber Volume	Temp. Range	Shelves Supplied (Max)/ Max Load	Chamber Dimensions (D x W x H)	Exterior Dimensions (D x W x H)	Temp. Uniformity/ Stability (@37°C)	Shipping Weight	Electrical/Plug Type
50125590	18L (.65 cu. ft.)	17-40°C	2 (3)/ 2kg (4.4lbs)	290 x 180 x 310mm (11.4 x 7.1 x 12.2in.)	470 x 260 x 415mm (18.5 x 10.2 x 16.3in.)	±1.2°C/ ±0.2°C	7.2kg (15.9 lb.)	100-240V 50/60Hz, 45w; 0.45–0.85A/ US Nema 5-15
50125882	18L (.65 cu. ft.)	17-40°C	2 (3)/ 2kg (4.4lbs)	290 x 180 x 310mm (11.4 x 7.1 x 12.2in.)	470 x 260 x 415mm (18.5 x 10.2 x 16.3in.)	±1.2°C/ ±0.2°C	7.2kg (15.9 lb.)	100-240V 50/60Hz, 45w; 0.45–0.85A/ EU standard, UK and Australia cable/plug
50129111	18L (.65 cu. ft.)	17-40°C	2 (3)/ 2kg (4.4lbs)	290 x 180 x 310mm (11.4 x 7.1 x 12.2in.)	470 x 260 x 415mm (18.5 x 10.2 x 16.3in.)	±1.2°C/ ±0.2°C	7.2kg (15.9 lb.)	100-240V 50/60Hz, 45w; 0.45–0.85A/ China cable/plug

Thermo Scientific Heratherm General Protocol Microbiological Incubators

Ideally suited for routine applications in pharmaceutical, medical, food and research laboratories, with sample safety in mind

- Gravity convection provides gentle airflow and minimal drying out
- Temperature range from ambient +5° to 75°C
- Corrosion-resistant stainless-steel chamber (1.4016 / AISI 430) and coated exterior
- Intuitive user interface for setting temperature
- Large, easy to read vacuum fluorescent display
- Internal glass door allows sample viewing without impacting temperature
- Exceptionally small footprint
- Access port for independent data monitoring or use of equipment, such as shakers or stirrers inside unit
- Easy stacking of two same-size units without need for stacking device

Ordering Alerts: Availability may vary by country
Warranty¥: 2 years (parts and labor)
Certifications: cCSAus (120V, 50/60Hz models) and CE (230V, 50/60Hz models)

Cat. No.	Chamber Volume	Temp. Range	Shelves Supplied (Max)/Max Load	Chamber Dimensions (D x W x H)	Exterior Dimensions (D x W x H)*	Temp. Uniformity/ Stability (@37°C)	Shipping Weight	Electrical/ Plug Type
51028063	75L (2.6 cu. ft.)	ambient +5 °C to 75 °C	2 (13)/25kg (55 lb.)	414 x 354 x 508mm (16.3 x 13.9 x 20.0in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C/ ±0.2°C	40kg (88 lb.)	120V 60Hz; 300w; 2.5A; Nema 5-15 US
51028130	75L (2.6 cu. ft.)	ambient +5 °C to 75 °C	2 (13)/25kg (55 lb.)	414 x 354 x 508mm (16.3 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C/ ±0.2°C	40kg (88 lb.)	230V 50/60Hz; 300w; 1.3A; Country-specific
51029638	75L (2.6 cu. ft.)	ambient +5 °C to 75 °C	2 (13)/25kg (55 lb.)	414 x 354 x 508mm (16.3 x 13.9 x 20.0in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C/ ±0.2°C	40kg (88 lb.)	100V 50/60Hz; 300w; 3A; Nema 5-15 Japan
51028064	117L (4.0 cu. ft.)	ambient +5 °C to 75 °C	2 (16)/25kg (55 lb.)	414 x 464 x 608mm (16.3 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.2°C	51kg (112 lb.)	120V 60Hz; 540w; 4.5A; Nema 5-15 US
51028131	117L (4.0 cu. ft.)	ambient +5 °C to 75 °C	2 (16)/25kg (55 lb.)	414 x 464 x 608mm (16.3 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7 in.)	±0.6°C/ ±0.2°C	51kg (112 lb.)	230V 50/60Hz; 540w; 2.3A; Country-specific
51029639	117L (4.0 cu. ft.)	ambient +5 °C to 75 °C	2 (16)/25kg (55 lb.)	414 x 464 x 608mm (16.3 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.2°C	51kg (112 lb.)	100V 50/60Hz; 540w; 5.4A; Nema 5-15 Japan
51028065	194L (6.85 cu. ft.)	ambient +5 °C to 75 °C	2 (19)/25kg (55 lb.)	589 x 464 x 708mm (23.2 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	±0.6°C/ ±0.2°C	65kg (143 lb.)	120V 60Hz; 720w; 6A; Nema 5-15 US
51029640	194L (6.85 cu. ft.)	ambient +5 °C to 75 °C	2 (19)/25kg (55 lb.)	589 x 464 x 708mm (23.2 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.	±0.6°C/ ±0.2°C	65kg (143 lb.)	100V 50/60Hz; 720w; 7.2A; Nema 5-15 Japan
51028132	194L (6.85 cu. ft.)	ambient +5 °C to 75 °C	2 (19)/25kg (55 lb.)	589 x 464 x 708mm (23.2 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	±0.6°C/ ±0.2°C	65kg (143 lb.)	230V 50/60Hz; 710w; 3.1A; Country-specific

* Depth does not include handle/display (65mm / 2.6in.) and distance spacer at rear (80mm / 3.1in.); height includes the feet (35mm / 1.4in.).
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Advanced Protocol Microbiological Incubators

Innovative dual convection technology with excellent temperature performance, providing an optimal sample environment

- Unsurpassed temperature performance — the flexible tool in the lab to be used for multiple applications
- Dual convection for application versatility — fan speed adjustable from 0 to 100%
- Advanced digital timer for daily or weekly ON / OFF cycles
- Access port for independent data monitoring or use of equipment, such as shakers or stirrers inside unit
- Internal 120V socket allows the use of equipment inside the unit (120V MODELS ONLY)
- Easy-to-clean, corrosion-resistant stainless-steel interior (1.4301 / AISI 304)
- Broad temperature range from 5°C above ambient to 105°C — suitable even for drying applications
- Temperature uniformity of +/- 0.6 (Fan off) and between ±0.2°C and +/- 0.4C (Fan full speed) (measured at 37°C)
- Temperature stability of ±0.1°C (measured at 37°C)
- Microprocessor controlled touch button user interface for ease of use and best performance
- Large, easy-to-view vacuum fluorescent display
- Internal glass door allows sample viewing without impacting temperature
- Exceptionally small footprint
- Choice of stainless steel exterior available for demanding pharmaceutical and clinical requirement (230V models only)

Ordering Alerts: Availability may vary by country
Warranty[¥]: 2 years (parts and labor)
Certifications: cCSAus (120V, 50/60Hz models) and CE (230V, 50/60Hz models)

Cat. No.	Model/Description	Chamber Volume	Temp. Range	Shelves Supplied (Max)/ Max Load	Chamber Dimensions (D x W x H)	Exterior Dimensions* (D x W x H)	Temp Uniformity (@37°C)	Temp Stability (@37°C)	Shipping Weight	Electrical/ Plug Type
51028066	IMH60, coated exterior, Dual Convection	66L (2.3 cu. ft.)	ambient +5 °C to 105 °C	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C*/ ±0.2°C	±0.1°C	45kg (99 lb.)	120V 60Hz; 300w; 2.5A; Nema 5-15 US
51028067	IMH100, coated exterior, Dual Convection	104L (3.67 cu. ft.)	ambient +5 °C to 105 °C	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	120V 60Hz; 300w; 2.5A; Nema 5-15 US
51028068	IMH180, coated exterior, Dual Convection	178L (6.3 cu. ft.)	ambient +5 °C to 105 °C	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	±0.6°C/ ±0.4°C	±0.1°C	70kg (154 lb.)	120V 60Hz; 300w; 2.5A; Nema 5-15 US
51028133	IMH60, coated exterior, Dual Convection	66L (2.3 cu. ft.)	ambient +5 °C to 105 °C	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C*/ ±0.2°C	±0.1°C	45kg (99 lb.)	230V 50/60Hz; 850w; 3.7A; Country-specific
51028134	IMH100, coated exterior, Dual Convection	104L (3.67 cu. ft.)	ambient +5 °C to 105 °C	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	230V 50/60Hz; 1100w; 4.8A; Country-specific
51028135	IMH180, coated exterior, Dual Convection	178L (6.3 cu. ft.)	ambient +5 °C to 105 °C	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	±0.6°C/ ±0.4°C	±0.1°C	70kg (154 lb.)	230V 50/60Hz; 1300w; 5.7A; Country-specific
51028717	IMH60 SS, stainless steel exterior, Dual Convection	66L (2.3 cu. ft.)	ambient +5 °C to 105 °C	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C*/ ±0.2°C	±0.1°C	45kg (99 lb.)	230V 50/60Hz; 850w; 3.7A; Country-specific
51028718	IMH100 SS, stainless steel exterior, Dual Convection	104L (3.67 cu. ft.)	ambient +5 °C to 105 °C	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	230V 50/60Hz; 1100w; 4.8A; Country-specific
51028719	IMH180 SS, stainless steel exterior, Dual Convection	178L (6.3 cu. ft.)	ambient +5 °C to 105 °C	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	±0.6°C/ ±0.4°C	±0.1°C	70kg (154 lb.)	230V 50/60Hz; 1300w; 5.7A; Country-specific

* Depth does not include handle/display (65mm / 2.6in.) and distance spacer at rear (80mm / 3.1in.); height includes the feet (35mm / 1.4in.).
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Advanced Protocol Security Microbiological Incubators

Unique 140°C decontamination routine, providing outstanding safety for samples

- Unique 140°C decontamination routine, providing outstanding safety for samples:
  - At 140°C microorganisms are reduced to a minimum, comparable to sterilization, within a six hour cycle
  - No need for separate autoclaving of interior fittings
  - Certified by an accredited microbiological institute (IBFE 09/2010)
- Safety features for ultimate sample protection:
  - Lockable door for restricted access
  - Alarm sounds if door is left open accidentally
  - Automatic over- and under-temperature alarm
- Dual convection for application versatility — fan speed adjustable from 0 to 100%
- Advanced digital timer for daily or weekly ON / OFF cycles
- Temperature Range: Ambient +5°C to 105°C
- Intuitive user interface for setting temperature
- Large, easy to read vacuum fluorescent display
- Optional sample sensor provides exact temperature of sample on display
- Access port for independent data monitoring or use of equipment, such as shakers or stirrers inside unit
- Internal glass door allows sample viewing without impacting temperature
- Available with a stainless-steel exterior, meets demanding needs in pharmaceutical and clinical laboratories

Ordering Alerts: Availability may vary by country.
Warranty[¥]: 2 years (parts and labor)
Certifications: cCSAus (120V, 50/60Hz units) and CE (230V, 50/60Hz units)

Cat. No.	Model/ Description	Chamber Volume	Shelves Supplied (Max)/Max Load	Chamber Dimensions (W x D x H)	Exterior Dimensions* (W x D x H)	Temp. Uniformity (@37°C)	Temp Stability (@37°C)	Shipping Weight	Electrical/ Plug Type
51028069	IMH60-S, coated	66L (2.3 cu. ft.)	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C*/ ±0.2°C	±0.1°C	45kg (99 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028070	IMH100-S, coated	104L (3.67 cu. ft.)	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028111	IMH180-S, coated	178L (6.3 cu. ft.)	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	±0.6°C/ ±0.4°C	±0.1°C	70kg (154 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028264	IMH60-S SS stainless steel	66L (2.3 cu. ft.)	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C*/ ±0.2°C	±0.1°C	45kg (99 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028535	IMH100-S SS stainless steel	104L (3.67 cu. ft.)	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028327	IMH180-S SS stainless steel	178L (6.3 cu. ft.)	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	0.6°C/ ±0.4°C	±0.1°C	70kg (154 lb.)	120V 60Hz; 1390w; 11.6A; Country-specific
51028136	IMH60-S, coated	66L (2.3 cu. ft.)	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C/ ±0.3°C	±0.1°C	45kg (99 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific
51028137	IMH100-S, coated	104L (3.67 cu. ft.)	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific
51028138	IMH180-S, coated	178L (6.3 cu. ft.)	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	±0.6°C/ ±0.3°C	±0.1°C	70kg (154 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific
51028541	IMH60-S SS, stainless steel	66L (2.3 cu. ft.)	2 (13)/ 25kg (55 lb.)	368 x 354 x 508mm (14.5 x 13.9 x 20in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	±0.6°C/ ±0.3°C	±0.1°C	45kg (99 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific
51028542	IMH100-S SS, stainless steel	104L (3.67 cu. ft.)	2 (16)/ 25kg (55 lb.)	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	±0.6°C/ ±0.3°C	±0.1°C	56kg (123 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific
51028543	IMH180-S SS, stainless steel	178L (6.3 cu. ft.)	2 (19)/ 25kg (55 lb.)	543 x 464 x 708mm (21.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	±0.6°C/ ±0.3°C	±0.1°C	70kg (154 lb.)	230V 50/60Hz; 1390w; 6.1A; Country-specific

* Depth does not include handle/display (65mm / 2.6in.) and distance spacer at rear (80mm / 3.1in.); height includes the feet (35mm / 1.4in.).
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Microbiological Incubators Accessories

Cat. No.	Description	Details
50125605	SS shelf compact incubator	Stainless steel perforated shelf for Compact incubator
50127770	SS shelf IGS60	Stainless steel perforated shelf for General Protocol 60L unit; includes 2 shelf supports
50127771	SS shelf IGS100	Stainless steel perforated shelf for General Protocol 100L unit; includes 2 shelf supports
50127772	SS shelf IGS180	Stainless steel perforated shelf for General Protocol 180L unit; includes 2 shelf supports
50127773	SS shelf IMH60 / IMH60-S	Stainless steel perforated shelf for Advanced Protocol / Advanced Protocol Security 60L unit; includes 2 shelf supports
50127774	SS IMH100 / IMH100-S	Stainless steel perforated shelf for Advanced Protocol / Advanced Protocol Security 100L unit; includes 2 shelf supports
50127777	SS IMH180 / IMH180-S	Stainless steel perforated shelf for Advanced Protocol / Advanced Protocol Security 180L unit; includes 2 shelf supports
50127764	Wire mesh shelf IGS60/ IMH60 / IMH60-S	Wire mesh shelf for all 60L unit; includes 2 shelf supports
50127765	Wire mesh shelf IGS100/ IMH100 / IMH100-S	Wire mesh shelf for all 100L unit; includes 2 shelf supports
50127766	Wire mesh shelf IGS180/ IMH180 / IMH180-S	Wire mesh shelf for all 180L unit; includes 2 shelf supports

Thermo Scientific Heratherm Incubators: Additional Accessories & Options

Cat. No.	Description	Details
Additional Shelving & Drip Trays		
50128816	Petri Dish Holder (90 mm) 60L units	Shelf with holders for Petri dishes; 90 mm diameter; wire mesh; for all 60L units; includes 2 shelf supports
50128818	Petri Dish Holder (90 mm) 100L units	Shelf with holders for Petri dishes; 90 mm diameter; wire mesh; for all 100L units; includes 2 shelf supports
50128819	Petri Dish Holder (90 mm) 180L units	Shelf with holders for Petri dishes; 90 mm diameter; wire mesh; for all 180L units; includes 2 shelf supports
50128793	Petri Dish Holder (50 mm) 60L units	Shelf with holders for Petri dishes; 50 mm diameter; wire mesh; for all 60L units; includes 2 shelf supports
50128794	Petri Dish Holder (50 mm) 100L units	Shelf with holders for Petri dishes; 50 mm diameter; wire mesh; for all 100L units; includes 2 shelf supports
50128815	Petri Dish Holder (50 mm) 180L units	Shelf with holders for Petri dishes; 50 mm diameter; wire mesh; for all 180L units; includes 2 shelf supports
50128683	Drip Tray 60L units	Stainless steel drip tray for all 60L units; includes 2 shelf supports
50128791	Drip Tray 100L units	Stainless steel drip tray for all 100L units; includes 2 shelf supports
50128792	Drip Tray 180L units	Stainless steel drip tray for all 180L units; includes 2 shelf supports
50128265	Lowenstein kit 150 mm tubes	2 trays for 150mm Lowenstein tubes to place on top of perforated shelf (shelf not supplied); 435 x 155 mm; 20 tubes each tray – usable for 100L models and larger
Support Stands		
50127741	Support stand 60L units	Support stand with casters for 60L units; height of stand including casters: 187mm / 7.4in
50127742	Support stand 100L units	Support stand with casters for 100L units; height of stand including casters: 187mm / 7.4in
50127743	Support stand 180L units	Support stand with casters for 180L units; height of stand including casters: 187mm / 7.4in
Sample Sensor		
50127768	Sample sensor for IMH60-S / IMH100-S / IMH180-S	All Heratherm Advanced Protocol Security incubators
Stacking Kits		
50126665	Stacking kit 60L units	Kit for stacking 60L units; recommended if decon cycle is used on lower unit
50126666	Stacking kit 100L units	Kit for stacking 100L units; recommended if decon cycle is used on lower unit; stacks also smaller unit on 100L unit
50126667	Stacking kit 180L units	Kit for stacking 180L units; recommended if decon cycle is used on lower unit; stacks also smaller unit on 180L unit
Special Sealing		
50130657	Silicone free viton sealing 60L	Silicone free viton door sealing for all 60L units
50130658	Silicone free viton sealing 100L	Silicone free viton door sealing for all 100L units
50130659	Silicone free viton sealing 180L	Silicone free viton door sealing for all 180L units
50134906	Vent gasket 60L	Special sealing for high humidity - for 60L units
50134907	Vent gasket 100L	Special sealing for high humidity - for 100L units
50134908	Vent gasket 180L	Special sealing for high humidity - for 180L units
Fresh Air Filter		
50127567	Fresh air particle filter	Fresh air particle filter for connection to the fresh air vent (intake); for all Advanced Protocol and Advanced Protocol incubators
Factory-Installed Options — Please order in conjunction with desired incubator		
51900996	Heratherm Access port left, small	Additional access port on center of left side of unit; Ø 24 mm for all incubators
51900997	Heratherm Access port left, large	Additional access port on center of left side of unit; Ø 58 mm for all incubators
51900998	Heratherm Access port right, small	Additional access port on center of right side of unit; Ø 24 mm for all incubators
51900999	Heratherm Access port right, large	Additional access port on center of right side of unit; Ø 58 mm for all incubators
51901000	Heratherm Access port top, small	Additional access port on center of top of unit; Ø 24 mm for all incubators
51901001	Heratherm Access port top, large	Additional access port on center of top of unit; Ø 58 mm for all incubators
51900993	Door hinge left side	Door hinge on left side – Available for General Protocol; Advanced Protocol and Advanced Protocol Security units. Coated exterior only, table top units only

Thermo Scientific Heratherm Microbiological Incubators – Large Capacity

Designed for high sample volume or large samples

General Protocol Incubators

Efficient

- Two sizes (400 and 750 L)
- Gravity convection technology with unique airflow – designed for minimal drying out of samples
- Flexible shelf system for optimal use of chamber volume
- Access port for independent data monitoring

Safe

- Automatic overtemperature alarm system
- Inner glass door for undisturbed viewing of samples
- Inner chambers made from corrosion-resistant stainless steel (1.4016)
- Protect delicate samples with stable temperature conditions: uniformity of up to ± 0.5 °C and temperature stability of 0.4 °K at 37 °C

Easy

- Large, easy to view, vacuum fluorescent display with push-button simplicity
- Doors can be opened over 180° for easy access and use
- Lockable casters for easy mobility and stability

Warranty[¥]: 2 years (parts and labor)
Certifications: CE, CSAus (120V, 208-240V/60Hz models) and CE (230V, 50/60Hz models)

Advanced Protocol Security Incubators

Efficient

- Two sizes (400 and 750 L)
- Mechanical convection technology ensures optimal temperature distribution with improved level of temperature uniformity: : ± 0.2 to 0.3 °C
- Temperature ranges from ambient +5 °C to 105 °C for application flexibility: units can even be used for drying applications

Safe

- Unique 140°C decontamination cycle eliminating the need for separate autoclaving or use of toxic decontaminants
- 2-speed fan for application flexibility
- Additional undertemp alarm provides safety even when the temperature deviates below set point
- Alarm notifies operator if door is left open
- Inner chamber made from highly corrosion-resistant stainless steel (AISI304 / 1.4301), suited even for use with aggressive substances

Easy

- Timer extends the automation options available to user
- Stainless steel inner chamber with rounded edges for easy cleaning
- Available in stainless steel exterior

Thermo Scientific Heratherm Microbiological Incubators – Large Capacity

Cat. No.	Model/ Exterior	Chamber Volume L (cuft)	Temperature Range	Temp. Uniformity/ Stability (@37°C)	Chamber Dimensions (D x W x H)	Exterior Dimensions* (D x W x H)	Shelves Supplied/ Max (Max. Load)	Shipping Weight	Electrical, Plug Type
General Protocol Incubators - Gravity Convection									
51029322	IGS400 / coated	405 (14.3)	Ambient +5 °C to 75 °C	± 0.5 °C / ± 0.4 °C	569 x 544 x 1307 mm (22 x 21 x 51 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	145 kg (187 lb)	230V; 50/60Hz; 1200W; 5A; Country specific
51029321	IGS400 / coated	405 (14.3)	Ambient +5 °C to 75 °C	± 0.5 °C / ± 0.4 °C	569 x 544 x 1307 mm (22 x 21 x 51 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	145 kg (187 lb)	120V; 60Hz; 1080W; 9A; NEMA5-15
51029334	IGS750 / coated	747 (26.4)	Ambient +5 °C to 75 °C	± 1.3 °C / ± 0.4 °C	569 x 1004 x 1307 mm (22 x 40 x 51 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	201 kg (251 lb)	230V; 50/60Hz; 1500W; 6.5A; Country specific
51029333	IGS750 / coated	747 (26.4)	Ambient +5 °C to 75° C	± 1.3 °C / ± 0.4 °C	569 x 1004 x 1307 mm (22 x 40 x 51 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	201 kg (251 lb)	120V; 60Hz; 1500W; 12.5A; NEMA5-15
Advanced Protocol Security Incubators - Mechanical Convection									
51029325	IMH400-S / coated	381 (13.4)	Ambient +5 °C to 105 °C	± 0.2 °C / ± 0.2 °C	524 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	144 kg (186 lb)	230V; 50/60Hz; 1400W; 6A; Country specific
51029323	IMH400-S / coated	381 (13.4)	Ambient +5 °C to 105 °C	± 0.2 °C / ± 0.2 °C	524 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	144 kg (186 lb)	120V; 60Hz; 1380W; 11.5A; NEMA5-15
51029326	IMH400-S SS / stainless steel	381 (13.4)	Ambient +5 °C to 105 °C	± 0.2 °C / ± 0.2 °C	524 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	144 kg (186 lb)	230V; 50/60Hz; 1400W; 6A; Country specific
51029324	IMH400-S SS / stainless steel	381 (13.4)	Ambient +5 °C to 105 °C	± 0.2 °C / ± 0.2 °C	524 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66in.)	2 / 39 (30kg / 66lb)	144 kg (186 lb)	120V; 60Hz; 1380W; 11.5A; NEMA5-15
51029337	IMH750-S / coated	702 (24.8)	Ambient +5 °C to 105 °C	± 0.3 °C / ± 0.2 °C	524 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	205 kg (255 lb)	230V; 50/60Hz; 1600W; 7A; Country specific
51029335	IMH750-S / coated	702 (24.8)	Ambient +5 °C to 105 °C	± 0.3 °C / ± 0.2 °C	524 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	205 kg (255 lb)	120V; 60Hz; 1560W; 13A; NEMA5-15
51029338	IMH750-S SS / stainless steel	702 (24.8)	Ambient +5 °C to 105 °C	± 0.3 °C / ± 0.2 °C	524 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	205 kg (255 lb)	230V; 50/60Hz; 1600W; 7A; Country specific
51029336	IMH750-S SS / stainless steel	702 (24.8)	Ambient +5 °C to 105 °C	± 0.3 °C / ± 0.2 °C	524 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66in.)	2 / 39 (30kg / 66lb)	205 kg (255 lb)	120V; 60Hz; 1560W; 13A; NEMA5-15

* Depth does not include handle/display (65mm / 2.6in.) and distance spacer at rear (80mm / 3.1in.); height includes the feet (35mm / 1.4in.).
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Accessories

Cat. No.	Description
50135241	Perforated stainless steel shelf for Heratherm Advanced Protocol Security incubators IMH400-S and General Protocol incubator IGS400
50135242	Perforated stainless steel shelf for Heratherm Advanced Protocol Security incubators IMH750-S and General Protocol incubator IGS750
50135244	Wire mesh shelf for Heratherm Advanced Protocol oven OMH750 3PH; also for use in Advanced Protocol Security incubator IMH750-S; 984 x 503 mm
50135869	Silicone-free viton sealing for all Heratherm 400L models
50135870	Silicone-free viton sealing for all Heratherm 750L models

Thermo Scientific Precision High-Performance Incubators

Mechanical or gravity convection with advanced microprocessor controls ideal for applications requiring excellent temperature distribution or gentle sample heating between 5°C above ambient to 75°C

- Uniform heating, precise temperature control and fast drying
- Blower circulates heated air in a horizontal airflow pattern for efficient heat distribution with tight temperature tolerances of up to ±0.5°C
- Gravity convection offers gentle drying with heat-generated convection to move the air vertically through the chamber to heat samples

317L units with Advanced Microprocessor PID Controls

- Sophisticated microprocessor PID controls with easy-to-view digital LED readout
- Temperature is displayed on large, three-character screen; can be easily set from 5°C above ambient to up to 75°C (depending on model) in 0.1°C increments using touch-sensitive arrow keys
- Fixed setpoints on control panel eliminate need for tuning
- Offset feature enables easy calibration

Built-In Safety

- Built-in safety back-up maintains control at 3°C above setpoint if primary heater control fails
- Visual alarm indicates when temperature exceeds 3°C setpoint

Robust Construction

- Inner glass door permits viewing of samples without disturbing chamber environment in 317L unit
- Silicone gasket on outer door and 7.6cm (3in.)-thick fiberglass insulation prevents heat loss, for high temperature uniformity
- Circuit breaker protects against power surges
- Durable, enamel-coated steel exterior
- Low-watt density heater elements are designed for long life
- Internal electrical outlet allows operation of a shaker, stirrer or other lab apparatus
- Double-door design

Warranty[¥]: 1 year (parts and labor)
Certifications: UL/cUL listed

PRODUCT ONLY AVAILABLE IN NORTH AMERICA

Cat. No.	Capacity	Interior Dimensions (D × W × H)	Exterior Dimensions (L × W × H)	Control	Temp. Range	No. of Shelves	Electrical
Gravity Convection							
PR205075G	317L (11.2 cu. ft.)	53 × 94 × 64cm (21 × 37 × 25in.)	64 × 101 × 88cm (25 × 40 × 35in.)	Microprocessor PID	Ambient +5° to 65°C	6 supplied/ 36 max.	120V 60Hz (450w/3.8A)
Mechanical Convection							
PR205075M	317L (11.2 cu. ft.)	53 × 94 × 64cm (21 × 37 × 25in.)	64 × 101 × 88cm (25 × 39.8 × 34.5in.)	Microprocessor PID	Ambient +5° to 75°C	6 supplied/ 36 max.	120V 60Hz (520w/4.3A)

Accessories

Cat. No.	Description	For Use with
AY2076X1	Shelf Kit	High-Performance Incubator; Double-door 11.2 cu. ft. units

Thermo Scientific Heratherm Refrigerated Incubators

Energy efficient, precise temperature control, reliable temperature environment

IMP180 and IMP400

- Superior performance with Peltier technology: Energy efficiency without the use of harmful refrigerants
- Temperature range: +5°C to +70°C
- Outstanding temperature uniformity and stability to keep the samples in a safe environment - uniformity as good as ±0.3°C (at +25°C), and stability as tight as ±0.1°C
- Energy consumption as low as 80Wh/h (benchtop model) 150Wh/h (floor model) at +20°C
- CFC free/HFC free polyurethane insulation foam for outstanding temperature performance and condensation prevention
- Heated door with intelligent energy control to ensure reduced condensation – even at low temperatures
- Sophisticated timer function with weekly/ daily or real-time mode
- Intuitive programmability function for defined temperature ramping, soak/cool and dwell: store up to 10 programs with 10 temperature steps, loop program, and select mode at end of cycle
- Adjustable over-temperature shut-off for protocols that require setting of over temperature for protection – (class 2 according to norm DIN12880)
- Easy-to-use microprocessor control
- PID control with automated fault analysis at start-up to ensure correct control at all times
- PID controls with easy push-button calibration
- Large and clear vacuum fluorescent display for easy viewing
- Flexible shelf system for optimal loading, easy to remove for cleaning, with non-tip protection
- Safe containment with automatic over and under temperature alarm
- Standard access port for data monitoring (large diameter of 42 mm/1.65 in.)
- RS232 interface for data logging
- Stainless steel interior (1.4301/ASTM 304) and rounded corners for easy cleaning

Specifications

Model	IMP180 (Benchtop/stackable)	IMP400 (Floor Standing)
Chamber Volume	178 L / 6.3 cu. ft.	381 L / 13.5 cu. ft.
Temperature Range	+5 to 70 °C	
Temperature Deviation Over Time (Measured in mid of work space)**	at 20 °C ≤ ± 0.1 / at 37 °C ≤ ± 0.1	
Spatial Temperature Deviation (Measured with 27 sensors)***	at 20 °C ≤ ± 0.2 / at 37 °C ≤ ± 0.5	at 20 °C ≤ ± 0.3 / at 37 °C ≤ ± 0.7
Internal Dimensions (W x H x D)	464 x 708 x 543 mm / 18.3 x 27.9 x 21.4 in.	544 x 1335 x 524 mm / 21.4 x 52.6 x 20.6 in.
External Dimensions (W x H x D)	640 x 955* x 738* mm / 25.2 x 37.6* x 29.1* in.	778 x 1653** x 770** mm / 30.6 x 66** x 30.3** in.
Footprint	0.47m² / 5.1ft.²	0.56m² / 6.0ft.²
Shelves Supplied / Max	2 / 9	2 / 17
Number of Shelf Positions	19	39
Shelf Size (W x D)	439 x 505 mm / 17.28 x 19.98 in.	528 x 498 mm / 20.79 x 21.06 in.
Loading Capcitiy Per Shelf**	25 kg / 55 lbs.	30 kg / 66 lbs.
Loading Capcitiy of Unit**	75 kg /165 lbs.	75 kg /165 lbs.
Weight of Unit	84 kg / 185 lbs.	167 kg / 368 lbs.
Shipping Weight	97 kg / 214 lbs.	216 kg / 476 lbs.
Peltier Modules (units)	1	2
Energy Consumption at 20 °C	90 W	150 W
Access Port Diameter	42 mm / 1.65 in.	
Interior Material	Stainless steel 1.4301/304	
Exterior	Coated sheet metal	

* Depth of handle/display not included in depth (65 mm / 2.6 in.); adjustable feet are included in height (35 mm/ 1.4 in.) - required distance to rear wall: 130 mm / 5.1 in
** Depth of handle/display not included in depth (65 mm / 2.6 in.); casters are included in height (108 mm / 4.3 in.) - required distance to rear wall: 150 mm / 5.9 in
*** All figures in this table are typical average values for series devices, based on factory standard following norm DIN12880. Please contact us for certification information or IQ/OQ documents.

Ordering information Heratherm Refrigerated Incubators

select the Heratherm refrigerated incubator that best meets your requirements:

	Model IMP180	Model IMP400
Standard unit without electrical outlet, for US and EU with NEMA 5-15 cable and Schuko CEE7/7 cable	51031562	51031565

Please add your electrical configuration:		
Electrical configuration for China	51900900	51900900
Electrical configuration for Great Britain	51900303	51900303
Electrical configuration for Australia	51900449	51900449
Electrical configuration for Denmark	51900481	51900481
Electrical configuration for Italy	51900306	51900306
Electrical configuration for Switzerland	51900300	51900300
Electrical configuration for Japan	51900312	51900312

Models with internal electrical socket:		
Unit with electrical outlet - 120V, 60Hz, US-plug (Nema 5-15)	51031563	51031566
Unit with electrical outlet - 230V, 50/60Hz, Schuko plug, (EU standard)	51031564	51031567
Unit with electrical outlet - 230V, 50/60Hz, UK plug	51031564 + 51900303	51031567 + 51900303

Factory installed options

	Model IMP180	Model IMP400
Door hinge left	51900993	51901213
Stainless steel exterior	51900992	51901212
Heratherm Access port left, small - 22mm/0.87in.	51900996	51900996
Heratherm Access port left, large - 52mm/2.05in.	51900997	51900997
Heratherm Access port right, small - 22mm/0.87in.	51900998	51900998
Heratherm Access port right, large - 52mm/2.05in.	51900999	51900999
Heratherm Access port top, small - 22mm/0.87in.	51901000	51901000
Heratherm Access port top, large - 52mm/2.05in.	51901001	51901001

Customer installed accessories

Perforated stainless steel shelf for IMP180	50127777	Includes 2 shelf supports, 439 x 551 mm
Perforated stainless steel shelf for IMP400	50135241	Includes 2 shelf supports, 528 x 498 mm
Wire mesh shelf for IMP180	50127766	Includes 2 shelf supports, 448 x 511 mm
Wire mesh shelf for IMP400	50135243	Includes 2 shelf supports, 528 x 503 mm
Petri Dish holder (90 mm) IMP180	50128819	Shelf with holders for Petri dishes; ø 90mm; stainless steel; for all 180 l incubators; incl. 2 shelf supports; 16 stacks; 77 mm height
Petri Dish holder (50 mm) for IMP180	50128815	Shelf with holders for Petri dishes; ø 50mm; stainless steel; for all 180 l incubators; incl. 2 shelf supports; 36 stacks; 77 mm height
Drip tray for IMP180	50128792	Includes 2 shelf supports, 405 x 500 x 20 mm drip space
Stacking kit for IMP180	50126667	For stacking oven or 60L/100L on IMP180
Support stand with casters for IMP180	50127743	Height including casters: 187mm
Fresh air particle filter for IMP180 and IMP400	50127567	Fresh air particle filter for connection to port
Silicone free viton gasket for IMP180	50130659	For silicone-free applications
Silicone free viton gasket for IMP400	50135869	For silicone-free applications
Vent gasket for IMP180	50134908	For reduced condensation in applications with higher humidity
Vent gasket for IMP400	50152305	For reduced condensation in applications with higher humidity

Thermo Scientific Precision Refrigerated Incubators

Ideal for applications that require temperatures ranging from -10°C to +60°C with excellent stability

Warranty[Y]: 2 year (parts and labor)
Certifications: 115V units are cCSAus listed

PRODUCT NOT AVAILABLE IN EUROPE

Temperature Uniformity

- Microprocessor control with easy-to-read display shows actual temperature within 0.1°C
- Push-button controls for temperature setpoint selection
- Forced-air circulation delivers excellent temperature stability
- CFC-free, foamed polyurethane insulation prevents heat loss
- RTD temperature probe and protected setpoint mode prevent accidental temperature change
- Door key lock protects samples from unauthorized access

Efficient Design

- Easy-to-clean, corrosion-resistant construction
- Compressor relay conserves energy

173L (6.1 cu. ft.) Unit

- Economical undercounter design
- High/low safety thermostat backups
- Three cooling modes simplify operation: high precision with cooling; high precision without cooling; and frost-free with variable cooling
- Four adjustable leveling feet for stable setup
- 2A outlet easily supports apparatus inside the unit (115V model only)

566L (20Cu. ft.) Unit

- Ideal for BOD applications and temperature settings at or below ambient
- Holds over 300 BOD bottles (300mL)
- Temperature setpoint selection with high- and low-temperature protection and simple calibration
- Available with dual lamp fluorescent lighting for plant growth studies and day/night cycles, programmable lighting conditions (see next page)
- Energy efficient design, cooling can be switched off for temperatures above ambient - energy consumption as low as 0.1kW at 37 °C*
- Safety relay and alarm LED alert to over/undertemperature conditions, see next page
- Recorder jacks for data logging; RS232 connection available on option (Cat. No. of optional Kit: 3166245)
- Standard access port for feeding probes and apparatus cord in/out of unit

* Based on internal testing

Cat. No.	Capacity	Shelves (50 lb. weight limit per shelf)	Interior Dimensions (D × W × H)	Exterior Dimensions (D x W x H)	Uniformity @37 °C/20 °C	Temp. Range	Electrical
BOD models							
PR205745R	173L (6.1 cu. ft.)	2 supplied/4 max	520 x 520 x 700mm (20.5 x 20.5 x 28in.)	622 x 610 x 876mm (24.5 x 24 x 34.5in.)	± 0.6/1.0 °C*	-10° to +60 °C	115V 60Hz (9.5A), NEMA 5-15 plug
PR205740R	173L (6.1 cu. ft.)	2 supplied/4 max	520 x 520 x 700mm (20.5 x 20.5 x 28in.)	622 x 610 x 876mm (24.5 x 24 x 34.5in.)	± 0.6/1.0 °C*	-10° to +60 °C	230V 50Hz (5.8A), NEMA 6-15P plug
PR205740RCN	173L (6.1 cu. ft.)	2 supplied/4 max	520 x 520 x 700mm (20.5 x 20.5 x 28in.)	622 x 610 x 876mm (24.5 x 24 x 34.5in.)	± 0.6/1.0 °C*	-10° to +60 °C	230V 50Hz (5.8A), China plug
PR505755R	566L (20.0 cu. ft.)	4 supplied/6 max	508 x 673 x 1448mm (20 x 26.5 x 57in.)	787 x 864 x 1956mm (31 x 34 x 77in.)	± 0.5/0.9 °C**	-10° to +50 °C	120V, 60Hz (6.2A), NEMA 5-15P plug
PR505750R	566L (20.0 cu. ft.)	4 supplied/6 max	508 x 673 x 1448mm (20 x 26.5 x 57in.)	787 x 864 x 1956mm (31 x 34 x 77in.)	± 0.5/0.9 °C**	-10° to +50 °C	230V, 50/60Hz (3.1A), NEMA 6-15P plug
PR505750RCN	566L (20.0 cu. ft.)	4 supplied/6 max	508 x 673 x 1448mm (20 x 26.5 x 57in.)	787 x 864 x 1956mm (31 x 34 x 77in.)	± 0.5/0.9 °C**	-10° to +50 °C	230V, 50/60Hz (3.1A), China plug

* Performance values are based on 10 point measurements
** Performance values are based on 27 point measurements (DIN 12880)
*** Lights switched on

Additional shelving and accessory options

Cat. No.	Description	Dimensions
107384	Shelf for 173L units	52 x 44cm (20.5 x 17.5 in.)
GT3185275	Shelf for 566L / 504L unit	64 x 42cm (25.3 x 16.6 in.)
3173710	Glass Thermometers	
3166245	RS232 Interface Kit	
3166207	Digital Chart Recorder	
3174255	Chart Paper (100 sheets)	

Thermo Scientific Refrigerated Incubators

A broad temperature range for your applications

Models RI150 and RI250

- Broad 4 to 60 ºC temperature range for applications that require high or low temperature levels
- Adjustable over and under temperature alarm alerts operator of unexpected temperature deviations
- Single-setpoint microprocessor control for precise temperature setting
- Timer function for automatic start or shut down of unit (0 to 99:59 hours:minutes)
- Automatic defrost for uninterrupted longterm applications below ambient
- Overtemperature cut-out and fan motor overheating protection for additional safety
- Access port (Ø 50 mm) for inserting monitoring probes or cables for use of electrical devices – easy access on right side of unit
- RS232 data interface for temperature monitoring (no software included)
- Large unit with lockable casters for easy set-up and re-location

Ordering Alerts: Not available in North America
Warranty¥: 2 years (parts and labor)
Certifications: CE

	Model RI-150	Model RI-250
Order code for unit with following cables: EU CEE7/7 (Schuko), UK BS1363/A, Australia AS 3112	**RI-150EU**	**RI-250EU**
Order code for unit with China GB 2099 cable	**RI-150CN**	**RI-250CN**

Specifications

Model	RI-150 (Table top)	RI-250 (Floor Standing)
Chamber Volume	150 L / 5.3 cu. ft.	250 L / 8.8 cu. ft.
Temperature Range	+4 to 60 °C	
Temperature Deviation Over Time*	at 20 °C ≤ ± 0.3 at 37 °C ≤ ± 0.3	
Spatial Temperature Deviation*	at 20 °C ≤ ± 0.8 at 37 °C ≤ ± 0.7	at 20 °C ≤ ± 0.8 at 37 °C ≤ ± 1.0
Internal Dimensions (W x H x D)	550 x 450 x 615 mm 21.6 x 17.7 x 24.2 in.	550 x 450 x 1015 mm 21.6 x 17.7 x 40.0 in.
External Dimensions (W x H x D)**	652 x 605 x 1050** mm 25.7 x 23.8 x 41.3** in.	652 x 605 x 1450** mm 25.7 x 23.8 x 57.1** in.
Footprint	0.39m² / 4.2ft.²	
Shelves Supplied / Max	2 / 4	3 / 5
Shelf Size (W x D)	545 x 445 mm / 21.46 x 17.52 in.	
Loading Capcitiy Per Shelf	15 kg / 33 lbs.	
Weight of Unit	95 kg / 209 lbs.	115 kg / 254 lbs.
Shipping Weight	115 kg / 254 lbs.	135 kg / 298 lbs.
Electrical	230 V / 50 Hz, China Plug	
Rated Power / Max. Current	90 W / 3.9 A	

*Based on measurement according to DIN12880, at ambient temperature of 22 °C ± 3 °C
** Height includes the height of feet/casters

Shelving

Cat. No.	Description	Dimensions	Shipping Weight	For Use With
RISHELF	Perforated stainless steel shelf (white, powder coated) with 4 shelf holders)	545 x 445 mm 21.46 x 17.52	2 kg / 4 lbs	RI-150EU, RI-150CN, RI-250EU, RI-250CN

Thermo Scientific Peltier Low Temperature Incubators

Ideal for Drosophila research or applications requiring temperature above and/or below ambient

Warranty: 2 years parts, 1 year labor

PRODUCT NOT AVAILABLE IN EUROPE

- Innovative thermoelectric cooling technology eliminates the need for a refrigerated compressor. Units consume less power than conventional models while also reducing laboratory ambient temperatures and air conditioning loads
- Thermo Scientific Peltier cooled incubators operate within the temperature range preferred by fruit flies
- Programmable Watlow® controller allows for 40-step ramp and soak profiles, or four files with 10 steps per file
- Capable of programming day/night cycles in models with LED lights
- The lack of compressor coils eliminates the concerns of corrosion from insect waste
- Excellent temperature uniformity allows for effective space utilization
- Peltier technology excludes the need for compressor coils so corrosion from fly secretions is no longer a concern
- Meets American Public Health Association (APHA) specifications for biochemical oxygen demand (BOD)
- Easy to clean and corrosion resistant painted stainless steel interiors.
- All models include an RS 485 output as well as an independent over-temperature thermostat and over-temperature alarm
- Heavy-duty shelves have a 75 lb. capacity
- TUV certification
- Access port standard

Specifications

Cat. No.	3915FL	3990FL	3915LT	3990LT
Description	Drosophila incubator with LED lights	Drosophila incubator with LED lights	Low temperature incubator	Low temperature incubator
Capacity	6.5 Cu.Ft. (185L)	19.5 Cu.Ft. (552L)	6.5 Cu.Ft. (185L)	19.5 Cu.Ft. (552L)
Interior Dimensions W x D x H in. (cm)	25.6 x 24.1 x 18.5 (64.7 x 60.9 x 46.9)	25.6 x 24.1 x 54.8 (64.7 x 60.9 x 138.4)	25.6 x 24.1 x 18.5 (64.7 x 60.9 x 46.9)	25.6 x 24.1 x 54.8 (64.7 x 60.9 x 138.4)
Exterior Dimensions W x D x H in. (cm)	31.8 x 32.3 x 33.5 (76.2 x 80.1 x 85.1)	31.8 x 32.3 x 69.6 (76.2 x 80.1 x 176.6)	31.8 x 32.3 x 33.5 (76.2 x 80.1 x 85.1)	31.8 x 32.3 x 69.6 (76.2 x 80.1 x 176.6)
Temperature Range	15°C to 40°C			
Temperature Uniformity (unit@15°)	+/-0.55°C (at 15-28°C ambient, 50%RH			
Temperature Uniformity (unit@22°)	+/-0.64°C (at 15-35°C ambient, 50%RH			
Temperature Uniformity (unit@40°)	+/-1.0°C (at 18-40°C ambient, 50%RH			
Electrical Specifications	100-120V, 50/60Hz, 360W (3.0A)			
Temperature Control	0.1°C Display increments			
RS 485 interface	Yes			
Shelving	2 Supplied	5 Supplied, Adjustable, Bottom shelf slide; max. 16	2 Supplied	5 Supplied, Adjustable, Bottom shelf slide, max. 16
Shelf Capacity	75 lbs/34 kg shelf. 150 lbs/68 kg total	75 lbs/34 kg shelf. 375 lbs/170 kg total	75 lbs/34 kg shelf. 150 lbs/68 kg total	75 lbs/34 kg shelf. 375 lbs/170 kg total
Weight (lbs/kg)	259/118	380/172	259/118	380/172
US style plug	Yes			

Thermo Scientific Accessories* for Peltier Low Temperature Incubators

Cat. No.	Description
3900BR	Sliding shelf brackets for drosophila and low temperature incubators
3900FSH	Fixed shelf for drosophila and low temperature incubators
3900SSH	Sliding shelf for drosophila and low temperature incubators incubators

* Stacking kit (Cat. No. 3915SK) is available for 6.5 Cu.Ft. models

Thermo Scientific Precision Plant-Growth Incubators

Broad temperature range ideal for applications requiring night/day simulation, precise temperature control and uniformity over a broad temperature range

- Programmable heating and lighting cycles: 7-day program with 2 light cycles per day
- Easy-to-read LED display shows actual temperature within 0.1°C
- Push-button microprocessor controls feature temperature setpoint selection
- Forced-air circulation delivers excellent temperature stability
- RTD temperature probe and protected setpoint mode prevent accidental temperature change
- Easy-to-clean, corrosion-resistant construction
- CFC-free, foamed polyurethane insulation prevents heat loss
- Door key lock protects samples from unauthorized access
- 1.2 in. access port
- Light information:
  - Color: cool white supreme
  - Lumens (brightness) per fluorescent lamp: 2600 Lm
  - Illumination level (measured at chamber center point at 20°C): 3678 Lux/342 foot-candles

Warranty¥: 1 year (parts and labor)
Certifications: 115V unit is cCSAus listed

PRODUCT NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Shelves	Interior Dimensions (D × W × H)	Exterior Dimensions (D x W x H)	Uniformity @37 °C/20 °C	Temp. Range	Electrical
Plant growth models with light at 20 °C							
PR505755L	504L (17.8 cu. ft.)	4 supplied/6 max	508 x 673 x 1448mm (20 x 26.5 x 57in.)	787 x 864 x 1956mm (31 x 34 x 77in.)	± 1.8 °C*** (0.9 °C w/o light)	-10° to +50 °C +10° to +50 °C***	120V, 60Hz (6.8A), NEMA 5-15P plug
PR505750L	504L (17.8 cu. ft.)	4 supplied/6 max	508 x 673 x 1448mm (20 x 26.5 x 57in.)	787 x 864 x 1956mm (31 x 34 x 77in.)	± 1.8 °C*** (0.9 °C w/o light)	-10° to +50 °C +10° to +50 °C***	230V, 60Hz (3.4A), NEMA 6-15P plug **Note: cannot be used in 50Hz circuit**

* Performance values are based on 10 point measurements
** Performance values are based on 27 point measurements (DIN 12880)
*** Lights switched on

Additional Shelving Options

Cat. No.	Description	Dimensions
107384	Shelf for 173L units	52 x 44cm (20.5 x 17.5 in.)
GT3185275	Shelf for 566L / 504L unit	64 x 42cm (25.3 x 16.6 in.)

Thermo Scientific Educational Countertop Plant Growth Chamber

Ideal for growing plants and designed to accommodate plant, animal culture studies in the classroom setting

- Automatic 24-hour programming with timer
- Sliding glass doors for easy access and viewing
- Four fluorescent and three incandescent lamps for various lighting levels (customer supplied)
- Two interior electrical outlets to easily accommodate other electrical equipment
- On/Off indicator lights for main power switch, lamp switch, heater output, fan, thermostat and 24 timer/programmer switches
- Front control panel can be removed for maintenance without disturbing experiments in progress
- Model 846 series combine large viewing area, simplified temperature controls and an economical price
- Black-out panel included

Warranty[¥]: 1 year (parts); 90 days (labor)

PRODUCT NOT AVAILABLE IN EUROPE

Cat. No.	Chamber Volume	Shelf Area	Chamber Dimensions (W x D x H)	Exterior Dimensions (W x D x H)	Shipping Weight	Electrical
846	14.2 cu. ft. (396L)	0.20 sq m (2.2 sq. ft.)	127 x 43 x 74cm (50 x 17 x 29in.)	132 x 47x 97cm (52 x 18.5 x 38in.)	107 kg (236 lb.)	120V, 60 Hz, 800W

Accessories

Cat. No.	Description
846-8	Chamber shelf (H x D) 16.5 x 125.7cm (6.5 x 49.5in.)
846-12	Mobile chamber stand 134.6 x 81.3 x 59.7cm (53 x 32 x 23.5in.)
846-13	Planting Tray (pkg. of 4)

Thermo Scientific Shake ‘n’ Stack Hybridization Ovens

Stackable, space-saving design and excellent uniformity are ideal for molecular biology labs

- Each unit capable of operating either rotisserie or shaking platform for additional functionality
- One compact triple-oven tower can be set up for three distinct functions at different temperatures
- Digital LED display and controls
- Capacity for 10 medium bottles
- Accurate temperature control for improved experimental results
- Excellent temperature uniformity for reproducible results with low backgrounds
- Multiple rotisserie fittings for flexible choice of consumable
- Interchangeable rotisserie/shaking platform (max. load of 1kg/2.2 lb.) for hybridization and washing procedures
- Variable speed settings for protocol optimization
- Up/down shaking motion

Includes: Models 6243, 6242 include 10-bottle capacity rotisserie, adjustable feet, drip tray, manual; Models 6241, 6240 includes Shaker platform, 10-bottle capacity rotisserie, adjustable feet, drip tray, manual
Warranty[¥]: 1 year (parts and labor)

Cat. No.	Interior D x W x H	Platform L x W	Exterior L x W x H	Temperature Range	Temperature Uniformity	Rotisserie Speed Range	Electrical
6243	24 × 35 × 24.5cm (9.5 × 13.8 × 9.7in.)	25 × 18cm (9.8 × 7in.)	38 × 42.5 × 43.5cm (15 × 17.1 × 16.7in.)	35° to 85°C	±0.25°C within bottle	5 to 15rpm	110V 250w 50/60 Hz
6242	24 × 35 × 24.5cm (9.5 × 13.8 × 9.7in.)	25 × 18cm (9.8 × 7in.)	38 × 42.5 × 43.5cm (15 × 17.1 × 16.7in.)	35° to 85°C	±0.25°C within bottle	5 to 15rpm	220V 250w 50/60 Hz
6241	24 × 35 × 24.5cm (9.5 × 13.8 × 9.7in.)	25 × 18cm (9.8 × 7in.)	38 × 42.5 × 43.5cm (15 × 17.1 × 16.7in.)	35° to 85°C	±0.25°C within bottle	5 to 15rpm	110V 250w 50/60 Hz
6240	24 × 35 × 24.5cm (9.5 × 13.8 × 9.7in.)	25 × 18cm (9.8 × 7in.)	38 × 42.5 × 43.5cm (15 × 17.1 × 16.7in.)	35° to 85°C	±0.25°C within bottle	5 to 15rpm	220V 250w 50/60 Hz

Models 6242 and 6240 are CE certified

Thermo Scientific Accessories for Shake ‘n’ Stack Hybridization Ovens

Cat. No.	Description	For Use with
Rotisseries		
222032	Delrin* Plastic Rotisserie	Shake ‘n’ Stack ovens
222033	Stainless-steel Rotisserie	Shake ‘n’ Stack ovens
222041	Stainless-steel Rotisserie	Shake ‘n’ Stack ovens
222042	Delrin Plastic Rotisserie	Shake ‘n’ Stack, Maxi 14 ovens
222043	Delrin Plastic Rotisserie	Shake ‘n’ Stack, Maxi 14 ovens
222044	Delrin Plastic Rotisserie	Shake ‘n’ Stack, Maxi 14 ovens
Other Accessories		
222051	Drip Tray	Shake ‘n’ Stack ovens
222000	Shaking Platform	Shake ‘n’ Stack ovens

Thermo Scientific Hybridization Bottle & Mesh System

Manufactured using thick walled borosilicate glass to ensure safe and easy handling

- Improves the flow of probe solution around and through membranes for optimal results
- Designed to exacting safety standards, these bottles have screw caps containing flat PTFE seals to ensure leak-resistant hybridization
- Full range of bottles accommodates every size of membrane
- Enables multiple blots to be processed simultaneously in one 35mm diameter bottle without direct overlap

Bottle gripper for safe and easy handling of bottles. Additional grippers can be purchased separately (Cat. No. 222055 to -057)

Cat. No.	Description	Dimensions
Bottles and Rack		
110103	Bottle Rack	For up to six 35mm bottles
110113	Bottle; Large	300 × 35mm
110115	Bottle; Medium	250 × 35mm
110116	Bottle; Small	150 × 35mm
110094	Bottle; Extra large	300 × 70mm
Bottle Caps and O-Rings		
110108	Bottle cap and seal for small, medium and large bottles	35mm
110105	Bottle cap and seal for extra large bottles	70mm
110109	Washer seal; For small, medium and large bottle caps	35mm
110107	Washer seal; For extra large bottle caps	70mm
Bottle Grippers		
222055	Bottle gripper; For extra large 70mm bottles	Length: 300mm
222056	Bottle gripper; For large and medium 35mm bottles	Length: 300mm
222057	Bottle gripper; For small 35mm bottles	Length: 150mm
Oven Mesh		
222054	Roll of mesh	5m × 25cm
222052	Oven mesh sheets; Small; Pack of 5	10 × 15cm
222053	Oven mesh sheets; Large; Pack of 5	23 × 23cm
222058	Oven mesh sheets; Small; Pack of 20	10 × 15cm
222059	Oven mesh sheets; Large; Pack of 20	23 × 23cm
Accessory Pack		
222060	Includes two medium bottles, one bottlegripper, one mesh and hybridization guide	250 × 35mm

ovens

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Thermo Scientific Heratherm Heating and Drying Ovens Selector Guide

Features	Heratherm® General Protocol Oven		Heratherm Advanced Protocol Oven		Heratherm Advanced Protocol Security Oven
	TABLE TOP	LARGE CAPACITY	TABLE TOP	LARGE CAPACITY	TABLE TOP
Temperature range	50°C [1] - 250°C	50°C [1] - 250°C	50°C [1] - 330°C	50 °C - 250 °C	50°C [1] 330°C
Interior material	stainless steel AISI 430 / 1.4016	stainless steel AISI 430 / 1.4016	stainless steel AISI 304 / 1.4301	stainless steel AISI 304 / 1.4301	stainless steel AISI 304 / 1.4301
Rounded corners	✔	✔	✔	✔	✔
Microprocessor control	✔	✔	✔	✔	✔
Automatic over-temperature alarm	✔	✔	✔	✔	✔
Stackable with optional stacking kit	✔	–	✔	–	✔
Easy calibration routine	✔	✔	✔	✔	✔
Gravity Convection	choice	✔	choice	–	choice
Mechanical Convection	choice	–	choice	✔	choice
Timer functions	on / off	on / off	choice of weekly / daily / real time	choice of weekly / daily / real time	choice of weekly / daily / real time
Fresh air damper	manually controlled	manually controlled	electronically controlled	electronically controlled	electronically controlled
Access port for independent data monitoring	Use exhaust vent	Use exhaust vent	✔	✔	✔
RS232 interface	✔	✔	✔	✔	✔
Adjustable fan speed	–	–	5 speeds	2 speeds	5 speeds
Programmable (ramps / dwells)	–	–	✔	✔	✔
Boost function for accelerated heat-up	–	–	✔	–	✔
Optional stainless steel exterior	–	–	–	✔ (not available in NA)	✔
Dry alarm contact for connection of alarm device	–	–	✔	✔	✔
Automatic undertemperature alarm	–	–	–	–	✔
Door alarm	–	–	–	✔	✔
Lockable door	–	–	–	–	✔
Connection for optional sample temperature sensor	–	–	–	✔	✔

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit

Application	Material/Sample*	Temp. Requirements	Recommended Heratherm Oven
Drying	Glassware	Fast drying	Gravity convection for gentle drying, Mechanical convection for fast drying, Choose Advanced Protocol for highest temperature accuracy and selection of fan speed, choose Advanced Protocol Security for highest sample safety. Check also our vacuum ovens for speedy drying at low temperatures.
	Powders	Gentle/Fast drying	
	Paper, textile	Gentle/Fast drying	
	Soil, sand	Gentle drying	
	Electronics	Gentle drying	
	Pharmaceutical preparations	Gentle drying	
Material testing	Cables	Highest temperature accuracy; safe processes	Advanced protocol models with mechanical convection; Advanced protocol security models for highest sample safety.
	Plastics	Highest temperature accuracy; safe processes	
Curing	Paint	Gentle Heating	Gravity convection for gentle heating. Choose Advanced Protocol for high temperature accuracy, Advanced Protocol Security for highest sample safety. If combustible solvents are released: ask your Thermo Fisher Scientific representative!
	Adhesives	Gentle Heating	
	Plastics	Gentle Heating	
	Metals	Gentle Heating	
Heated Storage	Pills, drugs	Gentle heating; safe processes	Gravity convection for gentle heating, or mechanical convection Advanced Protocol at low fan speed. Choose Advanced Protocol Security for highest sample safety.
Vulcanization	Rubber	Gentle Heating	

* examples

Thermo Scientific Heratherm General Protocol Ovens

Perfect for routine day to day work, providing the ideal heating and drying solution for research, clinical or industrial needs

- Choice of gravity convection for gentle drying and heating, or mechanical convection for faster drying and heating, and excellent temperature uniformity
- Three sizes; Operating temperatures from 50° to 250°C
- Automatic over-temperature alarm system to protect samples
- Low overall energy consumption
- Excellent footprint/volume ratio
- Corrosion-resistant stainless-steel chambers with rounded corners for easy cleaning
- Large, easy to read vacuum fluorescent display
- Easy to use, microprocessor-controlled touch button operation
- Easy to access – doors can be opened to over 180° degrees

Ordering Alerts: Availability may vary by country.
Warranty¥: 2 years (parts and labor)
Certifications: cCSAus (120V 208-240V 60Hz models) and CE (230V, 50/60Hz models)

Cat. No.	Model	Chamber Volume	Footprint	Temp Uniformity/ Stability (@150°C)	Chamber Dimensions (D x W x H)	Exterior Dimensions* (D x W x H)	Shelves Supplied (Max)/ Max Load	Shipping Weight	Electrical/ Plug Type
Gravity Convection									
51028112	OGS60	65L (2.30 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±4.0°C / ±0.4°C	415 x 328 x 480mm (16.4 x 12.9 x 18.9in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	42kg (93 lb.)	120V; 60Hz; 1730w; 14.4A; US Nema 5-15
51028139	OGS60	65L (2.30 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±4.4°C / ±0.4°C	415 x 328 x 480mm (16.4 x 12.9 x 18.9in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	42kg (93 lb.)	230V; 50/60Hz; 1800w; 7.9A; Country specific
51028872	OGS100	105L (3.75 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±4.5°C / ±0.4°C	414 x 438 x 580mm (16.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	120V; 60Hz; 1680w; 14A; US Nema 5-15
51028140	OGS100	105L (3.75 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±4.0°C / ±0.4°C	414 x 438 x 580mm (16.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
51028113	OGS100	105L (3.75 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±4.0°C / ±0.4°C	414 x 438 x 580mm (16.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20
51028874	OGS180	176L (6.20Cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±5.0°C / ±0.4°C	589 x 438 x 680mm (23.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	120V; 60Hz; 1680w; 14Ac; US Nema 5-15 (for use in North America)
51028141	OGS180	176L (6.20Cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±4.0°C / ±0.4°C	589 x 438 x 680mm (23.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
51028114	OGS180	176L (6.20Cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±4.0°C / ±0.4°C	589 x 438 x 680mm (23.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20 (for use in North America)
Mechanical Convection									
51028121	OMS60	66L (2.30 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±3.3°C / ±0.3°C	368 x 354 x 508mm (14.5 x 13.9 x 20.0in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	40kg (88 lb.)	120V; 60Hz; 1440w; 12A US Nema 5-15
51028148	OMS60	66L (2.30 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.8°C / ±0.3°C	368 x 354 x 508mm (14.5 x 13.9 x 20.0in.)	470 x 565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	40kg (88 lb.)	230V; 50/60Hz; 1400w; 6.1A Country specific
51028873	OMS100	104L (6.30 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.5°C / ±0.4°C	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	120V; 60Hz; 1660w; 13.8A; US Nema 5-15
51028149	OMS100	104L (6.30 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±2.5°C / ±0.3°C	368 x 464 x 608mm (14.5 x 18.3 x 23.9in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	230V; 50/60Hz; 3060w; 13.3A; Country specific
51028122	OMS100	104L (6.30 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±2.5°C / ±0.3°C	368 x 464 x 608mm (14.5 x 18.3 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	53kg (117 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20
51028875	OMS180	179L (6.30 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±3.5°C / ±0.3°C	543 x 464 x 708mm (21.4 x 18.3 x 27.9 in.	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	120V; 60Hz; 1660w; 13.8Ac; US Nema 5-15 (for use in North America)
51028150	OMS180	179L (6.30 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±3.0°C / ±0.3°C	543 x 464 x 708mm (21.4 x 18.3 x 27.9 in.	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	230V 50/60Hz; 3060w; 13.3A; Country specific
51028123	OMS180	179L (6.30 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.8°C / ±0.3°C	543 x 464 x 708mm (21.4 x 18.3 x 27.9 in.	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	66kg (146 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)

* Depth does not include handle/display (65mm / 2.6 in.) and distance spacer at rear (80mm / 3.1 in.); height includes the feet (35mm / 1.4 in.)
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Advanced Protocol Heating and Drying Ovens

Mechanical or gravity convection technology with excellent temperature values, providing flexibility, accuracy and dependability

- Unsurpassed temperature performance – the flexible tool in the lab to be used for multiple applications
- Choice of gravity convection for gentle drying and heating, or mechanical convection for faster drying and heating, and outstanding temperature uniformity
- Broad temperature range from 50-330°C
- Adjustable fan speed for application-related airflow in mechanical convection models (e.g., drying of powders)
- High speed for expedited drying and heating, quick recovery, and optimal temperature stability and uniformity
- Programmable controller for temperature ramps and dwells
- Up to 10 programs can be saved, each with 10 discrete steps
- Electronically controlled fan speed and damper position
- Programs can be repeated automatically
- Access port allows the introduction of sensors for independent data monitoring
- Microprocessor control with vacuum fluorescent display
- Simple calibration routine ensures temperature accuracy over time
- Boost function enables rapid heating up — no need to operate the oven 24/7

Ordering Alerts: Availability may vary by country
Warranty[¥]: 2 years (parts and labor)
Certifications: CSAus (120V, 208-240V/60Hz models) and CE (230V, 50/60 Hz models)

Cat. No.	Model/ Interior	Chamber Volume	Footprint	Temp Uniformity/ Stability (@150°C)	Chamber Dimensions (D x W x H)	Exterior Dimensions* (D x W x H)	Shelves Supplied (Max)/ Max Load	Shipping weight	Electrical/ Plug Type
Gravity Convection									
51028115	OGH60/ coated	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm 22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1730w; 14.4A; US Nema 5-15
51028142	OGH60/ coated	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1800w; 7.9A; Country specific
51028709	OGH60 SS/ stainless steel	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1800w; 7.9A; Country specific
51028116	OGH100/ coated	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±2.5°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028143	OGH100/ coated	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.0°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
51028711	OGH100 SS/ stainless steel	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.0°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
51028144	OGH180/ coated	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.5°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
51028117	OGH180/ coated	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.9°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20 (for use in North America)
51028712	OGH180 SS/ stainless steel	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.5°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3100w; 13.5A; Country specific
Mechanical Convection									
51028124	OMH60/ coated	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.5°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1440w; 12A; US Nema 5-15
51028151	OMH60/ coated	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.8°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1400w; 6.1A; Country specific
51028713	OMH60 SS/ stainless steel	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.8°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1400w; 6.1A; Country specific
51028125	OMH100/ coated	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 464 x 608mm (13.5 x 18.3 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028152	OMH100/ coated	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 464 x 608mm (13.5 x 18.3 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3060w; 13.3A; Country specific
51028715	OMH100 SS/ stainless steel	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 464 x 608mm (13.5 x 18.3 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3060w; 13.3A; Country specific
51028126	OMH180/ coated	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.5°C / ±0.2°C	518 x 464 x 708mm (18.3 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028153	OMH180/ coated	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.8°C / ±0.2°C	518 x 464 x 708mm (18.3 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3060w; 13.3Ac; Country specific
51028716	OMH180 SS/ stainless steel	179L (6.30 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.8°C / ±0.2°C	518 x 464 x 708mm (18.3 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3060w; 13.3A; Country specific

* Depth does not include handle/display (65mm / 2.6 in.) and distance spacer at rear (80mm / 3.1 in.); height includes the feet (35mm / 1.4 in.)
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Advanced Protocol Security Heating and Drying Ovens

Extra layer of security for applications where process reliability and security are paramount

- Choice of gravity convection for gentle drying and heating, or mechanical convection for faster drying and heating, and exceptional temperature uniformity
- Choice of stainless steel exterior available for demanding pharmaceutical and clinical applications
- Standard over-temperature alarm and an additional under-temperature alarm ensure that your samples stay at the correct temperature
- Door lock prevents disruption, tampering or accidental opening
- Door alarm notifies the operator when door is left open accidentally, preventing the temperature from deviating
- Broad temperatures range from 50-330°C
- Optional sample sensor provides exact temperature of sample on display
- Auto-dry function deactivates oven when the samples are dry, saving energy
  (Note: Optional sample sensor is required to utilize this feature)
- Advanced digital timer for daily or weekly on / off cycles
- Stainless-steel interior is easy to clean and corrosion resistant (steel quality AISI 304 /1.4301)
- Programmable controller for temperature ramps and dwells
- Up to 10 programs can be saved, each with 10 discrete steps
- Electronically controlled fan speed and damper position can be incorporated; Programs can be repeated automatically
- Access port allows the introduction of sensors for independent data monitoring
- Simple calibration routine ensures temperature accuracy over time
- Boost function enables rapid heating up – no need to operate the oven 24/7

Ordering Alerts: Availability may vary by country
Warranty[¥]: 2 years (parts and labor)
Certifications: CSAus (120V, 208-240V/60Hz models) and CE (230V, 50/60Hz models)

Cat. No.	Model/Interior	Chamber Volume	Footprint	Temp Uniformity/ Stability (@37°C)	Chamber Dimensions (D x W x H)	Exterior Dimensions* (D x W x H)	Shelves Supplied (Max)/ Max Load	Shipping weight	Electrical/ Plug Type
Gravity Convection									
51028118	OGH60-S/ coated	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1730w; 14.4A; US Nema 5-15
51028536	OGH60-S SS/ Stainless Steel	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1730w; 14.4A; US Nema 5-15
51028145	OGH60-S/ coated	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1800w; 7.9A; Country specific
51028544	OGH60-S SS/ Stainless Steel	61L (2.15 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±2.5°C / ±0.3°C	389 x 328 x 480mm (15.3 x 12.9 x 18.9in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1800w; 7.9A; Country specific
51028119	OGH100-S/ coated	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.0°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028537	OGH100-S SS/ Stainless Steel	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±2.5°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20
51028146	OGH100-S/ coated	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.0°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3100w; 13.5A Country specific
51028545	OGH100-S SS/ Stainless Steel	99L (3.6 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±3.0°C / ±0.3°C	389 x 438 x 580mm (15.3 x 17.2 x 22.8in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3100w; 13.5A Country specific
51028120	OGH180-S/ coated	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.9°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028538	OGH180-S SS/ Stainless Steel	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.9°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A; US Nema 6-20 (for use in North America)
51028147	OGH180-S/ coated	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.5°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3100w; 13.5A Country specific
51028546	OGH180-S SS/ Stainless Steel	168L (6.05 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±2.5°C / ±0.3°C	564 x 438 x 680mm (17.2 x 17.2 x 26.8in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6 in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V; 50/60Hz; 3100w; 13.5A Country specific
Mechanical Convection									
51028127	OMH60-S/ coated	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.5°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1440w; 12A; US Nema 5-15
51028539	OMH60-S SS/ Stainless Steel	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.5°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	120V; 60Hz; 1440w; 12A; US Nema 5-15
51028154	OMH60-S/ coated	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.8°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1400w; 6.1A Country specific
51028547	OMH60-S SS/ Stainless Steel	62L (2.2 cu. ft.)	0.3 sq. m (3.2 sq. ft.)	±1.8°C / ±0.2°C	343 x 354 x 508mm (13.5 x 13.9 x 20.0in.)	565 x 530 x 755mm (22.2 x 20.9 x 29.7in.)	2 (13)/25kg (55 lb.)	44kg (97 lb.)	230V; 50/60Hz; 1400w; 6.1A Country specific
51028128	OMH100-S/coated	97L (3.5 cu. ft)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 438 x 608mm (13.5 x 17.2 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20 (for use in North America)
51028326	OMH100-S SS/ Stainless Steel	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 438 x 608mm (13.5 x 17.2 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20 (for use in North America)
51028155	OMH100-S/coated	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 438 x 608mm (13.5 x 17.2 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3060w; 13.3A Country specific
51028548	OMH100-S SS/ Stainless Steel	97L (3.5 cu. ft.)	0.36 sq. m (3.9 sq. ft.)	±1.3°C / ±0.2°C	343 x 438 x 608mm (13.5 x 17.2 x 23.9 in.)	565 x 640 x 855mm (22.2 x 25.2 x 33.7in.)	2 (16)/25kg (55 lb.)	55kg (121 lb.)	230V; 50/60Hz; 3060w; 13.3A Country specific
51028129	OMH180-S/coated	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.5°C / ±0.2°C	518 x 464 x 708mm (20.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20
51028540	OMH180-S SS/ Stainless Steel	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.5°C / ±0.2°C	518 x 464 x 708mm (20.4 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	208-240V; 60Hz; 3360w; 14A US Nema 6-20 (for use in North America)
51028156	OMH180-S/ coated	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.8°C / ±0.2°C	518 x 464 x 708mm (18.3 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V 50/60Hz; 3060w; 13.3A Country specific
51028549	OMH180-S SS/ Stainless Steel	170L (6.1 cu. ft.)	0.47 sq. m (5.1 sq. ft.)	±1.8°C / ±0.2°C	518 x 464 x 708mm (18.3 x 18.3 x 27.9in.)	738 x 640 x 955mm (29.1 x 25.2 x 37.6in.)	2 (19)/25kg (55 lb.)	69kg (152 lb.)	230V 50/60Hz; 3060w; 13.3A Country specific

* Depth does not include handle/display (65mm / 2.6 in.) and distance spacer at rear (80mm / 3.1 in.); height includes the feet (35mm / 1.4 in.)

NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm Ovens Accessories

Cat. No.	Description	Details
Additional Shelving		
50128881	Reinforced shelf – 180L, mechanical convection	Shelf with maximum capacity of 70 kg for 180 liter models, mechanical convection of Advanced Protocol and Advanced Protocol Security ovens; max total capacity is 250 kg
50128880	Reinforced shelf – 180L, gravity convection	Shelf with maximum capacity of 70 kg for 180 liter models, gravity convection of Advanced Protocol and Advanced Protocol Security ovens; max total capacity is 250 kg
50127761	Additional shelf kit, 60L model, gravity convection	Additional wire mesh shelf for 60L gravity convection models, including 2 shelf supports
50127762	Additional shelf kit, 100L model, gravity convection	Additional wire mesh shelf for 100L gravity convection models, including 2 shelf supports
50127763	Additional shelf kitf, 180L model, gravity convection	Additional wire mesh shelf for 180L gravity convection models, including 2 shelf supports
50127764	Additional shelf kit, 60L model, mechanical convection	Additional wire mesh shelf for 60L mechanical convection models, including 2 shelf supports
50127765	Additional shelf kit, 100L model, mechanical convection	Additional wire mesh shelf for 100L mechanical convection models, including 2 shelf supports
50127766	Additional shelf kit, 180L model, mechanical convection	Additional wire mesh shelf for 180L mechanical convection models, including 2 shelf supports
Stacking Kits		
50126665	Stacking kit 60L units	Stacking kit for Heratherm 60L models
50126666	Stacking kit 100L units	Stacking kit for Heratherm 100L models - use also to stack 60L on 100L
50126667	Stacking kit 180L units	Stacking kit for Heratherm 180L models - use also to stack 60Lor 100L on 180L
Support Stands		
50127741	Support stand 60L units	Support stand with casters for 60L units; height of stand including casters: 187mm / 7.4in
50127742	Support stand 100L units	Support stand with casters for 100L units; height of stand including casters: 187mm / 7.4in
50127743	Support stand 180L units	Support stand with casters for 180L units; height of stand including casters: 187mm / 7.4in
Sample Sensor		
50127767	Sample sensor Advanced Protocol Security	Sample sensor to measure and display exact sample temperature - forHeratherm Advanced Protocol Security ovens
Underbench Installation Kit		
50128887	Kit for underbench installation – air exhaust	Kit for underbench installation; for all AP and APS ovens; consists of exhaust tubing (1.5 m length) and details on wall distances; note that maximum temperature for underbench installation is 250 °C
Special Sealing		
50130657	Silicone free viton sealing 60L	Silicone free viton door sealing for all 60 liter Heratherm ovens
50130658	Silicone free viton sealing 100L	Silicone free viton door sealing for all 100 liter Heratherm ovens
50130659	Silicone free viton sealing 180L	Silicone free viton door sealing for all 180 liter Heratherm ovens
Fresh Air Filter		
50127566	Fresh air particle filter	Fresh air particle filter for connection to the fresh air vent (intake), for Advanced Protocol and Advanced Protocol Security models only

* other voltages available on request

Cat. No.	Description	Details
Factory-Installed Options — Please order in conjunction with desired oven		
51900996	Access port left, small	Additional access port on center of left side of unit; Ø 24 mm for all mechanical convection ovens / Ø 19 mm for all gravity convection ovens.
51900997	Access port left, large	Additional access port on center of left side of unit; Ø 58 mm for all mechanical convection ovens / Ø 53 mm for all gravity convection ovens.
51900998	Access port right, small	Additional access port on center of right side of unit; Ø 24 mm for all mechanical convection ovens / Ø 19 mm for all gravity convection ovens.
51900999	Access port right, large	Additional access port on center of right side of unit; Ø 58 mm for all mechanical convection ovens / Ø 53 mm for all gravity convection ovens.
51901000	Access port top, small	Additional access port on center of top of unit; Ø 24 mm for all ovens.
51901001	Access port top, large	Additional access port on center of top of unit; Ø 58 mm for all ovens.
51900993	Door hinge left side	Door hinge on left side – Available for General Protocol, Advanced Protocol and Advanced Protocol Security units. Coated exterior only.
Ovens with View Package (ask for other voltages)		
51028897	OGH60 with view package 230VAC; 50/60Hz	Advanced Protocol oven with gravity convection; 61 liters volume; 230VAC; 50Hz; 1 window; light
51028898	OGH100 with view package 230VAC; 50/60Hz	Advanced Protocol oven with gravity convection; 99 liters volume; 230VAC; 50Hz; 1 window, light
51028916	OGH180 with view package 230VAC; 50/60Hz	Advanced Protocol oven with gravity convection; 168 liters volume; 230VAC; 50Hz; 2 windows, light
51028923	OMH60 with view package 230VAC; 50/60Hz	Advanced Protocol oven with mechanical convection; 62 liters volume; 230VAC; 50Hz; 1 window; light
51028734	OMH100 with view package 230VAC; 50/60Hz	Advanced Protocol oven with mechanical convection; 97 liters volume; 230VAC; 50Hz; 1 window, light
51028910	OMH180 with view package 230VAC; 50/60Hz	Advanced Protocol oven with mechanical convection; 170 liters volume; 230VAC; 50Hz; 2 windows, light
51028736	OGH60-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with gravity convection; 61 liters volume; 230VAC; 50Hz; 1 window; light
51028924	OGH100-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with gravity convection; 99 liters volume; 230VAC; 50Hz; 1 window, light
51028925	OGH180-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with gravity convection; 168 liters volume; 230VAC; 50Hz; 2 windows, light
51028926	OMH60-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with mechanical convection; 62 liters volume; 230VAC; 50Hz; 1 window; light
51028927	OMH100-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with mechanical convection; 97 liters volume; 230VAC; 50Hz; 1 window, light
51028733	OMH180-S with view package 230VAC; 50/60Hz	Advanced Protocol Security oven with mechanical convection; 170 liters volume; 230VAC; 50Hz; 2 windows, light

Thermo Scientific Heratherm Heating and Drying Ovens – Large Capacity

Designed for high sample volume or large samples

Warranty[¥]: 2 years (parts and labor)
Certifications: CSAus (208-240V/60Hz models) and CE (230V, 50/60Hz models)

General Protocol Ovens

Efficent

- Two sizes (400 and 750 L)
- Gravity convection technology for gentle heating and drying
- Low overall energy consumption: 25% energy savings compared to conventional ovens*
- Great footprint/volume ratio

Safe

- Operating from 10 °C above ambient temperature up to 250 °C
- Temperature uniformity of +/- 3.0 to 3.7 °K and temperature stability of 0.5 °K at 150 °C
- 750 L unit available in 400 V for high temperatures and fast heat-up and recovery times
- Inner chambers made from corrosion-resistant stainless steel (1.4016 / AISI430)

Easy

- “Plug and play” for 230V models with standard plug: 208/240V 60Hz models have Nema 6-20 plug: no special high voltage connection needed
- Intuitive user interface and easy to read display
- Lockable casters for mobility and easy set-up in your lab

Advanced Protocol Ovens

Efficent

- Two sizes (400 and 750 L)
- Mechanical convection technology ensures optimal temperature distribution with fast heat-up and drying processes

Safe

- Operating at temperatures as high as 250 °C – large 400 V unit available for up to 300 °C
- Improved level of temperature uniformity: 2.1 to 3.1 °K

Easy

- 2-speed fan for application flexibility:
- Programmable controller for pre-defined temperature ramps
  - > Up to 10 temperature steps defined per program
  - > Fan speed and damper position controlled electronically, and can be changed for every program step individually for maximium process flexibility
  - > Up to 10 programs can be saved for simple and speedy process repetition
- Sophisticated timer extends the automation options available to the user
- Inner chamber made from stainless steel (highly resistant quality 1.4301 / AISI304)
- Available in stainless steel exterior

*Values stated apply to the unloaded oven in conjunction with wire mesh trays (measurement according to DIN 12880, Part 2), air flap closed.

Cat. No.	Model/ Exterior	Chamber Volume L (cuft)	Temperature Range	Temp. Uniformity*/ Stability (@150°C)*	Chamber Dimensions (D x W x H)	Exterior Dimensions * (D x W x H)	Shelves Supplied/ Max (Max Load)	Shipping Weight	Electrical/ Plug Type
General Protocol Ovens - Gravity Convection									
51029328	OGS400 / coated	419 (14.8)	50 C to 250 C	± 3°C / ± 0.5°C	590 x 544 x 1307 mm (23 x 21 x 51 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	136 kg (300 lb)	230V; 50/60Hz; 2400W; 10.5A; Country specific
51029327	OGS400 / coated	419 (14.8)	50 C to 250 C	± 3°C / ± 0.5°C	590 x 544 x 1307 mm (23 x 21 x 51 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	136 kg (300 lb)	208/240V; 60Hz; 2640W; 11A; Nema 6-20 (for use in North America)
51029340	OGS750 / coated	774 (27.3)	50 C to 250 C	± 3.7°C / ± 0.5°C	590 x 1004 x 1307 mm (23 x 40 x 51 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	182 kg (401 lb)	230V; 50/60Hz; 3000W; 13A; Country specific
51029339	OGS750 / coated	774 (27.3)	50 C to 250 C	± 3.7°C / ± 0.5°C	590 x 1004 x 1307 mm (23 x 40 x 51 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	182 kg (401 lb)	208/240V; 60Hz; 3240W; 13.5A; Nema 6-20 (for use in North America)
51029342	OGS750-3P / coated	774 (27.3)	50 C to 300 C	± 2.8°C / ± 0.5°C	590 x 1004 x 1307 mm (23 x 40 x 51 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	182 kg (401 lb)	400V; 50/60Hz; 6350W; 14A; 3-Phase
Advanced Protocol Ovens - Mechanical Convection									
51029331	OMH400 / coated	396 (14.0)	50 C to 250 C	± 2.1°C / ± 0.3°C	545 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	135 kg (298 lb)	230V; 50/60Hz; 3000W; 13A; Country specific
51029329	OMH400 / coated	396 (14.0)	50 C to 250 C	± 2.1°C / ± 0.3°C	545 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	135 kg (298 lb)	208/240V; 60Hz; 3240W; 13.5A; Nema 6-20 (for use in North America)
51029332	OMH400 SS / stainless steel	396 (14.0)	50 C to 250 C	± 2.1°C / ± 0.3°C	545 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	135 kg (298 lb)	230V; 50/60Hz; 3000W; 13A; Country specific
51029330	OMH400 SS / stainless steel	396 (14.0)	50 C to 250 C	± 2.1°C / ± 0.3°C	545 x 544 x 1335 mm (21 x 21 x 53 in.)	770 x 778 x 1653mm (30 x 31 x 66 in.)	2 / 39 (40kg / 88lb)	135 kg (298 lb)	208/240V; 60Hz; 3240W; 13.5A; Nema 6-20 (for use in North America)
51029345	OMH750 / coated	731 (25.8)	50 C to 250 C	± 3.1°C / ± 0.4°C	545 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	185 kg (408 lb)	230V; 50/60Hz; 3000W; 13A; Country specific
51029343	OMH750 / coated	731 (25.8)	50 °C to 250 °C	± 3.1°C / ± 0.4°C	545 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	185 kg (408 lb)	208/240V; 60Hz; 3480W; 14.5A; Nema 6-20 (for use in North America)
51029348	OMH750-3P / coated	731 (25.8)	50 °C to 300 °C	± 2.3°C / ± 0.4°C	545 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	185 kg (408 lb)	400V; 50/60Hz; 5750W; 12A; 3-Phase
51029346	OMH750 SS / stainless steel	731 (25.8)	50 °C to 250 °C	± 3.1°C / ± 0.4°C	545 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	185 kg (408 lb)	230V; 50/60Hz; 3000W; 13A; Country specific
51029344	OMH750 SS / stainless steel	731 (25.8)	50 °C to 250 °C	± 3.1°C / ± 0.4°C	545 x 1004 x 1335 mm (21 x 40 x 53 in.)	770 x 1261 x 1653mm (30 x 50 x 66 in.)	2 / 39 (40kg / 88lb)	185 kg (408 lb)	208/240V; 60Hz; 3480W; 14.5A; Nema 6-20 (for use in North America)

* Depth does not include handle/display (65mm / 2.6 in.) and distance spacer at rear (106mm / 4.2 in.); height includes the casters (108mm / 4.3 in.)
NOTE: All figures in tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Accessories

Cat. No.	Description
50135245	Wire mesh shelf for Heratherm Advanced Protocol oven OMH400 and General Protocol oven OGS400; 528 x 535 mm
50135246	Wire mesh shelf for Heratherm Advanced Protocol oven OMH750 and General Protocol oven OGS750; 984 x 541 mm
50135244	Wire mesh shelf for Heratherm Advanced Protocol oven OMH750 3PH; also for use in Advanced Protocol Security incubator IMH750-S; 984 x 503 mm
50135869	Silicone-free viton sealing for all Heratherm 400L models
50135870	Silicone-free viton sealing for all Heratherm 750L models

Thermo Scientific Precision High-Performance Ovens

Built for drying applications requiring high temperatures, ultra-precise temperature stability and reproducibility with a very broad temperature range of ambient +15° to 325°C

- High-quality construction and high-efficiency insulation provide temperature uniformity as precise as ±0.5°C with excellent stability and air exchange within the chamber
- Mechanical convection provides uniform heating, precise temperature control and fast drying using a blower that circulates heated air in a horizontal airflow pattern

Advanced Microprocessor PID Controls

- Bright LED display of actual and setpoint temperatures using 2-line, 4-digit
- Built-in 12-hour mechanical timer along with user-adjustable safety thermostat allows for power cut-out in case of over-temperature
- Highly responsive RTD sensor provides temperature sensitivity of ±0.1°C or better

Two Specialty Units

- Model 605P: Extra baffle provides low airflow for precise drying and testing of material with minimal disruption of volatile components
- Model 625S: Features a rear blowout panel with retaining cage and positive action front-door catches for volatile material testing

Energy- and Safety-Efficient Construction

- Heat-up time to 325°C: 45-60 minutes, depending on model
- Turbo blowers for efficient drying are side-mounted within stainless-steel chamber
- Stainless-steel exterior door with fiberglass gasket for secure, tight seal
- Cold-rolled, chemical-resistant steel cabinet with powder-coated finish
- High-limit safety with built-in circuit breaker protects oven from power surges
- Fiberglass door gasket prevents heat loss
- Low-density heating elements ensure long life
- Non-tip shelves spaced 4cm (1.6in.) apart quickly, easily remove for thorough cleaning – 2 supplied

Includes: Two nickel-plated nontip shelves Warranty¥: 12 months, parts and labor
Compliance: ASTM* E145 Type IIA, ASTM D-2436, and UL 746B performance/uniformity standards
Notes: Requires hardwired installation by a qualified technician; Ordering Alerts: Not available in Europe
Warranty¥: 1 year (parts and labor)
Certifications: all models are UL listed

PRODUCT NOT AVAILABLE IN EUROPE

*Values stated apply to the unloaded oven in conjunction with wire mesh trays (measurement according to DIN 12880, Part 2), air flap closed.

Cat. No.	Model	Capacity	Interior D x W x H	Exterior D x W x H	Electrical	Temperature Uniformity	Temperature Range	Max. Output Power
6050	605	39.6L (1.4 cu. ft.)	33 × 36 × 33cm (13 × 14 × 13in.)	61 × 97.8 × 63.5cm (24 × 38.5 × 25in.)	120V 50/60Hz, 2500w/20.8A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	8538 BTU/hr.
6051	605	39.6L (1.4 cu. ft.)	33 × 36 × 33cm (13 × 14 × 13in.)	61 × 97.8 × 63.5cm (24 × 38.5 × 25in.)	208/230V 50/60Hz, 2500w/10.9A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	8538 BTU/hr.
6052	605P	39.6L (1.4 cu. ft.)	33 × 36 × 33cm (13 × 14 × 13in.)	61 × 97.8 × 63.5cm (24 × 38.5 × 25in.)	120V 50/60Hz, 2500w/20.8A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	8538 BTU/hr.
6053	605P	39.6L (1.4 cu. ft.)	33 × 36 × 33cm (13 × 14 × 13in.)	61 × 97.8 × 63.5cm (24 × 38.5 × 25in.)	205/230V 50/60Hz, 2500w/10.9A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	8538 BTU/hr.
6054	625	113.3L (4.0 cu. ft.)	48.3 × 48.3 × 48.3cm (19 × 19 × 19in.)	71.1 × 114.3 × 73.7cm (28 × 45 × 29in.)	208/230V 50/60Hz 3700w 16.1A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	12,636 BTU/hr.
6055	625S	113.3L (4.0 cu. ft.)	48.3 × 48.3 × 48.3cm (19 × 19 × 19in.)	71.1 × 114.3 × 73.7cm (28 × 45 × 29in.)	208/230V 50/60Hz 3700w 16.1A	±0.5° at 100°C; ±1.0° at 200°C; ±2.5° at 300°C	Ambient +15° to 325°C	12,636 BTU/hr.
6056	645	269L (9.5cuft))	48.3x91.4x61cm (19x36x24in.)	78.7x165.1x91.4cm (31x65x36in.)	208/230V 50/60Hz 3700w/16.1A	±0.5° at 100°C; ±1.0° at 200°C; ±2.1° at 300°C	Ambient +15° to 325 °C	16,393 BTU/hr.

NOTE: Note maximum air exchange rates per hour: Model 605/605P: 128; Model 625/625S: 195; Model 645: 155

Accessories — Additional Shelving

Cat. No.	For Use with	Max. No. of Shelves
3166188	Precision High-Performance Ovens Models 605/605P	7
3166179	Precision High-Performance Ovens Models 625/625S	11
3166180	Precision High-Performance Oven Model 645	12

Thermo Scientific Precision Compact Heating and Drying Ovens

Compact heating and drying ovens conserve valuable benchtop space and feature mechanical or gravity convection models, ideal for drying and baking applications

Unit shown mechanical convection unit PR305225M with LED display.

- Double-wall interior with 2.5cm (1in.) silica-based insulation and powder-coated cold-rolled steel exterior
- Pilot light visually indicates oven operation status

Gravity-Convection Models

- Gentle drying with low turbulence: air is moved vertically through chamber to heat samples
- Preset high-temperature safety bimetallic thermostat (no display) ensures over-temperature protection

Mechanical-Convection Models

- Uniform heating, precise temperature control and fast drying
- Hydraulic thermostat
- LED display
- Stainless-steel chamber

Applications: Drying and baking
Ordering Information: Additional shelves are sold separately
Includes: One fixed and two adjustable shelves.
Warranty[¥]: 1 year (parts and labor)
Certifications: UL/cUL listed

PRODUCT NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Interior D x W x H	Exterior L x W x H*	Temp. Range	Chamber Material	Shipping Weight	Electrical
Gravity Convection							
PR305225G	48.1L (1.7 cu. ft.)	41× 41 × 29cm (11.5 x 16 x 16.2in.)	34 × 47 × 57cm (13.5× 18.5 × 22.5in.)	Ambient +5° to 210°C	Aluminum	26kg (57 lb.)	120V 60Hz, 800w
PR305220G	48.1L (1.7 cu. ft.)	41 × 41 × 29cm (11.5 x 16 x 16.2in.)	34 × 47 × 57cm (13.5× 18.5 × 22.5in.)	Ambient +5° to 210°C	Aluminum	26kg (57 lb.)	240V 50/60Hz, 800w
Mechanical Convection							
PR305225M	48.1L (1.7 cu. ft.)	29 × 41 × 41cm (11.5 x 16 x 16in.)	40 x 47 × 64cm (15.6 x 18.4 × 25in.)	Ambient +5° to 210°C	Stainless steel	36kg (80 lb.)	120V 60Hz, 1200w
PR305220M	48.1L (1.7 cu. ft.)	29 × 41 × 41cm (11.5 x 16 x 16in.)	40 x 47 × 64cm (15.6 x 18.4 × 25in.)	Ambient +5° to 210°C	Stainless steel	36kg (80 lb.)	240V 50/60Hz, 1200w

*Length does not include handle (2in.)

Thermo Scientific Shelves for Precision Compact Ovens

Cat. No.	Capacity	Type
3511-8Q	48.1L (1.7 cu. ft.)	Gravity Convection
3515M-8Q	48.1L (1.7 cu. ft.)	Mechanical Convection

Thermo Scientific Vacuum Ovens

Maximum flexibility, with a maximum temperature of 220°C (428°F), two control configurations and display options

Model 3608-5 (with LED)

- Radiant warm-wall heating system optimizes uniformity and conserves chamber space for drying, curing, vacuum embedding and plating applications
- 3in. (7.6cm) glass wool insulation prevents heat loss
- Silicone door gasket and positive latch door maintain seal at all vacuum levels
- Polycarbonate safety shield protects door glass
- Hydraulic thermostat temperature control ±1.5°C with a uniformity of ±5°C at 100°C, 25in.Hg
- Built-in over-temperature protection
- Vacuum level is displayed on gauges from 0 to 30in.Hg
- Vacuum and air lines are corrosion-resistant stainless-steel tubing for optimum chamber cleanliness and long-term performance
- With two removable stacking aluminum shelves
- Easy-to-clean Type 304 stainless-steel interior chamber
- Powder-coated heavy-gauge steel exterior for durability
- Temperature Range: Ambient +10° to 220°C

3606 Models

- Top-mounted independent evacuation and venting vacuum fittings

3608 and 3618 Models

- Front-mounted three-way valve for evacuation, venting and purging of inert gases (e.g., Nitrogen or Argon) with vacuum fittings on the front of the unit

Required Accessories: Vacuum fittings require 0.25in. (0.6cm) I.D. tubing
Warranty¥: 1 year (parts and labor)
Certifications: CSA, CE as listed

Cat. No.	Capacity	Display	Interior D x W x H	Exterior L x W x H	Temp. Resolution	Temp. Uniformity	Shipping Weight	Electrical
3606	12.5L (0.44 cu. ft.)	Bimetallic thermometer with 5°C increments	30 × 20 × 20cm (12 x 8 x 8in.)	41 × 43 × 44cm (16 × 17 × 17in.)	±1.5°C	±2.2°C at 100°C 25in.Hg	50kg (110 lb.)	120V 50/60Hz, 600w, 5A
3606-1CE	12.5L (0.44 cu. ft.)	Bimetallic thermometer with 5°C increments	30 × 20 × 20cm (12 x 8 x 8in.)	41 × 43 × 44cm (16 × 17 × 17in.)	±1.5°C	±2.2°C at 100°C 25in.Hg	50kg (110 lb.)	240V 50/60Hz 600w 2.5A
3608	19.8L (0.7 cu. ft.)	Bimetallic thermometer with 5°C increments	30 × 25 × 25cm (12 x 10 x 10in.)	40 × 50 × 41cm (16× 19.8 × 16.25in.)	±1.0°C	±6.0°C at 150°C 25in.Hg	59kg (130 lb.)	120V 50/60Hz, 600w, 5A
3608-1CE*	19.8L (0.7 cu. ft.)	Bimetallic thermometer with 5°C increments	30 × 25 × 25cm (12 x 10 x 10in.)	40 × 50 × 41cm (16× 19.8 × 16.25in.)	±1.0°C	±6.0°C at 150°C, 25in.Hg	59kg (130 lb.)	240V 50/60Hz 600w 2.5A
3608-5	19.8L (0.7 cu. ft.)	LED with 1°C increments	30 × 25 × 25cm (12 x 10 x 10in.)	40 × 50 × 41cm (16×19.8 × 16.25in.)	±1.0°C	±6.0°C at 150°C, 25in.Hg	59kg (130 lb.)	120V 50/60Hz, 600w, 5A
3608-6CE*	19.8L (0.7 cu. ft.)	LED with 1°C increments	30 × 25 × 25cm (12 x 10 x 10in.)	40 × 50 × 41cm (16×19.8 × 16.25in.)	±1.0°C	±6.0°C at 150°C, 25in.Hg	59kg (130 lb.)	240V 50/60Hz 600w 2.5A
3618	65.1L (2.3 cu. ft.)	Bimetallic thermometer with 5°C increments	51 × 36 × 36cm (20 x 14 x 14in.)	64 × 64 × 56cm (25 × 25 × 22in.)	±1.0°C	±5.0°C at 100°C 25in.Hg	134kg (295 lb.)	120V 50/60Hz, 1600w, 13.3A
3618-1CE*	65.1L (2.3 cu. ft.)	Bimetallic thermometer with 5°C increments	51 × 36 × 36cm (20 x 14 x 14in.)	64 × 64 × 56cm (25 × 25 × 22in.)	±1.0°C	±5.0°C at 100°C 25in.Hg	134kg (295 lb.)	240V 50/60Hz 1600w 6.7A
3618-5	65.1L (2.3 cu. ft.)	LED with 1°C increments	51 × 36 × 36cm (20 x 14 x 14in.)	64 × 64 × 56cm (25 × 25 × 22in.)	±1.0°C	±5.0°C at 100°C 25in.Hg	134kg (295 lb.)	120V 50/60Hz, 1600w, 13.3A
3618-6CE*	65.1L (2.3 cu. ft.)	LED with 1°C increments	51 × 36 × 36cm (20 x 14 x 14in.)	64 × 64 × 56cm (25 × 25 × 22in.)	±1.0°C	±5.0°C at 100°C 25in.Hg	134kg (295 lb.)	240V 50/60Hz 1600w 6.7A

* Model is CE certified

Thermo Scientific Lindberg/Blue M Vacuum Ovens

Digital electronic control, built-in over-temperature protection, and a fully flexible vacuum/purge/release system for a range of applications including drying, curing, outgassing, aging, process control and other applications requiring elevated temperature in reduced atmospheres or vacuum/purge with nonflammable and inert atmospheres

Single-Setpoint Digital Microprocessor Control

- Maximum temperature: 260°C (500°F) with nominal uniformity of ±3.5% of setpoint
- Simultaneous LED display of setpoint and actual temperature with push-button view
- Keypad data entry and pull-out control module for easy service
- Independent over-temperature safety system factory set with reset push-button

Vacuum System

- 1in. (2.54cm) manifold, chamber rear, exterior, connects to pump or in-house vacuum source
- With inert gas injection valve, fresh air inlet, vacuum exhaust port, controllable vacuum release vent port
- 1000 microns (1torr) capacity
- Vacuum gauge, vacuum, gas and inlet valves located on front

Construction

- Corrosion-resistant stainless-steel cabinet chamber
- Rear-mounted vacuum manifold connects to pump (not included) or in-house vacuum source
- Low-watt heating element extends oven life
- Heavy-gauge steel, dual-wall construction with fiberglass insulation for minimum heat loss in walls and door
- High-temperature silicone gasket is specially molded for a positive seal
- Magnetic latch for positive door seal (4.5 cu. ft. capacity models include mechanical latches)
- Viewing windows: 0.5in. (1.3cm) thick in two smaller capacity models or 0.75in. (1.9cm) thick in 4.5 cu. ft. model; permit observation of work in progress without loss of heat
- Stainless-steel exterior models come with double door — a solid outer door over inner window door

Includes: Power cord and aluminum shelves (number of shelves based on model; see ordering table)
Warranty[¥]: 1 year (parts and labor)
Certifications: UL listed (VO914A, VO914SA, VO1218A, VO1218SA only)
Alert: Ovens are not suitable for use with hazardous vapor. For use with nonflammable, noncorrosive inert gases only

PRODUCT NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Interior D x W x H	Exterior L x W x H	Temp. Resolution/ Uniformity	Temp. Range	No. of Shelves	Finish	Electrical	Shipping Weight
V0914A-1	18.6L (0.65 cu. ft.)	36 × 23 × 23cm (14 × 9 × 9in.)	58 × 46 × 66cm (23 × 18 × 26in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Painted Steel	120V 50/60Hz 750w	68kg (150 lb.)
V0914C-1	18.6L (0.65 cu. ft.)	36 × 23 × 23cm (14 × 9 × 9in.)	58 × 46 × 66cm (23 × 18 × 26in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Painted Steel	208/240V 50/60Hz 750w	68kg (150 lb.)
V0914SA-1	18.6L (0.65 cu. ft.)	36 × 23 × 23cm (14 × 9 × 9in.)	58 × 46 × 66cm (23 × 18 × 26in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Stainless Steel	120V 50/60Hz 750w	68kg (150 lb.)
V01218A-1	42.5L (1.5 cu. ft.)	46 × 31 × 31cm (18 × 12 × 12in.)	66 × 53 × 74cm (26 × 21 × 29in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Painted Steel	120V 50/60Hz, 1250w	113kg (250 lb.)
V01218C-1	42.5L (1.5 cu. ft.)	46 × 31 × 31cm (18 × 12 × 12in.)	66 × 53 × 74cm (26 × 21 × 29in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Painted Steel	208/240V 50/60Hz 1250w	113kg (250 lb.)
V01218SA-1	42.5L (1.5 cu. ft.)	46 × 31 × 31cm (18 × 12 × 12in.)	66 × 53 × 74cm (26 × 21 × 29in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	3	Stainless Steel	120V 50/60Hz, 1250w	113kg (250 lb.)
V01824A-1	127.4L (4.5 cu. ft.)	61 × 46 × 46cm (24 × 18 × 18in.)	81 × 69 × 89cm (32 × 27 × 35in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	2	Painted Steel	120V 50/60Hz 1500w	147kg (325 lb.)
V01824C-1	127.4L (4.5 cu. ft.)	61 × 46 × 46cm (24 × 18 × 18in.)	81 × 69 × 89cm (32 × 27 × 35in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	2	Painted Steel	208/240V 50/60Hz 1500w	147kg (325 lb.)
V01824SA-1	127.4L (4.5 cu. ft.)	61 × 46 × 46cm (24 × 18 × 18in.)	81 × 69 × 89cm (32 × 27 × 35in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	2	Stainless Steel	120V 50/60Hz, 1500w	147kg (325 lb.)
V01824HPC-1	127.4L (4.5 cu. ft.)	61 × 46 × 46cm (24 × 18 × 18in.)	81 × 69 × 89cm (32 × 27 × 35in.)	±1°C/ ±3.5°C	6° above ambient to 260°C	1	Painted Steel	208/240V 50/60Hz 3000w	147kg (325 lb.)

Thermo Scientific Accessories for Lindberg/Blue M Vacuum Ovens

Catalog No	Description	For use with
6718	White Floor Stand	All Lindberg/Blue M vacuum ovens
6723	Stainless-steel Floor Stand	All Lindberg/Blue M vacuum ovens
118961	Connection Kit – includes NW fittings, centering rings, connectors, vacuum clamps and hose to connect vacuum pump to oven.	All Lindberg/Blue M vacuum ovens
305994H01	Silicone replacement gasket (red)	V0914 Series
305992H01	Silicone replacement gasket (red)	V01218 Series
305993H01	Silicone replacement gasket (red)	V01824 Series
118974	Buna-N silicone-free gasket, for temperatures up to 150°C only	V0914 Series
118977	Buna-N silicone-free gasket, for temperatures up to 150°C only	V01218 Series
34637H01	Buna-N silicone-free gasket, for temperatures up to 150°C only	V01824 Series

Thermo Scientific Vacutherm Vacuum Ovens

Excellent heat transfer and fast heating up minimize operation time

- Ideal for drying of heat-sensitive materials, residue-free drying of intricately designed parts, elimination of oxidation associated with heat treatment and targeted recover of degassed products
- Front window with double-paned safety glass provides unique implosion protection
- Modular system allows application-specific configurations through a wide range of equipment options
- Ovens can dry up to six times faster than conventional units
- Temperature and pressure documentation is available to meet ISO 9000 and GLP/GMP requirements
- User-friendly Kelvitron™ microprocessor (jacket-heated ovens) or Digicon multi-channel controller (shelf-heated ovens)
- Analog pressure display; attainable ultimate vacuum: 0.1 mbar
- Over-temperature sensor protects oven and product – protection class I / IP20
- Stainless steel vacuum fittings, tubing and ball valve
- Interior chamber made of high-grade 1.4404 (316L) stainless steel, electropolished for smooth surface
- Inert gas connection with precision valve and overpressure safety valve precisely releases non-flammable, non-toxic gasses
- Standard DN25 access port in rear wall (20 mm)
- Jacket-heated models operate up to 200°C
- Shelf-heated versions operate up to 300 or 400°C for optimum heat transfer
- For applications with flammable solvents, ask your sales representative for our BL version with additional safety features (230V versions only)

Ordering Alerts: Not available in some countries
Certifications: CE (230V, 50 / 60Hz models) and cCSAus (120V and 208V, 60Hz models)
Warranty[¥]: 2 years (parts and labor)

Cat. No.	Model	Type	Capacity	Internal Dimensions W x H x D	External Dimensions[1] W x H x D	Rated Temp.[2,3]	Spatial temp. deviation[2,4]	Heat Output (at max. temperature)	Electrical[5]	Weight
51014550	VT 6025	Jacket-Heating no inert gas connection	25L (0.88 cu.ft.)	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	200°C	±4 (@200°C)	340 Wh/h	230V 50/60Hz, 1.3kW	58kg (128 lb.)
51014551	VT 6025	Jacket-Heating no inert gas connection	25L (0.88 cu.ft.)	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	200°C	±4 (@200°C)	340 Wh/h	120V 60Hz, 1.3kW	58kg (128 lb.)
51014552	VT 6025	Jacket-Heating	25L (0.88 cu.ft.)	300 x 275 x 307mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	200°C	±4 (@200°C)	340 Wh/h	230V 50/60Hz, 1.3kW	58kg (128 lb.)
51014553	VT 6025	Jacket-Heating[6]	25L (0.88 cu.ft.)	300 x 275 x 307 mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	200°C	±4 (@200°C)	340 Wh/h	230V 50/60Hz, 1.3kW	58kg (128 lb.)
51014554	VT 6025	Jacket-Heating with Digicon S[7]	25L (0.88 cu.ft.)	300 x 275 x 307 mm (11.8 x 10.8 x 12.1in.)	480 x 600 x 450 mm (18.9 x 23.6 x 17.7in.)	200°C	±4 (@200°C)	340 Wh/h	230V 50/60Hz, 1.3kW	58kg (128 lb.)
51014539	VT 6060 M	Jacket-Heating	53L (1.87 cu.ft.)	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	200°C	±4 (@200°C)	540Wh/h	230V 50/60Hz, 1.7kW	82kg (181 lb.)
51014540	VT 6060 M	Jacket-Heating	53L (1.87 cu.ft.)	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	200°C	±4 (@200°C)	550Wh/h	120V 60Hz, 1.4kW	82kg (181 lb.)
51014542	VT 6060 P	Shelf-Heating[8]	53L (1.87 cu.ft.)	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	300/400°C	±3 (@200°C) ±7 (@300°C) ±9 (@400°C)	450 Wh/h	230V 50/60Hz, 1.6kW	90kg (198 lb.)
51023263	VT 6060 P	Shelf-Heating[8]	53L (1.87 cu.ft.)	415 x 345 x 371 mm (16.3 x 13.6 x 14.6in.)	744 x 576 x 570 mm (29.3 x 22.7 x 22.4in.)	300/400°C	±3 (@200°C) ±7 (@300°C) ±9 (@400°C)	450 Wh/h	120V 60Hz, 1.4kW	90kg (198 lb.)
51014541	VT 6130 M	Jacket-Heating	128L (4.52 cu.ft.)	495 x 489 x 529 (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	200°C	±7 (@200°C)	870 Wh/h	230V 50/60Hz, 2.2kW	153kg (337 lb.)
51023262	VT 6130 M	Jacket-Heating	128L (4.52 cu.ft.)	495 x 489 x 529 (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	200°C	±7 (@200°C)	870 Wh/h	208V 60Hz, 1.8kW	150kg (331 lb.)
51014543	VT 6130 P	Shelf-Heating[8]	128L (4.52 cu.ft.)	495 x 489 x 529 mm (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	300/400°C	±4 (@200°C) ±7 (@300°C) ±9 (@400°C)	880 Wh/h	230V 50/60Hz, 3.0kW	164kg (362 lb.)
51023264	VT 6130 P	Shelf-Heating[8]	128L (4.52 cu.ft.)	495 x 489 x 529 mm (19.5 x 19.3 x 20.8in.)	895 x 720 x 750 mm (35.2 x 28.3 x 29.5in.)	300/400°C	±4 (@200°C) ±7 (@300°C) ±9 (@400°C)	880 Wh/h	208V 60Hz, 2.5kW	164kg (362 lb.)

[1] Depth without handle and wall distance. Dimensions: handle 70 mm, wall distance 80 mm
[2] The values stated apply to the empty oven and vacuum operation in acc. with DIN 12880, part 2
[3] Control range M: electronic controller from TA + 15°C; control range P: electronic controller from TA + 10°C; TA = Ambient temperature
[4] Measured on the shelves
[5] Other voltages on request
[6] With digital pressure display and recorder output
[7] Digicon S: Analog temperature controller
[8] Comes standard with Digicon multi-channel controller and rated temperature of 300°C; for 400°C: order option in addition, see next page

Accessories & Options

Accessories	
Cat. No.	Description
50028403	Additional shelf for VT6025 (incl. Shelf supports)
50043975	Additional shelf for VT6060 M (incl. Shelf supports)
50043976	Additional shelf for VT6130 M (incl. Shelf supports)
50048621	Stainless steel tray for VT6060
50048619	Stainless steel tray for VT6130
50048620	Aluminum tray for VT6060 M/P
50048618	Aluminum tray for VT6130 M/P
50046860	Stainless steel vacuum connection kit for tubing, 10mm diameter (all models)
50029890	Support frame, 780 mm height, for VT6060 M/P
50029597	Support frame, 780 mm height, for VT6130 M/P

		Diaphragm pumps			Rotary vane pumps
Vacuum Pumps**		MD 12H	HMD 4C	HMZ 2C	RE 9H
Cat. No.		50040078	50028362	50028364	50028361
Rated pumping capacity (Pneurop)	m^3/h	9.6	3.0	1.7	8.6
Total final pressure without gas ballast	mbar	2	2	10	0.1
Total final pressure with gas ballast	mbar	<10	<10	<20	6 x 10-1
Water vapor compatibility	mbar	–	–	–	40
Capacity of trap	ml	725	500	500	500
Weight	kg	24	18	14	21.6
Dimensions with trap (w/h/d)	mm	240 x 300 x 610	241 x 500 x 338	241 x 326 x 336	260 x 232 x 460
Vacucenter® with pump model		MD 12H	HMD 4C		RE 9H
Cat. No.*		50044332	50044333	–	50044334
Voltage	V3N~, 50/60 Hz	400	400	–	400
Max. rated power	kW	3.37	3.20	–	3.37
External dimensions (w/h/d)	mm	895/650/900	895/650/900	–	895/650/900
Total weight	kg	88	80	–	86
Protection class		I	I	–	I
Protection type		IP 20	IP 20	–	IP 20

*In combination with VT 6060 or VT 6130
**Pumps not available in North America

Factory installed options	
Cat. No.	Options for Vacutherm 6060 and 6130 M/P
51900284	RS 232 computer interface for Kelvitron controller
51900069*	Digital pressure display
51900193*	Pressure controller with solenoid valve
51900071	VITON door gasket for VT 6060 M
51900072	VITON door gasket for VT 6130 M
51900205	Daily program timer, mechanical
51900073*	24 hour timer (20 h at 60 Hz)
51900008	Weekly program timer, mechanical
51900161	Weekly program timer, digital
51900074	Digital sample temperature display with flexible Pt 100 temperature sensor and socket for external data recorder
51900209	Thermicon® P temperature program controller (for M-models only)
51900297	Eurotherm 2404/P4 temperature controller with RS 232 interface (for M-models only)
51900298	Eurotherm 2404/P4 temperature controller with RS 422/485 interface (for M-models only)
51900081*	Central monitoring connection
51900194*	Digicon S temperature controller with analog interface 0-20 mA/0-10V (for M-models only)
Cat. No.	**Extended rated temperature, Digicon® S temperature controller with analog interface 0–20 mA/0–10 V**
51900195	(300 °C): VT 6060 P and VT 6130 P
51900196	(400 °C): VT 6060 P, door without inspection window
51900197	(400 °C): VT 6130 P, door without inspection window
Cat. No.	**Extended rated temperature, Digicon® S temperature controller without data interface**
51900079*	400 °C: for VT 6060 P, door without inspection window
51900080*	400 °C: for VT 6130 P, door without inspection window
Cat. No.	**Vacuum chamber with rounded corners at the rear**
51900075	for VT 6060 M
51900077	for VT 6060 P
51900076	for VT 6130 M
51900078	for VT 6130 P
Cat. No.	**Options for Vacutherm 6025**
51900326	Precision control valve for standard model (only for order nos. 51014550 and 51014551)
51900284	RS232 computer interface

* Option not available for North American voltages (120V-60Hz, 208V-60Hz)

Thermo Scientific Hi-Temp Vacuum Ovens

Over-temperature protection for peace of mind at temperatures up to 280°C

- Ideally suited for general drying, conditioning, curing, desiccating, and annealing – as well as moisture tests
- Radiant warm wall heaters mounted on the outside conserve chamber working space and eliminate hazards of open wire heaters
- Compression fittings on the sidewall accept 0.6cm (0.25in.) O.D. hard tubing for pump and air connections
- Durable exterior is powder-coated heavy-gauge steel
- Glass window in the door allows sample viewing
- Two adjustable chrome-plated shelves improve heat conduction to samples; remove easily for cleaning
- Stainless-steel interior chamber resists corrosion
- Vacuum and air lines of corrosion-resistant stainless-steel tubing optimize chamber cleanliness and long-term performance
- Vacuum range: 10 to 30" hg

Models 3625A and 3625A-1

- Dual-electronic control system
- For operational convenience, all controls and indicators are located on the front panel: powerswitch and three indicators, purge gas and vacuum control valves, a 0-to-30-inch vacuum gauge and a temperature control

Models 3628A and 3628A-1

- Seven-day programmable timer that cycles oven on or off up to eight times per day with automatic temperature/vacuum control in real time steps
- Runs on a single setpoint controller
- Dual displays provide constant day/time and temperature/pressure updates every 5 seconds
- Purge and Vacuum valves conveniently located under the control panel
- Accepts up to eight shelves

Warranty[¥]: 1 year (parts and labor)

PRODUCT NOT AVAILABLE IN EUROPE

Cat. No.	Capacity	Interior D x W x H	Exterior L x W x H	Temp. Range	Temp. Uniformity	Shipping Weight	Electrical
3625A	18.4L (0.65 cu. ft.)	29 × 25.4 × 25.4cm (11.5 × 10 × 10in.)	44 × 46 × 58cm (17.5 × 18 × 23in.)	Ambient +10° to 280°C	±1.0°C at 100°C 25ft.Hg	48kg (90 lb.)	120V 50/60Hz, 1000w, 8.5A
3625A-1	18.4L (0.65 cu. ft.)	29 × 25.4 × 25.4cm (11.5 × 10 × 10in.)	44 × 46 × 58cm (17.5 × 18 × 23in.)	Ambient +10° to 280°C	±1.0°C at 100°C, 25ft.Hg	48kg (90 lb.)	240V 50/60Hz, 1000w; 4.2A
3628A	42.4L (1.5 cu. ft.)	46 × 30 × 30cm (18 × 12 × 12in.)	66 × 58 × 56cm (26 × 23 × 22in.)	50° to 280°C	±5°C at 100°C 25ft.Hg	92.9kg (205 lb.)	120V 50/60Hz, 1800w, 14.7A
3628A-1	42.4L (1.5 cu. ft.)	46 × 30 × 30cm (18 × 12 × 12in.)	66 × 58 × 56cm (26 × 23 × 22in.)	50° to 280°C	±5°C at 100°C 25ft.Hg	92.9kg (205 lb.)	240V 50/60Hz, 1800w, 7.4A

rockers, rotators & mixers

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Thermo Scientific LP Vortex Mixer

Choose to continuously mix or pulse samples with our low profile vortex mixer

Includes rubber platform for single tube pulsing, shown at left

- Low profile design with small footprint
- Continuous or pulsing functions
- Speed Control: 0 to 3000rpm
- Built-in safety features regarding current overload
- Wide variety of optional accessories to accommodate different vessel types
- **Includes: rubber platform for tube vortexing**

Common Applications

- Any application that requires vortex mixing in a tube, plate, or glass vessel

Optional tube holder shown

Cat. No.	88880017	88880018
Plug Configurations		
Speed Range	0-3000rpm	
Operating Mode	Continuous / Touch	
Max Load	0.5 kg / 1.1lbs	
Dimensions (W x D x H) without attachments	154 x 210 x 83mm 6.1 x 8.3 x 3.3in	
Weight	3.1kg / 6.8lbs	
Power	100 – 240V, 50/60Hz	
Certifications	CE	
Warranty	2 Years	

Accessories for the LP Vortex mixer	Cat. No.
Microplate Tray	**88880117**
Rubber Platform	**88880118**
Flat bottom vessel accessory (for pulse mode only)	**88880119**
10mm Dia. Tube Holder with Insert Retainer	**88880120**
12mm Dia. Tube Holder with Insert Retainer	**88880121**
15mm Dia. Tube Holder with Insert Retainer	**88880122**
20mm Dia. Tube Holder with Insert Retainer	**88880123**
25mm Dia. Tube Holder with Insert Retainer	**88880124**

Tube Holders

Thermo Scientific MaxiMix I Vortex Mixer

Ensures fast, uniform mixing in continuous operation or touch-on mode.

- Ideal for enzymatic and RIA assays, general test tube mixing, biochemical assays, viral dilutions preparations, precipitated assays, cell suspension vortexing and tissue sample mixing
- Excellent for single and multiple tubes and small flasks with closed tops
- Simultaneously mixes up to four test tubes
- Push-button top-mounted ON/OFF switch
- Vary vortex mixing by simply changing pressure of tube against foam rubber top
- Durable, white plastic case resists acids and alkalis
- Cast-aluminum base with suction-cup rubber feet provides maximum stability
- Compact design with 4in. diameter (10.2cm) foam rubber top

Includes: One extra foam top (PT167X2), 3-wire power cord and plug
Warranty[¥]: 90 days on labor and one year on parts
Certifications: CSA listed (120V models only) and CE listed (230V models)

Cat. No.	Speed Range	Tube Capacity	Platform, Foam Pad	Exterior L x W x H	Shipping Weight	Electrical
M16715Q	3000rpm	1 to 4	10.1cm (4in.)	13.9 x 13.9 x 10.6cm (5.5 x 5.5 4.2in.)	1.5 kg (3.5 lb.)	120V 50/60Hz, 0.5A
M16710-33Q	3000rpm	1 to 4	10.1cm (4in.)	13.9 x 13.9 x 10.6cm (5.5 x 5.5 4.2in.)	1.5 kg (3.5 lb.)	230V 50/60Hz, 0.3A

Thermo Scientific MaxiMix III Vortex Mixer

Performs functions of four separate apparatus, saving valuable bench space in labs and clinics.

- Four interchangeable mixing and shaking accessories for large volume mixing, variable speed control, and continuous, trouble-free shaking
- Accessories available for different applications (foam pad, universal holder, utility tray or flask holder). Precise matching of an electronic speed control to a high torque DC type motor provides versatile speed selection ranging from 100 to 2200rpm
- Soft foam rubber top 6.3 x 5.5in. (15.8 x 13.9cm) allows vortexing multiple test tubes and small flasks
- Lighted main power switch indicates mixer is operating
- Heavy, cast-aluminum base with counterbalance system for strength and stability
- Spring-dampened feet eliminate “creeping and walking” during large volume mixing
- Continuous trouble-free shaking of loads up to 5 lb. (2.2kg)

Includes: One soft foam rubber pad (PT500X6A)
Warranty[¥]: 90 days on labor and one year on parts
Certifications: CSA listed (120V models only) and CE listed (230V models)

Cat. No.	Speed Range	Platform L x W	Load Capacity	Exterior L x W x H	Shipping Weight	Electrical
M65825	100 to 2200rpm	15.8 x 13.9cm (6.3 x 5.5in.)	2.2 kg (5 lb.)	21.5 x 16.5 x 13cm (8.5 x 6.5 x 5.1in.)	7.7 kg (17 lb.)	120V 50/60Hz, 0.4A
M65820-33	100 to 2200rpm	15.8 x 13.9cm (6.3 x 5.5in.)	2.2 kg (5 lb.)	21.5 x 16.5 x 13cm (8.5 x 6.5 x 5.1in.)	7.7 kg (17 lb.)	230V 50/60Hz, 0.2A

Accessories and Replacement Parts for MaxiMix III Vortex Mixer

Cat. No.	Description
PT500X6A	Replacement foam rubber pad
PT500X9A	Universal holder for a variety of flasks, beakers, bottles, test tub racks. Two soft rubber bars hold vessels in place.
PT500X7A	Utility tray
PT500X8A	Flask holder for 4 x 250mL flasks

Thermo Scientific Digital Bottle/Tube Roller

Maximize valuable bench space with our compact, adjustable speed unit, capable of rolling multiple tube and bottle sizes

- Adjustable speed accommodates a variety of applications
- Anti-corrosive and wear resistant construction enables use in humid and CO_2 environments
- Adjustable rollers accommodate a variety of tube/bottle sizes
- Stacking kit allows you to stack units two high, saving valuable bench space
- Optional remote control facilitates operating unit while in incubator and adds timer function
- Includes O Rings for smooth rolling of 15 or 50ml tubes

Common Applications

- Cell Culture
- Hybridization Assays
- Liquid Mixing
- Bioproduction

Nalgene Unwire Test Tube Full Rack

Cat. No.	88881003	88881004
Plug configurations		
Roller Speed	1-80rpm	
Maximum Bottle Diameter	≤ Φ 120mm 4.72in	
Number of Rollers	6 rollers standard, up to 11 can be added	
Roller Dimensions (D x L)	Φ 28 x 259mm / 1.1 x 10.2in	
Display	LED Roller Speed Display	
Timing Range (optional control box needed)	0-999min or continuous	
Stackable	Two high with optional kit	
Maximum Working Capacity	6.5kg / 14.3lbs	
Maximum Power	10W	
Operating Temperature	4°C – 60°C	
Relative Humidity Tolerance	≤ 95%	
Dimensions W x L x H	378 x 360 x 72mm / 14.9 x 14.2 x 2.8in	
Weight	6.5kg / 14.3lbs	
Power	AC100V-240V / 50Hz 60Hz	
Certification	CE cCSAus	
Warranty	2 year	

Accessories for Bottle/Tube Roller	Cat. No.
Additional Rollers (pack of two)	88881010
O ring for 50ml tube (pack of 20) 23.5 x 3.55mm .93 x .14in	88881011
O ring for 15ml tube (pack of 20) 13.2 x 2.65mm .52 x .1in	88881012
Bar for stacking (pack of four)	88881013
Remote Control	88881014

Note: Two bottle rollers stacked reach 32cm in height.

O rings

Bars for Stacking

Remote control

Thermo Scientific Digital Tube Revolver

Increase your lab's efficiency with our variable speed tube revolver. Its small footprint, flexible design, and simple display help increase flexiblity and effectiveness.

- Interchangeable rotisseries accommodate different tube sizes for maximum flexiblity. Each paddle can be adjusted from 0-90 degrees.
- Achieve more effective mixing with "agitation" mode. Agitation will occur at every 40 degrees in the rotation cycle.
- Small footprint
- Plug-and-play simplicity
- Maintenance-free motor, quiet operation

Common Applications

- Molecular Biology
- Clinical
- Biochemistry

Cat. No.	88881001	88881002
Plug Configurations		
Rotation Speed	10-40 rpm	
Capacity	**Combination of 4 paddles of:** 7 x 10/15ml tubes 7 x 5/7ml tubes 15 x 1.5ml/2ml tubes 21 x 0.5/0.8ml tubes One paddle of 6 x 50ml tubes	
Standard Rotisserie Paddles included	**88881005** – 10/15ml paddle, quantity 2 **88881006** – 5ml/7ml paddle, quantity 2 **88881007** – 1.5ml/2ml paddle, quantity 2 **88881008** – 0.5ml/0.8ml paddle, quanity 2 **88881009** – 50ml paddle, quantity 1 Paddles can also be purchased as accessories in quantities listed above	
Operating Temperature	4°C – 60°C	
Dimensions W x L x H	225 x 154 x 195mm / 8.9 x 6 x 7.7in	
Max Power	6W	
Weight	1.2kg / 2.65lbs	
Power	AC100V-240V / 50Hz – 60Hz	
Certification	cCSAus, CE	
Warranty	2 years	

Ordering Information and Specifications	Cat. No.
Paddles 10ml/15ml, 2 pack	**88881005**
Paddles 5ml/7ml, 2 pack	**88881006**
Paddles 1.5ml/2ml, 2 pack	**88881007**
Paddles 0.5ml/0.8ml, 2 pack	**88881008**
Paddle 50ml	**88881009**

Paddles

Thermo Scientific Compact Digital Microplate Shaker

Harness the efficiency of our microplate shaker, capable of shaking up to four microplates in one run

Features

- PID control ensures consistent shaking results
- Digital display for easy viewing
- Compact design is ideal for placing in incubators (non-CO_2), chambers, and refrigerators (up to 60°C)
- Timer Range: Continuous or 1min to 99hrs 59min
- Automatic Overload Shutdown
  > 4.4kg / 9.7lbs
- Small 3mm orbital motion, ideal mixing small volumes
- Tube rack accessories make this unit extremely versatile
- Includes 4 place microplate top standard

Common Applications

- Any application requiring precise and accurate shaking of microplates: immunoassay, screening applications, magnetic bead applications

Cat. No.	88880023	88880024
Plug Configurations		
Max. Load	4kg / 8.8lbs	
Control	Feedback Control PID	
Display	Digital	
Speed Range	150-1,200rpm	
Accuracy at 500 rpm	+/- 15rpm	
Timer	1min to 99hrs 59min/continuous	
Orbit Size	3 mm / 0.12in diameter	
Maximum Load	4kg / 8.8lbs	
Dimensions	**Tray:** (W x D) 267 x 185mm / 10.5 x 7.3in **Overall:** (W x D x H) 249 x 329 x 127mm / 9.8 x 13 x 5in	
Weight	7.7kg / 17lbs	
Power	100 – 240V, 50/60Hz	
Certifications	CE	
Warranty	2 years	

Accessories for Compact Digital Microplate Shaker	Number of Tubes	Cat. No.
1.5ml micro tube rack	80 (5 x 16)	**88880114**
15ml conical rack	30 (3 x 10)	**88880115**
50ml conical rack	12 (2 x 6)	**88880116**

Conical racks, sold separately

Thermo Scientific Compact Digital Rocker

Ensure gentle sample agitation with our compact, adjustable angle, digital display rocker

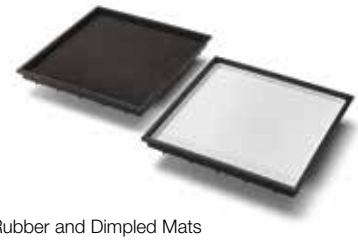
- PID control ensures consistent and smooth rocking motion
- Digital Speed Control: 5-100rpm
- Easy to adjust tilt angle: 7° to 13°
- Compact design is ideal for placing in incubators (non-CO_2), chambers, and refrigerators (up to 60°C)
- Timer Range: Continuous or 1min to 99hrs 59min
- Securing bands keep tubes in place to reduce risk of rolling around
- Optional non-slip rubber sticky mat tray is great for use with plates, dishes and bags
- Efficient size trays can be used with up to 6 well-plates
- Includes dimpled mat (tray, silicone pad, two securing bands)

Common Applications

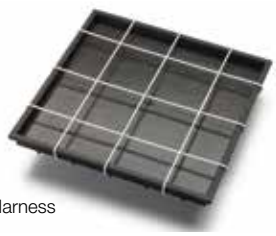
- Designed for time-dependent and low-dependent sensitive applications such as ELISA, protein synthesis, staining/de-staining gels, and antibody staining

Cat. No.	88880019	88880020
Plug Configurations		
Max. Load	5kg / 11lbs	
Control	Feedback Control PID	
Display	Digital	
Speed Range	5 -100rpm	
Accuracy at 100 rpm	+/- 5 rpm	
Timer	1min to 99hrs 59min / Continuous	
Tilt Angle	7° to 13°	
Dimensions	**Tray:** (W x D) 276 x 276mm / 10.87 x 10.87in **Overall:** (W x D x H) 276 x 320 x 150mm / 10.87 x 12.6 x 5.91in	
Weight	3.7kg / 8.16lbs	
Power	100 – 240V, 50/60Hz	
Certifications	CE	
Warranty	2 years	

Accessories for the Compact Digital Rocker	Description	Cat. No.
Rubber Mat	Tray, Sticky Pad	**88880101**
Dimpled Mat	Tray, Silicone Pad	**88880102**
Universal Harness	Tray, Sticky Pad, Rubber Band (6ea)	**88880103**
Securing Bands	6 Securing Cands	**88880105**



Rubber and Dimpled Mats



Universal Harness

Thermo Scientific Compact Digital Waving Rotator

Achieve maximum sample mixing efficiency with the adjustable orbital waving rotator

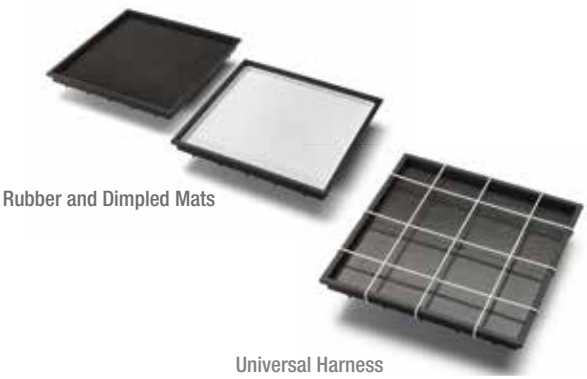
- PID control ensures consistent and smooth waving motion
- Digital Speed Control: 8 to100rpm
- Easy to adjust tilt angle: 0° to 13°
- Compact design ideal for placing in incubators (non-CO_2), chambers, and refrigerators (up to 60°C)
- Timer Range: Continuous or 1min to 99hrs 59min
- Securing bands keep tubes in place to reduce risk of rolling around
- When angle is set at 0°, can be used as small orbital shaker.
- Optional non-slip rubber sticky mat tray is great for use with plates, dishes and bags
- Efficient size trays can be used with up to 6 well-plates
- Includes dimpled mat (tray, silicone pad, two securing bands)

Common Applications

- Designed for time-dependent and low-dependent sensitive applications such as ELISA, protein synthesis, staining/de-staining gels, and antibody staining

Cat. No.	88880021	88880022
Plug Configurations		
Max. Load	5kg / 11lbs	
Control	Feedback Control PID	
Display	Digital	
Speed Range	8 -100rpm	
Accuracy at 100 rpm	+/- 5 rpm	
Timer	1min to 99hrs 59min / continuous	
Tilt Angle	0° to 13°	
Dimensions	**Tray:** (W x D) 276 x 276mm / 10.87 x 10.87in **Overall:** (W x D x H) 276 x 320 x 150mm / 10.87 x 12.6 x 5.91in	
Weight	3.7kg / 8.16lbs	
Power	100 – 240V, 50/60Hz	
Certifications	CE	
Warranty	2 years	

Accessories for the Compact Digital Waving Rotator	Description	Cat. No.
Rubber Mat	Tray, Sticky Pad	**88880101**
Dimpled Mat	Tray, Silicone Pad	**88880102**
Universal Harness	Tray, Sticky Pad, Rubber Band (6ea)	**88880103**
Securing Bands	6 Securing Bands	**88880105**



Rubber and Dimpled Mats

Universal Harness

Thermo Scientific Compact Digital Mini Rotator

Realize maximum flexibility and high quality with the easy-to-use Thermo Scientific™ Compact Digital Mini Rotator/Shaker, which provides smooth, quiet orbital mixing for beakers, flasks, tubes, dishes and more.

Universal platform and clamps

Features

- PID control ensures consistent and smooth orbital motion
- Digital Speed Control: 50 to 300rpm
- Timer Range: Continuous or 1min to 99hrs 59min
- Compact design ideal for placing in incubators (non-CO_2), chambers, and refrigerators (up to 60°C)
- Choose from 5 different platform options (purchased separately) to customize unit to meet exact application needs.
- Display both current and set RPM simultaneously.

Common Applications

- Bacteria and fungi culturing
- Hybridization assays
- Gel staining/de-staining

Required: must purchase a platform with unit, and clamps if using universal platform

Cat. No.	88880025*	88880026*
Plug Configurations		
Max. Load	4kg / 8.8lbs	
Control	Feedback Control PID	
Display	Digital	
Speed Range	50-300rpm	
Accuracy at 100rpm	+/- 5rpm	
Orbit Size	13 mm / 0.51in diameter	
Maximum Load	4 kg/8.81lbs	
Dimensions	**Platform:** (W x D) 250 x 250mm / 9.8 x 9.8in **Overall:** (W x D x H) 276 x 334 x 130mm / 10.9 x 13 x 5.1in	
Weight	8kg / 17.6lbs	
Power	100 – 240V, 50/60Hz	
Certifications	CE	
Warranty	2 Years	

***NOTE: Unit must be ordered with a platform**

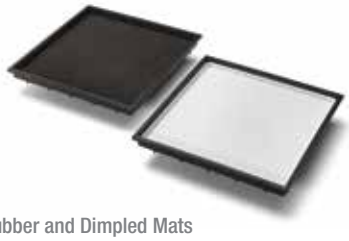
Platforms (at least one platform must be purchased)

Cat. No.	Description
88880104	Universal Attachment with Adjustable Bars
88880105	Universal Platform for Flask Clamps
88880101	Tray with Rubber Mat (250x250mm)
88880102	Tray with Silicon Dimpled Mat
88880103	Tray with Universal Harness with 6 bands

Flask Clamps & Accessories

Cat. No.	Description
88880107	50 mL metal clamp, 1 ea (max platform capacity- 16)
88880108	100 mL metal clamp, 1 ea (max platform capacity- 9)
88880109	250 mL metal clamp, 1 ea (max platform capacity- 9)
88880110	300 mL metal clamp, 1 ea (max platform capacity- 9)
88880111	500 mL metal clamp, 1 ea (max platform capacity- 5)
88880112	1 L metal clamp, 1 ea (max platform capacity- 4)
88880113	2 L metal clamp, 1 ea (max capacity- 1)
88880105	Rubber Bands for Universal Harness (6 each)

Universal Platform



Rubber and Dimpled Mats

Universal Attachment

Thermo Scientific Vari-Mix Platform Rocker

Provides steep angle rocking for applications such as hybridization, blotting and staining or destaining gels

- Variable speed control provides a gentle to vigorous wave motion
- Built-in timer makes it easy to perform time-dependent studies
- Large white nonskid rubber mixing platform easily adjusts angle of motion
- Set timer for continuous or timed operation
- Rocker can be used in many different laboratory applications
- Platform removes easily for autoclaving and allows easy viewing of contents
- All finishes are chemical-resistant and easy to clean
- Optional double-tier platform doubles mixing surface

Includes: 3-wire cord and plug; 240V model also includes European cord set
Warranty¥: 90 days on labor and one year on parts
Certifications: 120V model is CSA approved; 240V model is CE marked

Specifications	
Speed Range	5 to 30rpm variable
Rocking Angle	1° to 48°
Timer	Up to 2 hr. automatic at 60Hz; Up to 3 hr. automatic at 50Hz; Continuous
Platform L x W	32 x 26.9cm (12.6 x 10.6in.)
Load Bearing Capacity	6.8kg (15 lb.)
Exterior L x W x H	30.4 x 39.6 x 18.5cm (12 x 15.6 x 7.3in.)
Operating Temperature Range	4° to 40°C (39.2° to 104°F)
Operating Humidity Range	20 to 80% noncondensing
Shipping Weight	2.7kg (6 lb.)

Cat. No.	Electrical
M79735Q	120V 50/60Hz, 0.10A, 12W
M79730-33	240V 50/60Hz, 0.05A, 12W

Thermo Scientific Vari-Mix Double Tier Platform

Cat. No.	Description	Dimensions
AY797X1	Double-Tier Platform	32 x 26.9cm (12.6 x 10.6in.)

Thermo Scientific Thermal Rocker Incubators

Excellent alternative to higher-priced hybridization incubators for agitation of blotting membranes under controlled temperatures

- Provides smooth, gentle adjustable rocking from 0 to 100 cycles/min to meet a variety of mixing needs
- Accommodates different-size containers and heat-sealed plastic bags; operates with and without heat
- Front-mounted switch allows operation with or without heat
- LED temperature display, analog speed display with rotary dial
- Electronic proportional temperature controller maintains temperatures
- Automatic resetting thermal cutoff shuts down power to the heaters in the event of an over-temperature condition
- Platform features a nonskid rubber pad to keep samples in place
- Angle of motor is easily adjusted.

Includes: 3-wire line cord and plug
Warranty¥: 90 days on labor and one year on parts
Certifications: 120V model is cCSAus approved; 240V model is CE marked

Specifications	
Speed Range	0 to 100 cycles/min.
Rocking Angle	10° to 15°
Temperature Control	Electronic Proportional
Temperature Range	Ambient ±5° to 70°C
Temperature Accuracy	±0.5°C
Platform L x W	36 x 36cm (14.19 x 14.19in.)
Load Capacity	4.5kg (10 lb.)
Exterior L x W x H with cover	41 x 42 x 34.7cm (16 x 16.5 x 13.5in.)
Shipping Weight	11kg (25 lb.)

Cat. No.	Electrical
4637Q	120V 50/60Hz (3.3A)
4637-1CEQ	240V 50/60Hz (1.7A)

Thermo Scientific Vari-Mix and Speci-Mix Test Tube Rockers

Compact, precision-controlled platform mixers provide smooth rocking action for uniform specimen suspension

- All models hold 10 to 30mm diameter tubes; Choose from fixed or adjustable speeds
- Reversible pad provides one side (with lip to prevent sliding) for capped tubes 110mm (4.33in.) long; other side for longer tubes
- Autoclavable white silicone rubber pad enhances viewing
- Can be used in a noncondensing incubator or coldroom with ambient operating conditions of 4° to 40°C (39.2° to 104°F) and 20 to 80% RH noncondensing

Includes: A white silicon rubber friction grip pad for holding tubes in place
Warranty¥: 90 days labor, one year on parts
Certifications: CE listed (240V models only)

Cat. No.	Description	Tube Capacity	Speed Range	Rocking Angle	Exterior L x W x H	Shipping Weight	Electrical
M71015Q	Speci-Mix™ Test Tube Rocker	8 (10-20mm); 3 (22-30mm)	18rpm, fixed	Preset 48° tilt of rocker platform	13.9 x 19.1 x 10.7cm (5.5 x 7.5 x 4.3in.)	1.4kg (3 lb.)	120V 50/60Hz (0.03A)
M71010-33Q	Speci-Mix Test Tube Rocker	8 (10-20mm); 3 (22-30mm)	18rpm, fixed	Preset 48° tilt of rocker platform	13.9 x 19.1 x 10.7cm (5.5 x 7.5 x 4.3in.)	1.4kg (3 lb.)	240V 50Hz (0.01A)
M48725Q	Vari-Mix™ Test Tube Rocker	16 (10-20mm); 7 (22-30mm)	2 to 20rpm	Adjustable rocking from 1° to 48° angle	13.9 x 38.1 x 10.7cm (5.5 x 15 x 4.3in.)	2.6kg (5.8 lb.)	120V 50Hz (0.08A)
M48720-33Q	Vari-Mix Test Tube Rocker	16 (10-20mm); 7 (22-30mm)	2 to 20rpm	Adjustable rocking from 1° to 48° angle	13.9 x 38.1 x 10.7cm (5.5 x 15 x 4.3in.)	2.6kg (5.8 lb.)	240V 50Hz (0.02A)

Thermo Scientific Multi-Tube Rotators

Three-dimensional rotation is ideal for DNA extractions and other laboratory applications where a continuous, gentle motion is necessary

- Circular motion coupled with a rocking pattern keeps liquids and solutions mixed gently without the potential for shearing or other damage
- Fixed shaker speed of 30rpm
- Compact size makes it easy to transport and use in areas with limited space
- Angle of rotation – varies 20° from the horizontal plane
- Portable, lightweight metal body is durable and easy to clean
- Four rubber feet provide added stability
- White silicone, nonskid, dimpled platform surface and 1.8cm (0.71in.) sides hold tubes firmly in place – no need for racks or clamps
- Removable platform surface can be used to transport tubes

Includes: White silicone, nonskid dimpled platform surface (L x W: 8.5in. x 5in.)
Warranty¥: 90 days labor, one year parts
Certifications: 120V model is cCSAus approved; 240V model is CE marked

Cat. No.	Tube Capacity	Operating Temp. Range	Operating Humidity Range	Mixing Surface	Platform Load Capacity	Exterior L x W x H	Shipping Weight	Electrical
4632Q	14 x 7mL, 10mL or 15mL	15° to 40°C (59° to 104°F)	20 to 80% noncondensing	13 x 22cm (5.3 x 8.8in.)	1.4 kg (31 lb.)	21 x 22 x 18cm (8.5 x 8.8 x 8.1in.)	3.6kg (8 lb.)	120V 60Hz, 0.3A
4632-1CEQ	14 x 7mL, 10mL or 15mL	15° to 40°C (59° to 104°F)	20 to 80% noncondensing	13 x 22cm (5.3 x 8.8in.)	1.4 kg (31 lb.)	21 x 22 x 18cm (8.5 x 8.8 x 8.1in.)	3.6kg (8 lb.)	240V 50Hz, 0.2A

Thermo Scientific Cel-Gro Tissue Culture Rotator

No-maintenance brushless motor provides a gentle rotating motion that mixes test tube contents for optimum culture results

- Single-drum as an adjustable rotating angle and speed, while the dual-drum has a fixed rotating angle and speed
- Rotator operates in standard incubators for cultivation under controlled temperature conditions
- Powder-coated stainless-steel outer body construction is durable and corrosion-resistant
- Drums can be lifted off the rotor without interrupting rotator operation
- Adjusting screw on the base varies elevation angle
- Pilot light indicates when unit is on

Single-Drum Rotator

- Adjustable 5° rotating angle above horizontal to 90°
- Adjustable speed control from 12 to 70rpm

Ordering Information: Drums sold separately (1647Q, 1648Q, 1651Q)
Required Accessories: Single-drum model requires one drum, sold separately.
Warranty[¥]: 90 days labor, one year parts
Certifications: 120V models are cCSAus approved

Cat. No.	Description	Speed Range	Operating Temp. Range	Operating Humidity Range	Rotating Angle	Exterior L x W x H	Shipping Weight	Electrical
1640Q	Single-Drum Model	12 to 70rpm	Up to 40°C (104°F)	20 to 80 % noncondensing	Adjustable 5° above horizontal to 90°	38.1 x 35.6 x 57.2cm (15 x 14 x 22.5in.)	9kg (19 lb.)	120V 60Hz, 0.5A

Thermo Scientific Cel-Gro Tissue Culture Rotator Drums

Cat. No.	Description
1647Q	142 x 17mm tube diameter
1648Q	76 x 26mm tube diameter
1651Q	60 x 30mm tube diameter

water purification essentials

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Thermo Scientific Barnstead Hose Nipple Cartridges

Economical and simple way to purify water in small volumes up to 75L/hr

- Barnstead™ Hose Nipple Cartridges may be installed in a series using simple tubing for greater capacity
- Color change indicator identifies when resin is exhausted in specific cartridges
- Designed for non-pressurized applications
- Cartridges include 0.38in. hose barb connection on each end except D8822, D8950 and D8951, which include tapered straight nipple for 0.38in. ID tubing
- Constructed of 100% virgin polypropylene cartridge with excellent quality resin

Applications: Softening, deionization, organic and chlorine removal
Alert: Alcohol-containing samples cannot be used in cartridges containing the color indicator
System Warranty[¥]: One year parts, 90 days labor
Cartridge Warranty[¥]: 1 year parts

Cat. No.	Description	Flowrate	Length
D8900	Hose Nipple Cartridge Holder	Up to 75L/hr	1/2 Size: 25.9cm (10.2in.) 2/3 Size: 33.8cm (13.3in.) Full Size: 47.5cm (18.7in.)

Required Accessories

Cat. No.	Description	Resin Type(s)	Capacity	Color Indicator[†]
D50220	1/2 Size Mixed Bed	Ultrapure Ion Exchange	430 grains	No
D8822	1/2 Size Mixed Bed with Oxygen Removal	Ultrapure Mixed Bed with Strong Anion Exchange	280 grains/4.4g	No
D8950	2/3 Size High Capacity	Two bed Ion Exchange with Strong Cation Exchange	1100 grains	Yes
D8951	2/3 Size Mixed Bed and Organic Removal	Mixed Bed Ion Exchange with Activated Carbon	470 grains/ 2000 gal.	Yes
D8905	Full Size Cation Removal	Cation Exchange	3000 grains	Yes
D8901	Full Size High Capacity	Two Bed Ion Exchange	1650 grains	Yes
D8908	Full Size Macroreticular, Cation Removal	Macroreticular Cation Exchange	n/a	No
D8904	Full Size Organic Removal	Activated Carbon	5000 gal.	No
D8903	Full Size Oxygen Removal	Strong Anion Exchange	30g	No
D8921	Full Size Pretreatmentand Scale Eliminator	Mixed Bed and Strong Cation Exchange, Activated Charcoal	1250 grains/1000 gal.	Yes
D8911	Full Size Ultrapure	Ultrapure Ion Exchange	915 grains	No
D8902	Full Size Ultrapure	Ultrapure Mixed Bed Ion Exchange	915 grains	Yes
D8922	Full Size Ultrapure with Organic Removal	Mixed Bed Ion Exchange with Activated Carbon	730 grains/2000 gal.	Yes

†Alcohol-containing samples cannot be used in cartridges containing the color indicator.

Thermo Scientific Bantam Deionizer

Economical way to deionize water and easily view resistivity directly from unit

- Customizable to specific applications by selecting the appropriate cartridge
- Ideal for applications requiring up to 38L/hr of purified water
- Point-of-use polishing of pretreated water or single-stage treatment of tap water
- Integrated direct-reading purity monitor
- Inlet pressure range: 5 to 70psi (0.35 to 4.9kg/cm^2)
- Mounts on benchtop or wall
- Select the cartridge best suited to meet your application needs

Applications: Pretreatment and deionization
Includes: 3ft. (91cm) inlet tubing
Required Accessories: Cartridges sold separately
System Warranty[¥]: 1 year parts, 90 days labor
Cartridge Warranty[¥]: 1 year parts
Notes: Designed for nonpressurized applications. Output water must be diverted to an atmospherically vented receptacle; no back pressure can be accepted.

Cat. No.	Model	L x W x H	Resistivity	Flowrate	Max. Feed Water Pressure	Electrical
D0800	Bantam Deionizer	22 × 15 × 72cm (8.75 × 6 × 28.5in.)	Reads 25,000 to 18,000,000ohms-cm	Up to 38L/hr	0.35 to 4.9kg/cm2 (5 to 70psi)	120V 50/60Hz
D0805	Bantam Deionizer	22 × 15 × 72cm (8.75 × 6 × 28.5in.)	Reads 25,000 to 18,000,000ohms-cm	Up to 38L/hr	0.35 to 4.9kg/cm2 (5 to 70psi)	240V 50/60Hz

Required Accessories

Cat. No.	Type	Characteristics	Resin	Capacity	Cartridge Size
D0760	Anion Removal	Effective removal of weakly ionized impurities, raises the pH of solutions, recovers precious metal complex	Strong Anion Exchange	1680 grains	Full
D0815	Cation Removal	Converts ionized salts to the acid form resulting in a product water that is low in pH, ideal for precious metal or isotope recovery	Strong Cation Exchange	3170 grains	Full
D0803	High Capacity	Removes ionized impurities, produces a larger quantity of water than that of the Ultrapure (D0809), however at a lower resistivity	Two-bed Ion Exchange	1760 grains	Full
D0813	Organic Removal	Removes organics and chlorine	Activated Carbon	5000 gal.	Full
D0809	Ultrapure	Removes ionized impurities to produce high resistivity water with a neutral pH	Mixed Bed	875 grains	Full
D0832	Ultrapure and Organic Removal	Commonly used as still pretreatment. Removes ionized impurities and has a layer of activated carbon to remove chlorine and organics	Mixed Bed, Activated Carbon	785 grains/ 1000 gal.	Full
D0835	Macroreticular and Organic Removal	Effectively removes colloids, bacteria, organics and chlorine. Excellent for pretreatment	Macroreticular, Activated Carbon	5000 gal.	Full
D0811	Oxygen Removal	Maintains low oxygen content to prevent corrosion in cooling loops, etc. The feed water should contain less than 10ppm of ionized solids	Porous Strong Anion Exchange	30 g	Full
D8811	Ultrapure, Oxygen and Organic Removal	Removes ions, oxygen and organics to produce water with a high resistivity	Mixed Bed Ion Exchange, Porous Strong Anion Exchange and Activated Carbon	365 gr / 2000 gal./ 12 g	Full

Thermo Scientific Barnstead B-Pure Water Purification System

Economical, lab-grade water system easily customized for all pretreatment or deionization needs

- Engineered for feed water pressures up to 100 psi
- Choose from single, double or half-size holders depending on your application
- Modular design provides ability to add additional holders as needed
- Produces up to 4L/min., depending on model
- Quarter-turn quick-release canisters make cartridge changes easy
- Accepts Thermo Scientific Barnstead Pura-Lite indicator or digital purity meter to monitor water quality
- Barnstead B-Pure holders are available in full or half-size cartridge configurations supporting space constraints

B-Pure™ Single Cartridge Holder

- Simple system without draw-off valve; optional Barnstead Pura-Lite purity indicator available

B-Pure Double Cartridge Holder

- Complete with draw-off valve
- Choose from models with digital purity meter or Barnstead Pura-Lite "Go/No Go" resistivity indicator

B-Pure Half-size Cartridge Holder

- Easily attaches to full-size B-Pure systems
- Small size allows flexibility in mounting location

Applications: Pretreatment, deionization
Required Accessories: Cartridges (sold separately).
System Warranty¥: 1 year parts, 90 days labor
Cartridge Warranty¥: 1 year parts
Certifications: CE, CSA
Notes: Free Thermo Scientific Barnstead H_2O Select Kits are available to help select the correct B-Pure system. For details, contact your Sales Representative.

Cat. No.	Model	L x W x H	Inlet Connection NPTF	Maximum Flowrate	Feedwater Temperature	Max. Feed Water Pressure	Electrical	Requires
D4505	Half-size Holder	17.8 × 17.8 × 38.1cm (7 × 7 × 15in.)	1.3cm (0.5in.) NPTF	2L/min.	4° to 49°C (40° to 120°F)	100psig	N/A	Half-Size B-Pure Cartridge
D4511	Single Holder	17.8 × 17.8 × 61cm (7 × 7 × 24in.)	1.3cm (0.5in.) NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	N/A	Full-Size B-Pure Cartridge
D4521	Double Holder with Digital Purity Meter	17.8 × 38.1 × 68.6cm (7 × 15 × 27in.)	1.3cm (0.5in.) NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	120V	2 Full-Size B-Pure Cartridges
D4522-33	Double Holder with Digital Purity Meter	17.8 × 38.1 × 68.6cm (7 × 15 × 27in.)	1.3cm (0.5in.) NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	240V	2 Full-Size B-Pure Cartridges
D4524	Double Holder with Pura-Lite Indicator (50 kΩ)	17.8 × 38.1 × 68.6cm (7× 15 × 27in.)	1.3cm (0.5in.) NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	120V	2 Full-Size B-Pure Cartridges
D5831	Double Holder with Pura-Lite Indicator (200 kΩ)	17.8 × 38.1 × 68.6cm (7 × 15 × 27in.)	1.3cm (0.5in.) NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	120V	2 Full Size B-Pure Cartridges
D5833	Double Holder with Pura-Lite Indicator (1M Ω)	17.8 × 38.1 × 68.6cm (7 × 15 × 27in.)	1.3cm (0.5in. NPTF	4L/min.	4° to 49°C (40° to 120°F)	100psig	120V	2 Full Size B-Pure Cartridges

Required Accessories

Cat. No.	Cartridge Size	Type	Characteristics	Resin	Capacity
D0760	Full Size	Anion Removal	Effective removal of weakly ionized impurities, raises the pH of solutions,recovers precious metal complex	Strong Anion Exchange	1680 grains
D0815	Full Size	Cation Removal	Converts ionized salts to theacid form resulting in a product water that is low in pH, ideal for precious metal or isotope recovery	Strong Cation Exchange	3170 grains
D0803	Full Size	High Capacity	Removes ionized impurities, produces a larger quantity of water than that of the Ultrapure (D0809), however at a lower resistivity	Two-bed Ion Exchange	1760 grains
D0835	Full Size	Pretreatment	Effectively removes colloids, bacteria, chlorine and organics	Macroreticular, Activated Carbon	5000 gal.
D0836	Full Size	Macropure	Effectively removes collloids, bacteria, chlorine and organics, increases filter life	Macroreticular, Activated Carbon	2000 gal.
D0813	Full Size	Organic Removal	Removes organics and chlorine	Activated Carbon	5000 gal.
D0811	Full Size	Oxygen Removal	Maintains low oxygen content to prevent corrosion in cooling water. The feedwater should contain less than 10ppm of ionized solids	Porous Strong Ion Exchange	30g
D0809	Full Size	Ultrapure	Removes ionized impurities to produce high resistivity water with a neutral pH	Mixed Bed	875 grains
D0832	Full Size	Ultrapure and Organic Removal	Commonly used as still pretreatment. Removes ionized impurities and has a layer of activated carbon to remove chlorine and organics	Mixed Bed, Activated Carbon	785 grains / 1000 gal.
D8809	Full Size	Ultrapure and Oxygen Removal	Removes ionized impurities and oxgen to produce high purity water	Ultrapure, Oxygen Removal	455 grains/ 30g
D8811	Full Size	Ultrapure, Oxygen and Organic Removal	Removes ionized impurities, oxygen and organics to produce high purity water	Ultrapure, Oxygen and Organic Removal	365 grains/ 2000 gal./12g
D50215	Half Size	Organic Removal	Removes organics and chlorine	Activated Carbon	5000 gal.
D50214	Half Size	Oxygen Removal	Maintains low oxygen content toprevent corrosion in colling water. The feed water should contain less than 10ppm of ionized solids	Porous Strong Anion Exchange	18g
D50213	Half Size	Ultrapure	Removes ionized impurities to produce high resistivity water with a neutral pH	Mixed Bed	550 grains
D50217	Half Size	Ultrapure and Organic removal	Commonly used as still pretreatment. Removes ionized impurities and has a layer of activated carbon to remove chlorine and organics	Mixed Bed, Activated Carbon	275 grains/ 2000 gal.
D50216	Half Size	Oxygen and demineralization	Removes oxygen and ions. Commonly used in cooling loops	Oxygen Removal Mixed	275 grains/ 9 gal.

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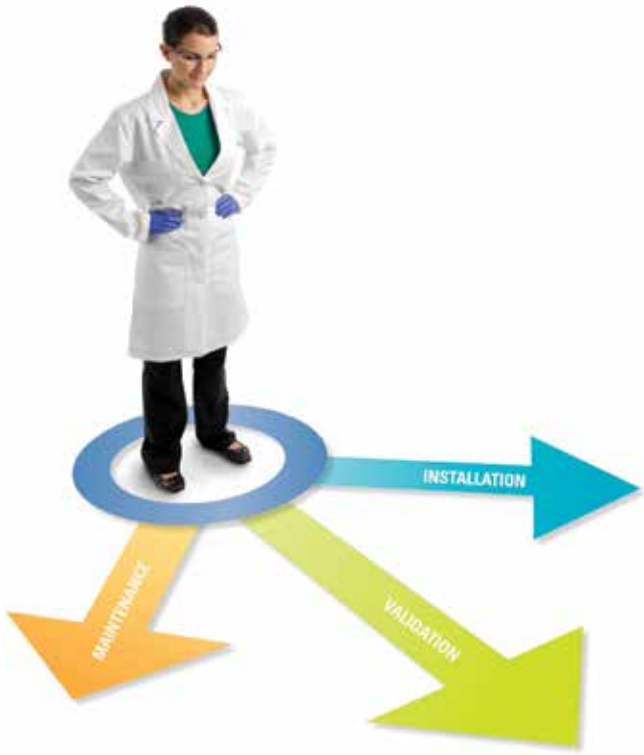

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