# Low Temperature Incubator (Programmable)

Forced Air Convection

## IN602C/612C/802C/812C

-10°C~+50°C

±1.0°C (at 37°C)

IN602C/612C

2861 IN802C/812C

### Standard low temperature incubator

- Large capacity
- Forced circulation with a fan enables high accuracy temperature control and even temperature distribution.
- All models come with either an observation window (W) for improved visibility or solid door.
- Inner glass door keeps temperature stable during sample observation.
- Employment of a large dual-glass door and inner door, forms a triplex glass doors for better heat insulation result (for models with observation window)
- Equipped with various functions such as self-diagnostic (tempera-ture sensor error, heater disconnection, SSR shortcircuit, automatic overheat prevention), calibration off-set, clock, timer, overheat pre-vention device and key lock.
- Manual and program defrost operation are both available.
- After power failure, unit automatically restarts operation at setting before power failure.



(Stand optional)

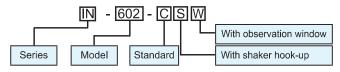
#### Specifications

Model	IN602C	IN612C	IN802C	IN812C	
System	Forced air convection		<u> </u>		
Operating temperature range	-10°C~+50°C				
Temperature adjustment	±0.3°C (when refrigerator in continuous operation)				
accuracy	±1.0°C (when refrigerator in cycle operation)				
Temperature distribution accuracy	±1.0°C(when refrigerator in continuous operation at 37°C)				
Maximum temperature reaching time	20~50°C Approx. 20min		20~50°C Approx. 30	20~50°C Approx. 30min	
Minimum temperature reaching time	20~-10°C Approx. 45min (20~-10°C Approx. 55 min for IN602CW / 612CW)		20~-10°C Approx. 6	20~-10°C Approx. 65min	
nterior material	Stainless steel				
Exterior material	Chrome free electronic galvanized plated steel plate chemical proof baking finish				
Heat insulation material	Styrene foam				
Refrigerator	Air-cooled fully closed compressor 275W Air-cooled fully closed compressor 375W		d compressor 375W		
Refrigerator medium	R134A				
Defrosting mechanism	Manual ON / Auto OFF, Timer operation, Cycle operation				
Blower fan	Axial fan				
Heater	Iron-chrome wire heater: 550W		Iron-chrome wire hea	Iron-chrome wire heater: 750W	
Sensor	Platinum resistance temperature detector: Pt100Ω (temperature controller), K-thermocouple (Overheat prevention device)				
Cable port	I.D.: 32 mm (right side)				
Temperature control	PID control				
Temperature setting	Digital setting with ▲/▼ keys				
Temperature display	Measured temperature: 4-digit orange LED digital display + VFD fluorescent display				
Timer / timer resolution	0min.~999hrs. 59min. / 1min.				
Operation function	Fixed temperature, Auto stop, Auto start, Program (up to 32 steps, repeat operation)				
Additional functions	Timer function (Accumulated time to 49,999 hrs), Calibration off-set function, Clock display				
Safety device	Refrigerator overload relay, Independent overheat prevention device, Over current leakage breaker, Self diagnostic functions (Temperature sensor error, Heater disconnection, SSR short-circuit, Automatic overheat prevention), Abnormal buzzer alarm				
Internal dimensions (W×D×Hmm)	600×477×500		600×477×1,000	600×477×1,000	
External dimensions (W×D×Hmm)	710×645×915		710×645×1,630	710×645×1,630	
Internal capacity	143L		286L	286L	
Shelf plate load	15kg / pc.				
Shelf rest step number / pitch	13 steps / 30mm		23 steps / 30mm	23 steps / 30mm	
Power supply (50/60Hz)	AC115 9A	AC220V 5A	AC115 10A	AC220V 6A	
Weight	Approx. 89kg		Approx. 115kg	Approx. 115kg	
Shelf / Shelf brackets	3 pcs. / 6 pcs.		5 pcs. / 10 pcs.	5 pcs. / 10 pcs.	
Optional items	Stand, Additional shelf, Cable port (ø30/50mm), Recorder, Warning light combination (Stand-by / Operation / Error), Observation window, External communication function (RS485), Temperature output terminal (4-20mA), External alarm output terminal, Time up output terminal				



#### (Stand optional)

#### Model Guide



#### Examples:

IN-602C: Standard model

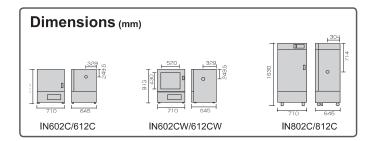
IN-602CW: Standard model with observation window

IN-602CSW: Standard model with shaker hook-up and observation window

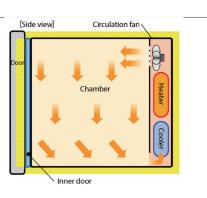
#### Optional items

— - F				
Description		Product code		
Stand for 600 models (ON61)		211856		
Metal stacking kit with cooling f	212823			
Stainless steel punched metal	211221			
Stainless steel wire shelf up to	213464			
*External communication functi	281166			
*External communication adapt	281167			
*Temperature output terminal	281168			
*External alarm terminal	281169			
*Time up output terminal	281170			
Seismic mat for 600 models	296902			
Anti-vilonation material	with support EPM-08	851352		
Anti-vibration material	without support EPM-05	851351		
Shaker table with slide rail for 6	211318			

<sup>\*</sup> Please specify when ordering main unit.



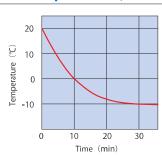
## Method



## **Control Panel**



## **Temperature Drop Curve (IN612C)**



## Interior







IN612C

## **Interior Light**



Shelf & Bracket Set

