

TECHNICAL DATA

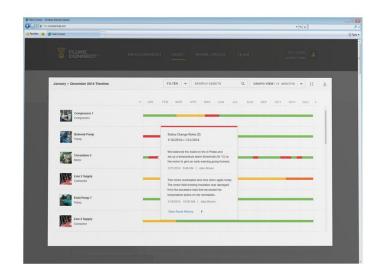
Fluke v3000 FC Wireless AC Voltage Kit













Key features

The Fluke FC Wireless v3000 Voltage Kit provides measurement of many common electrical parameters

The Fluke 3000 FC Series Wireless Multimeter with the Fluke Connect® app has all the essentials for convenient test and measurement troubleshooting:

- AC and DC voltage measurements to 1000 V
- AC and DC current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX recording
- CAT III 1000 V, Cat IV 600 V; IP54

With the Fluke v3000 FC Wireless AC Voltage Module you can:

- Measure up to 1000 V True-RMS AC
- Use as a standalone meter or as part of the system
- Use the logging function for recording and saving up to 65,000 readings

Product overview: Fluke v3000 FC Wireless AC Voltage Kit

The Fluke v3000 FC WirelessVoltage Kit is part of the Fluke Connect team of wireless test tools

Connect the v3000 FC Wireless AC Voltage Module to your test point, and view the results up to 20 meters away on the 3000 FC Wireless Digital Multimeter.

You'll save time, with less run-around collecting multiple measurements. Use multiple modules for measurements on three-phase systems, as a stand-alone measurement tool or combine with other Fluke Connect® modules as a system for multiple measurements.

From short distances, you can even view readings from modules through closed electrical panels. Plus no more writing down data as the FC Wireless Temperature Module captures up to 65,000 sets of time stamped min/max/avg readings, using the optional PC adapter. Fluke Connect wireless test tools also offer increased safety by letting you view readings in a separate location from the test point.

Now you can take readings on moving machinery, with only the measurement module in harm's way.

Specifications: Fluke v3000 FC Wireless AC Voltage Kit

Fluke 3000 FC Wireless Digital Multimeter

* For all specifications: accuracy is specified for one 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 \pm ([% of Reading] + [Number of least significant digits]).

Detailed Specifications

AC Voltage



Dange 1	Resolution	Accuracy ^{2 3 4}	Accuracy ^{2 3 4}
Range ¹	Resolution	45 Hz to 500 Hz	500 Hz to 1 kHz
600.0 mV	0.1 mV		
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		

- All 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.
 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.

Function	Range	Resolution	Accuracy
mV	600.0 mV	0.1 mV	0.09% + 2
	6.000 V	0.001 V	
\	60.00 V	0.01 V	0.09% + 2
V	600.0 V	0.1 V	
	1000 V	1 V	0.15% + 2
Ω	600 Ω	1 Ω	Meter beeps at < 25 Ω , beeper detects opens or shorts of 250 μ s or longer.
	600.0 Ω	0.1 Ω	0.5% + 2
	6.000 kΩ	0.001 kΩ	
	60.00 kΩ	0.01 kΩ	0.5% + 1
Ω	60.00 kΩ	0.1 kΩ	0.3% + 1
	600.0 kΩ	00.0 kΩ 0.001 MΩ	
	50.00 ΜΩ	0.01 ΜΩ	1.5% + 3
Diode test	2.000 V	0.001 V	1% + 2
	1000 nF	1 nF	
	10.00 μF	0.01 μF	1.2% + 2
μF	100.0 μF	0.1 μF	
	9999 μF¹	1 μF	10% typical

1. In the 9999 μF range for measurements to 1000 μF , the measurement accuracy is 1.2% + 2.

AC and DC Current

Function	Range ¹	Resolution	Accuracy
mA AC (45 Hz to 1 kHz)	60.00 mA	0.01 mA	1.504 + 2
	400.0 mA ³	0.1 mA	1.5% + 3



mA DC ²	60.00 mA 0.01 mA
DC -	400.0 mA ³ 0.1 mA

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

Frequency		
Range	Resolution	Accuracy ¹
99.99 Hz	0.01 Hz	
999.9 Hz	0.1 Hz	0.1% + 1
9.999 kHz	0.001 kHz	U.170 T 1
99.99 kHz	0.01 kHz	

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

1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps.					
Input Characteristics					
Function	Overload protection	Input impedance (nominal)	Common mode rejection ratio (1 kΩ unbalance)		Normal mode rejection
×	1100 Vrms	> 10 MΩ < 100 pF	> 120 dB at DC, 50 Hz or 60 Hz		> 60 dB at 50 Hz or 60 Hz
×	1100 Vrms	> 10 MΩ < 100 pF	> 60 dB, DC to 60 Hz		
×	1100 Vrms	> 10 MΩ < 100 pF	> 1700 dB at D(-500 Hz or 600 Hz		> 60 dB at 50 Hz or 60 Hz
			Full scale voltage		Typical short
Open circuit test voltage			Το 6 ΜΩ	50 ΜΩ	circuit current
×	1100 Vrms	< 2.7 VDC	< 0.7 VDC	< 0.9 VDC	< 350 mA
×	1100 Vrms	< 2.7 VDC	2.000 VDC		< 1.1 mA
mA Function					
Overload Protection	Fused, 44/100 A, 1000 V FAST Fuse				
Overload	600 mA overload for 2 minutes maximum, 10 minutes rest minimum				
MIN/MAX Recording Accuracy					
DC functions The specified accuracy of the measurement function ± 12 counts for changes > 350 mS in duration.					
AC functions	The specified accuracy of the measurement function ± 40 counts for changes > 900 mS in duration.				
General Specifications					
Maximum voltage between any terminal and earth ground	1000 VDC or AC rms				
Ω fuse protection from A inputs	0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only				



	Update rate	4/sec		
Display (LCD)	Volts, amps, ohms	6000 counts		
	Frequency	10,000 counts		
	Capacitance	1,000 counts		
Baery type	Three AA Alkaline baeries, NEDA 15A IEC LR6			
Baery life	250 hours minimum			
RF communications	2.4 GHZ ISM Band			
	Open air, unobstructed	Up to 20 m		
RF communication range	Obstructed, sheetrock wall	Up to 6.5 m		
J.	Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5 m		
Tomporature	Operating	-10°C to 50°C		
Temperature	Storage	-40°C to 60°C		
Temperature coefficient	0.1 x (specified accuracy) / °C (< 18	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)			
Altitude	Operating	2,000 m		
	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			
	ANSI/ISA 61010-1 / (82.02.01)	3rd edition		
Safety compliance	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)	340 g (12 oz)		
Warranty	Three years			
Not compatible with Fluke (CNX test tools			

Fluke v3000 FC Wireless AC Voltage Module

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.



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

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

General Specifications			
LCD w/ backlight	3½ digits, 6000 counts, updates 4/sec		
Baery type	2 AA, NEDA 15 A, IEC LR6		
Baery life	400 Hours		
Memory	Record up to 65000 readings		
RF communications	2.4 GHZ ISM Band		
	Open air, unobstructed Up to 20 m		
RF communication range	Obstructed, sheetrock wall	Up to 6.5 m	
J	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	
Aititude	C+	12,000	
	Storage	12,000 m	
EMC	EN 61326-1:2006	12,000 m	
EMC		3rd edition	
	EN 61326-1:2006		
EMC Safety compliance	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01)	3rd edition	
	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12	3rd edition 3rd edition	
	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12 UL 61010-1	3rd edition 3rd edition 3rd edition	
Safety compliance	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12 UL 61010-1 IEC/EN 61010-1	3rd edition 3rd edition 3rd edition 2010	
Safety compliance Safety rating	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12 UL 61010-1 IEC/EN 61010-1 CAT IV 600 V, CAT III 1000 V	3rd edition 3rd edition 3rd edition 2010	
Safety compliance Safety rating Certifications Ingress Protection (IP)	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12 UL 61010-1 IEC/EN 61010-1 CAT IV 600 V, CAT III 1000 V CSA, CE, FCC: T68-FBLE IC: 6627A-F	3rd edition 3rd edition 3rd edition 2010	
Safety compliance Safety rating Certifications Ingress Protection (IP) rating	EN 61326-1:2006 ANSI/ISA 61010-1 / (82.02.01) CAN/CSA-C22.2 No 61010-1-12 UL 61010-1 IEC/EN 61010-1 CAT IV 600 V, CAT III 1000 V CSA, CE, FCC: T68-FBLE IC: 6627A-F IP42	3rd edition 3rd edition 3rd edition 2010	

⁷ Fluke Corporation Fluke v3000 FC Wireless AC Voltage Kit



Warranty	Three years
Not compatible with Fluke CNX test tools	



Ordering information



FLK-v3000 FC Kit

Fluke v3000 FC Wireless AC Voltage Kit

Includes:

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 AC Voltage Module
- TL175 Test Leads
- TL224 Test Leads
- AC175 Alligator Clips
- AC285 Alligator Clips
- Magnetic hanging strap





Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect $^{\text{\tiny{TM}}}$ 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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Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.