

FLUKE®

Fluke Connect™ Modules

Technical Data

Giving you the flexibility to build your wireless system—how you want—when you want.

The Fluke 3000 FC Wireless Test Tools are a team and the modules are team players. You connect any of the Fluke Connect™ Modules to your test point and then view the results on specific Fluke Connect enabled hardware or through Windows® software on your PC—up to 20 meters (65.6 feet) away. Save time and conduct more tests with less trips.

Increase your productivity

- Save money and time by taking multiple measurements simultaneously
- Isolate interruptions or record signal fluctuations without even being there using the log function on the modules
- Work with fewer interruptions by recording multiple sessions before downloading
- Capture readings at different intervals, with user-set recording intervals from one second to one hour
- Choose the module(s) that work best for your applications—voltage, current, and temperature

Take back your schedule

- View up to 10 live readings at once on the Fluke Connect™ mobile app
- View up to six live readings at once on a PC to get a complete understanding of the situation and download logging sessions (PC Adapter sold separately)
- Add the 3000 FC Digital Multimeter or Ti200/300/400 Infrared Camera to monitor modules on the move
- No more run-around. See multiple measurements in one place at the same time
- No more writing data down. Capture single or multiple logging sessions using the recording capability
- Avoid awkward or uncomfortable measurement positions. Set up the measurement once, step back and read it as many times as you want, when you want



Built with
**FLUKE
CONNECT™**

See it. Save it. Share it.
All the facts, right in the field.

Fluke Connect with ShareLive™ video call is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ (4.3 and up) and iOS (4s and later) and works with over 20 different Fluke products—the largest suite of connected test tools in the world. And more are on the way. Go to the Fluke website to find out more.

Make the best decisions faster than ever before by viewing all temperature, mechanical, electrical and vibration measurements for each equipment asset in one place. Get started saving time and increasing your productivity.

Download the app at:



Smart phone not included with purchase.

Fluke a3000 FC Wireless AC Current Clamp Module

A fully functional true-rms current clamp meter that wirelessly relays measurements to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

a3000 FC main features include:

- True-rms ac clamp meter
- Measure up to 400 A ac
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- Inrush function

a3000 FC general specifications

Range	0.5 A to 400.0 A
Resolution	0.1 A
Accuracy	400.0 A: 2 % ± 5 digits (10 Hz to 100 Hz), 2.5 % ± 5 digits (100 Hz to 500 Hz)
Inrush	Max displayed reading: 999.9A
Crest factor (50 Hz/60 Hz)	3 at 500 A, 2.5 at 600 A, 1.42 at 1000 A, add 2 % for C.F. > 2
LCD w/backlight	3½ digits
Log rate/interval	1 sec minimum/adjustable by PC
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	Add 0.1 x (specified accuracy)/°C (< 18 °C or > 28 °C)
Operating humidity	90 % at 35 °C, 75 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	IEC 61010-1, 600 V CAT III, 3rd edition Pollution Degree 2
Safety rating	CAT III 600 V
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP30
Pollution Degree	2
Jaw opening	34 mm (1.33 in)
Size (HxWxD)	20.3 cm x 7.49 cm x 3.55 cm (8 in x 2.95 in x 1.4 in)
Weight	.22 kg (8 oz)

(Not compatible with Fluke CNX test tools)



Fluke a3001 FC Wireless iFlex AC Current Module

A true-rms current clamp meter that wirelessly relays measurements to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

The iFlex™ Wireless Current Module allows you to measure around awkward sized conductors or get into tight spaces and makes wire access easier.

- Contains: One true-rms flexible current meter and one iFlex i2500-10 Flexible Current Probe
- Measure up to 2500 A ac
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- Inrush function
- Magnetic hanging strap



a3001 FC general specifications

Range	0.5 A to 2500 A AC
Resolution	0.1 A
Accuracy	3 % ± 5 digits (5 Hz to 500 Hz)
Crest factor (50 Hz/60 Hz)	3.0 at 1100 A, 2.5 at 1400 A, 1.42 at 2500 A, add 2 % for C.F. > 2
LCD w/backlight	3½ digits
Log rate/interval	1 sec minimum/adjustable by PC or front panel
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	Add 0.1 X (specified accuracy)/ °C (< 18 °C or > 28 °C)
Operating humidity	90 % at 35 °C, 75 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	IEC 61010-1, 600 V CAT IV/1000 V CAT III, 3rd edition Pollution Degree 2
Safety rating	CAT IV 600 V, CAT III 1000 V
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Pollution degree	2
Jaw opening	25.4 cm (10 in) coil
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)

(Not compatible with Fluke CNX test tools)

Fluke a3002 FC Wireless AC/DC Current Module

Designed to be used with the i410 or i1010 ac/dc current clamps (not included with module). AC/DC current module that wirelessly relays measurements from the i410 or i1010 clamp accessory to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

a3002 FC main features include:

- Measure up to 400 A ac or 400 A dc with i410 (sold separately)
- Measure up to 600 A ac or 1000 A dc with i1010 (sold separately)
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- Magnetic hanging strap

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ±[% of Reading] + [Number of least significant digits]. Dc ranges are autoranging. Ac accuracy is specified from 1 % to 110 % of the range. dc accuracy is specified from -110 % to 110 % of range.

AC/DC current

Function	Range	Resolution	Accuracy ¹
A dc	1000 A	0.1 A	(0.5 % + 3)
A ac	600.0 A	0.1 A	(1.0 % + 3)

¹AC accuracy is specified from 45 Hz to 1000 Hz



a3002 FC general specifications

Maximum voltage between terminal and earth ground (module)	30 V dc or ac rms
LCD w/backlight	3 ½ digits, 6000 counts, 4/sec update rate
Log rate/Interval	Adjustable by PC from 1 sec to 1 hr, default 1 min
Battery type	2 AA Alkaline batteries, NEDA 15A, IEC LR6
Battery life	400 hours minimum
Memory	Record up to 65,000 readings
RF communications	2.4 GHz ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.1 X (specified accuracy)/°C (< 18 °C or > 28 °C)
Relative humidity	0 % to 90 % (0 °C to 35 °C), 0 % to 75 % (35 °C to 40 °C), 0 % to 45 % (40 °C to 50 °C)
EMC	IEC 61236-1, Portable
Safety compliance	Protected to IEC 61010-1, 600 V CAT IV / 1000 V CAT III, 3rd edition Pollution Degree 2
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Size (HxWxD)	160 mm x 66 mm x 38 mm (6.3 in x 2.6 in x 1.5 in)
Weight	0.255 kg (9 oz)

(Not compatible with Fluke CNX test tools)

Fluke v3000 FC Wireless True-rms AC Voltage Module

A fully functional true-rms voltage meter that wirelessly relays ac voltage measurements to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

v3000 FC main features include:

- True-rms ac voltage module
- Measure up to 1000 V
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- TL224 Test Leads
- AC285 Alligator Clips
- Magnetic hanging strap

Accuracy is specified as \pm ([% of reading] + [number of least significant digits]). All ranges are autoranging. Accuracy is specified from 5 % to 100 % of the range obtained by autoranging, from 18 °C to 28 °C.

AC voltage

Range ¹	Resolution	Accuracy ^{2,3,4}	
		45 Hz to 500 Hz	500 Hz to 1 kHz
6.000 V	0.001 V	1.0 % + 3	2.0 % + 3
60.00 V	0.01 V		
600.0 V	0.1 V		
1000 V	1 V		

¹ All ac voltage ranges are specified from 1 % of range to 100 % of range.

² Crest factor of \leq 3 at full scale up to 500 V, decreasing linearly to crest factor \leq 1.5 at 1000 V.

³ For non-sinusoidal waveforms, add $-(2\%$ of reading + 2% full scale) typical, for crest factor up to 3.

⁴ Do not exceed 10° V-Hz.



v3000 FC general specifications

LCD w/backlight	3½ digits, 6000 counts, updates 4/sec
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 Hours
Memory	Record up to 65000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.1 X (specified accuracy)/°C (< 18 °C or > 28 °C)
Operating humidity	90 % at 35 °C, 45 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	ANSI/ISA 61010-1 / (82.02.01): 3rd edition CAN/CSA-C22.2 No 61010-1-12: 3rd edition UL 61010-1: 3rd edition IEC/EN 61010-1:2010
Safety rating	CAT IV 600 V, CAT III 1000 V
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Pollution Degree	2
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)

(Not compatible with Fluke CNX test tools)

Fluke v3001 FC Wireless DC Voltage Module

A fully functional dc voltage meter that wirelessly relays dc voltage measurements to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

v3001 FC main features include:

- Measure up to 1000 V dc
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- TL222 Test Leads
- AC220 Alligator Clips
- Magnetic hanging strap

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ±[% of Reading] + [Number of least significant digits]. All ranges are autoranging. Accuracy is specified from the range obtained by autoranging, from 18 °C to 28 °C.



DC voltage			
Function	Range	Resolution	Accuracy
mV dc	600.0 mV	0.1 mV	0.09 % + 3
V dc	6.000 V	0.001 V	0.09 % + 3
	60.00 V	0.01 V	
	600.0 V	0.1 V	
	1000 V	1 V	0.15% + 2

v3001 FC general specifications

LCD w/backlight	3 ½ digits, 6000 counts, 4/sec update rate
Battery type	2 AA Alkaline batteries, NEDA 15A, IEC LR6
Log rate/Interval	Adjustable by PC from 1 sec to 1 hr, default 1 min
Battery life	400 hours minimum
Memory	Record up to 65,000 readings
RF communications	2.4 GHz ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.1 X (specified accuracy)/°C (< 18 °C or > 28 °C)
Relative humidity	0 % to 90 % (0 °C to 35 °C), 0 % to 75 % (35 °C to 40 °C), 0 % to 45 % (40 °C to 50 °C)
EMC	IEC 61236-1, Portable
Safety Compliance	IEC 61010-1, 600 V CAT IV / 1000 V CAT III, 3rd edition Pollution Degree 2
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Size (HxWxD)	160 mm x 66 mm x 38 mm (6.3 in x 2.6 in x 1.5 in)
Weight	0.255 kg (9 oz)

(Not compatible with Fluke CNX test tools)

Fluke t3000 FC Wireless K-Type Temperature Module

A versatile K-type thermocouple thermometer wirelessly relays measurements to other Fluke Connect™ enabled master units, listed below.

- Fluke 3000 FC DMM
- Fluke Ti200/300/400 Infrared Camera
- PC via optional pc3000 FC Adapter
- Fluke Connect Mobile app

t3000 FC main features include:

- K-type Thermocouple Thermometer
- 80PK-1 K-type Bead Thermocouple
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- Magnetic hanging strap
- Other K-type temperature probes also available

t3000 FC general specifications

Range	K-type: -200 °C to 1372 °C
Resolution	0.1 °C
Accuracy	± [0.5 % + 0.5 °C] counts
Input terminals	K-type mini
LCD w/backlight	3 ½ digits
Log rate/interval	1 sec minimum/adjustable by PC
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20 m Obstructed, sheetrock wall: Up to 6.5 m Obstructed, concrete wall or steel electrical enclosure: Up to 3.5 m
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.01 % of reading +0.03 °C per °C
Temperature scale	ITS-90
Operating humidity	90 % at 35 °C, 75 % at 40 °C, 45 % at 50 °C
Altitude	Operating: 2,000 m Storage: 12,000 m
EMC	EN 61326-1:2006
Safety compliance	IEC 61010-1, CAT I, 3rd edition Pollution Degree 2
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE
Ingress Protection (IP) rating	IP42
Pollution Degree	2
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)

(Not compatible with Fluke CNX test tools)



Fluke pc3000 FC Adapter and Software

Fluke 3000 FC Wireless Test Tools show real-time measurements from remote modules up to 20 meters away on your PC

Fluke FC wireless test tools work together to help you troubleshoot faster. The pc3000 FC Adapter and Software help you understand the information you measure. When you need to get information back to a PC the pc3000 FC Adapter and Software wirelessly collects up to 65,000 sets of time stamped min/max/avg readings from FC remote modules. Software can display live readings from up to six modules simultaneously. Allows custom logging intervals and custom names for modules. Includes Windows SW3000 software.

Software requirements:

Fluke pc3000 must be connected to the USB port in order to enable communication between FC modules and software. SW3000 will support up to two pc3000 FC Adapters.

OS Compatibility:

Windows XP or later.

RF connection time (binding time) can be up to one minute for all FC wireless tools. Not compatible with Fluke CNX test tools



Ordering information

Modules:

- FLK-A3000FC** FC Wireless AC Current Clamp Module
- FLK-A3001FC** FC Wireless iFlex AC Current Module
- FLK-A3002FC** FC Wireless AC/DC Current Module
- FLK-V3001FC** FC Wireless DC Voltage Module
- FLK-V3000FC** FC Wireless AC Voltage Module
- FLK-V3001FC** FC Wireless DC Voltage Module
- FLK-T3000FC** FC Wireless K-Type Temperature Module
- FLK-pc3000** FC Adapter and Software

Kits:

- FLK-3000 FC Industrial Kit** Fluke 3000 FC Industrial System includes multimeter, three iFlex clamp modules, one ac voltage module and accessories
- FLK-3000 FC General Maintenance Kit** Fluke 3000 FC General Maintenance System includes multimeter, iFlex clamp module, ac voltage module, dc voltage module and accessories
- FLK-3000 FC HVAC Kit** Fluke 3000 FC HVAC System includes multimeter, ac current clamp module, temperature module and accessories
- FLK-T3000 FC Kit** Fluke t3000 FC Kit includes multimeter, temperature module and accessories
- FLK-A3000 FC Kit** Fluke a3000 FC Kit includes multimeter, ac current clamp module and accessories
- FLK-A3001 FC Kit** Fluke a3001 FC Kit includes multimeter, iFlex clamp module and accessories
- FLK-V3000 FC Kit** Fluke v3000 FC Kit includes multimeter, ac voltage module and accessories
- FLK-V3001 FC Kit** Fluke v3001 FC Kit includes multimeter, dc voltage module and accessories
- FLK-V3003 FC Kit** Fluke v3003 FC Kit includes multimeter, ac voltage module, dc voltage module and accessories

Fluke. *Keeping your world up and running.*®

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or
Fax +31 (0) 40 2675 222
In Canada (800)-36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: <http://www.fluke.com>

©2014 Fluke Corporation.
Specifications subject to change without notice.
Printed in U.S.A. 5/2014 6002156b-EN

Modification of this document is not permitted without written permission from Fluke Corporation.