

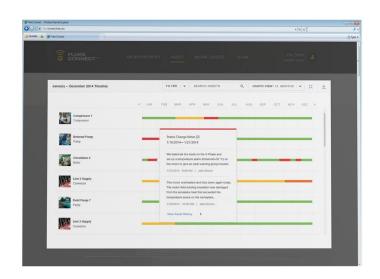
**TECHNICAL DATA** 

# Fluke 3000 FC Series Wireless Multimeter













## **Key features**

- Full featured multimeter that also reads results wirelessly from remote Fluke Connect® wireless modules
- Measures AC and DC voltage to 1000 V, AC and DC current, and temperature
- Shows up to four readings simultaneously on a bright white backlit display
- Sends measurement data to your smartphone
- Safety rated CAT III 1000 V, Cat IV 600 V; IP54

## Product overview: Fluke 3000 FC Series Wireless Multimeter

#### The Fluke 3000 FC with Fluke Connect provides all the facts right in the field.

With its precision, reliability, and ease of use, the Fluke 3000 FC Wireless Multimeter has all the essential electrical and electronic troubleshooting features professional technicians need. It gives you true-RMS voltage and current measurements, 6000-count resolution, manual and automatic ranging, plus a frequency, capacitance, resistance, continuity and diode measurements.

#### Reduces arc flash risk

Independently tested for safe use in CAT IV 600V/CAT III 1000 V environments, the Fluke 3000 FC DMM and Fluke Connect wireless modules put tools, not your body, near live electrical panels. Just de-energize the cabinet; open the panel while wearing PPE; and connect the remote modules—voltage modules, current clamps, flexible current loops or thermometers. Then read the results on the 3000 FC from a safe distance up to away. You can view the meter measurement, plus readings from up to three wireless modules all on the same screen. And by separating yourself from hazardous measurement situations you'll reduce the risk of arc flash.

#### Gives the full picture in real time.

With Fluke Connect-enabled tools you can connect multiple remote modules in different parts of the system and view the interaction between remote test points on a single screen, in real time. Create and email reports right from the field, or download the data to a PC for further analysis. The Fluke 3000 FC connects to your smartphone through Bluetooth so you can send measurement data from the meter to your phone and share it with your team anytime, from anywhere.

#### Other useful capabilities:

- Record measurements over time and monitor changes live on your phone.
- Share the results using Fluke Cloud™ storage and ShareLive™ video call.
- Provides True-RMS voltage and current measurements with 6000-count resolution
- Share results with remote team members instantly with ShareLive™ video call
- Includes continuity, resistance, diode test, capacitance, and frequency tests, plus MIN/MAX recording
- Provides 0 09% basic accuracy
- Works with a standard amp clamp or with a flexible iFlex clamp
- Shows meter measurement and readings from up to three modules simultaneously
- Allows mixing and matching modules to meet your specific measurement needs
- Current, voltage and temperature modules are available separately or in Fluke Connect kits
- Runs on three AA Alkaline batteries, providing 250 hours minimum battery life
- Comes with three-year standard warranty













	Fluke 115 Field Technicians Digital Multimete
CAT rating	CAT III 600 V
True-rms readings	0
Voltage AC/DC	600 V
Current AC/DC	10 A
Resistance	40 MΩ
Capacitance	10,000 µF
Temperature	-
Infrared camera	-
Additional measurement capabilities	Continuity/diode test

Fluke 87V Industrial Multimet CAT III 1000 V CAT IV 600 V
О
1000 V
10 A
50 MΩ 10,000 μF
-200.0 °C to 1090 °C
-
Frequency, continuity/diode test, motor drive (VFD) measurement, duty cycle, microamps, analog bar graph, relative reference

Fluke 3000 FC Series Wireless Multimeter	Fluke 1587 FC Insulation Multimet
CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V
0	
1000 V	1000 V
400 mA	400 mA
50 MΩ	50 ΜΩ
10,000 µF	10,000 µF
with t3000 FC	-40 °C to 537 °C
-	-
Frequency, confinuity/diode test. Able to connect to three 3000 FC modules.	Frequency, Pi/DAR timed ratio tests, continuity/diode test, motor drive (VFD) measurement, microamps, relative reference

Fluke 279 FC True-rms Thermal Multimeter CAT III 1000 V CAT IV 600 V
0
1000 V
2500 A AC (with iFlex)
50 ΜΩ
10,000 µF
Infrared camera -10 °C to 200 °C
0
Frequency, continuity/diode test, motor drive (VFD) measurement

## **Specifications: Fluke 3000 FC Series Wireless Multimeter**

AC Voltage			
Range <sup>1</sup> / resolution		600.0 mV / 0.1 mV 6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V	
Accuracy <sup>2 3 4</sup>	45 Hz to 500 Hz	1.0% + 3	
	500 Hz to 1 kHz	2.0% + 3	

- AC voltage ranges are specified from 1% of range to 100% of range.
   Crest factor of □ 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V.</li>
   For non-sinusoidial waveforms, add ± (2% of reading + 2% full scale) typical, for crest factor up to 3.
- 4. Do not exceed 107 V-Hz.

DC Voltage, Continuity, Resistance, Diode Test and Capacitance		
mV	Range / resolution	600.0 mV / 0.1 mV
	Accuracy	0.09% + 2
V	Range / resolution	6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V
	Accuracy	0.09% + 2 0.15% + 2
	Range / resolution	600 Ω / 1 Ω
)))	Accuracy	Meter beeps at $< 25 \Omega$ , beeper detects opens or shorts of 250 $\mu$ s or longer.



Ω	Range / resolution	600.0 Ω / 0.1 Ω 6.000 kΩ / 0.001 kΩ 60.00 kΩ / 0.01 kΩ 60.00 kΩ / 0.1 kΩ 600.0 kΩ / 0.001 MΩ 50.00 MΩ / 0.01 MΩ
	Accuracy	0.5% + 2 0.5% + 1 1.5% + 3
Diode test	Range / resolution	2.000 V / 0.001 V
Diode test	Accuracy	1% + 2
μF	Range / resolution	1000 nF / 1 nF 10.00 μF / 0.01 μF 100.0 μF / 0.1 μF 9999 μF <sup>1</sup> / 1 μF
	Accuracy	1.2% + 2 10% typical

1. In the 9999  $\mu$ F range for measurements to 1000  $\mu$ F, the measurement accuracy is 1.2% + 2.

### **AC and DC Current**

mA AC (45 Hz to 1 kHz)	Range <sup>1</sup> / resolution	60.00 mA / 0.01 mA 400.0 mA <sup>3</sup> / 0.1 mA
	Accuracy	1.5% + 3
mA DC <sup>2</sup>	Range <sup>1</sup> / resolution	60.00 mA / 0.01 mA 400.0 mA <sup>3</sup> / 0.1 mA
	Accuracy	0.5% + 3

- 1. All AC current ranges are specified from 5% of range to 100% of range.
- 2. Input burden voltage (typical): 400 mA input 2 mV/mA.
- 3. 400.0 mA accuracy specified up to 600 mA overload.

## Frequency

Range / resolution	99.99 Hz / 0.01 Hz 999.9 Hz / 0.1 Hz 9.999 kHz / 0.001 kHz 99.99 kHz / 0.01 kHz
Accuracy <sup>1</sup>	0.1% + 1

1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps.

### **Input Characteristics**

	Overload protection	1100 V RMS
	Input impedance (nominal)	> 10 MΩ < 100 pF
×	Common mode rejection ratio (1 $k\Omega$ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz



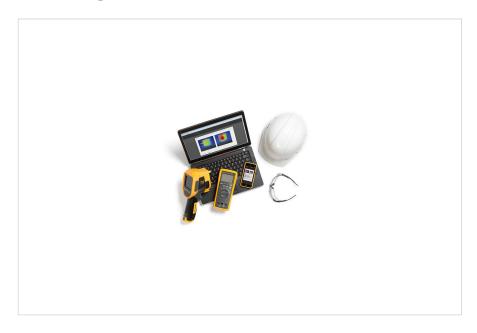
Overload protection	1100 V RMS
-	> 10 MΩ < 100 pF
Common mode rejection ratio (1 kΩ unbalance)	> 60 dB, DC to 60 Hz
Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
Overload protection	1100 V RMS
Input impedance (nominal)	> 10 MΩ < 100 pF
Common mode rejection ratio (1 kΩ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
Overload protection	1100 V RMS
Input impedance (nominal)	< 2.7 V DC
Full scale voltage to 6 M $\Omega$ Full scale voltage 50 M $\Omega$	< 0.7 V DC < 0.9 V DC
Typical short circuit current	< 350 mA
Overload protection	1100 V RMS
Input impedance (nominal)	< 2.7 V DC
Full scale voltage to 6 M $\Omega$ Full scale voltage 50 M $\Omega$	2.000 V DC
Typical short circuit current	< 1.1 mA
Fused, 44/100 A, 1000 V FAST F	use
600 mA overload for 2 minutes	maximum, 10 minutes rest minimum
± 12 counts for changes > 350	mS in duration.
± 40 counts for changes > 900	mS in duration.
1000 V DC or AC RMS	
0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only	
Update rate	4/sec
Volts, amps, ohms	6000 counts
Frequency	10,000 counts
1,000 counts	
1,000 counts	
1,000 counts  Three AA Alkaline baeries, NED	A 15A IEC LR6
	(1 kΩ unbalance)  Normal mode rejection  Overload protection  Input impedance (nominal)  Common mode rejection ratio (1 kΩ unbalance)  Normal mode rejection  Input impedance (nominal)  Full scale voltage to 6 MΩ Full scale voltage 50 MΩ  Typical short circuit current  Overload protection  Input impedance (nominal)  Full scale voltage to 6 MΩ Full scale voltage 50 MΩ  Typical short circuit current  Fused, 44/100 A, 1000 V FAST F 600 mA overload for 2 minutes  ± 12 counts for changes > 350  ± 40 counts for changes > 900  1000 V DC or AC RMS  0.44 A (44/100 A, 440 mA), 1000  Update rate  Volts, amps, ohms



RF communications	2.4 GHZ ISM Band	
DE	Open air, unobstructed	Up to 20m
RF communication range	Obstructed, sheetrock wall	Up to 6.5m
Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5m	
T	Operating	-10°C to 50°C
Temperature	Storage	-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)	
Alice I	Operating	2,000 m
Altitude	Storage	12,000 m
Electromagnetic compatibility EMI, RFI, EMC, RF	EN 61326–1:2006, EN 61326–2–2:2006 ETSI EN 300 328 V1.7.1:2006, ETSI EN 300 489 V1.8.1:2008 FCC Part 15 Subpart C Sections 15.207, 15.209, 15.249 FCCID : FCC: T68–FDMMBLE IC: 6627A–FDMMBLE	
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	
Certifications	CSA, FCC, CE	
Ingress Protection (IP) rating	IP54	
Pollution Degree	2	
Size (H x W x L)	4.75 x 9.3 x 20.7 cm (1.87 x 3.68 x 8.14 in)	
Weight	340 g (12 oz)	
Warranty	Three years	
Not compatible with Fluke CNX test tool:	5	



## **Ordering information**



### **FLK-3000 FC**

Fluke 3000 FC Series Wireless Multimeter

#### Includes:

- True-RMS Wireless Multimeter
- TL175 Test Leads
- AC175 Alligator Clips

### **Optional accessories**

## Description

# Fluke pc3000 FC Wireless PC Adapter

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 through Windows® software on your PC - up to 20 meters (65.6 feet) away.





#### Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect® system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Access baseline, historical and current measurements by asset.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Share your measurement data using ShareLive™ video calls and emails.

Find out more at **flukeconnect.com** 







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