

TECHNICAL DATA

Fluke v3001 FC Wireless DC Voltage Kit









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	MEASUREMENT ASSET WORK ORDER TEAM The Order Team	ł
January - December 2014 Timeline	FILTER V SEANCH ASSETS Q. GRAPH WEW 12 MONTHS V .	(<u>*</u>
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Key features

The Fluke FC Wireless v3001 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

The Fluke v3001 FC Wireless DC Voltage Module lets you:

- Measure up to 1000 VDC
- 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 v3001 FC Wireless DC Voltage Kit

The Fluke FC Wireless v3001 Voltage Kit is part of the Fluke Connect team of wireless test tools

Connect the v3001 FC Wireless DC 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 DC Voltage 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 v3001 FC Wireless DC 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 $\pm([\% \text{ of Reading}] + [\text{Number of least significant digits}])$.



Detailed Specifications

AC Voltage

Possiution	Accuracy ²³⁴	Accuracy ²³⁴
Resolution	45 Hz to 500 Hz	500 Hz to 1 kHz
0.1 mV		
0.001 V		
0.01 V	1.0% + 3	2.0% + 3
0.1 V		
1 V		
	0.001 V 0.01 V 0.1 V	Resolution 45 Hz to 500 Hz 0.1 mV 0.001 V 0.001 V 1.0% + 3 0.1 V 0.1 V

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

2. Crest factor of [] 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.

DC Voltage, Continuity, Resistance, Diode Test and Capacitance

		•	
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	
Ω	60.00 kΩ	0.01 kΩ	0.5% + 1
12	60.00 kΩ	0.1 kΩ	0.5% + 1
	600.0 kΩ	0.001 MΩ	
	50.00 MΩ	0.01 MΩ	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 μF^1	9 μF ¹ 1 μF 10% typical	10% typical
1. In the 9999 μF range for	measurements	to 1000 μF, the mea	asurement accuracy is 1.2% + 2.
AC and DC Current			
Function	Range ¹	Resolution	Accuracy



mA AC	60.00 mA	0.01 mA	1.50(+ 2
(45 Hz to 1 kHz)	400.0 mA ³	0.1 mA	1.5% + 3
	60.00 mA	0.01 mA	0.5% + 2
mA DC ²	400.0 mA ³	0.1 mA	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	Accuracy ¹
99.99 Hz	0.01 Hz	
999.9 Hz	0.1 Hz	0.4% + 4
9.999 kHz	0.001 kHz	0.1% + 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.

Input Characteristics

•					
Function	Overload protection	Input impedance (nominal)	Common moo ratio (1 kΩ un		Normal mode rejection
×	1100 Vrms	> 10 MΩ < 100 pF	> 120 dB at DC Hz	2, 50 Hz or 60	> 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	> 120 dB at DC Hz	2, 50 Hz or 60	> 60 dB at 50 Hz or 60 Hz
			Full scale voltage		Typical short
Open circuit test voltage			Το 6 ΜΩ	50 MΩ	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	<u>.</u>		
Overload	600 mA overload	l for 2 minutes ma	iximum, 10 minu	ites rest minimu	m
MIN/MAX Recording Accu	racy				
DC functions	The specified acc in duration.	curacy of the meas	surement functio	on ±12 counts fo	r changes > 350 mS
AC functions	The specified acc in duration.	curacy of the meas	surement functio	on ±40 counts fo	r changes > 900 mS
General Specifications					
Maximum voltage between any terminal and earth ground	1000 VDC or AC	rms			

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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	
rr communication range	Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5 m	
- .	Operating	-10°C to 50°C	
Temperature	Storage	-40°C to 60°C	
Temperature coefficient	0.1 x (specified accuracy) / °C (< 18	3°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)		
	Operating	2,000 m	
Altitude	Storage 12,000 m	12,000 m	
Electromagnetic compatibility EMI, RFI, EMC, RF	EN 61326-1:2006, EN 61326-2-2:20 ETSI EN 300 328 V1.7.1:2006, ETSI V1.8.1:2008, FCC Part 15 Subpart (FCCID : FCC: T68-FDMMBLE IC: 66	EN 300 489 C Sections 15.207, 15.209, 15.249	
	ANSI/ISA 61010-1 / (82.02.01)	3rd edition	
Safety compliance	CAN/CSA-C22.2 No 61010-1-12	3rd edition	
Salety compliance	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)		
Not compatible with Fluke (CNX test tools		

Fluke v3001 FC Wireless DC Voltage Module

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 $\pm([\% \text{ of Reading }] + [\text{ Number of least significant digits }])$. All ranges are autoranging. Accuracy is specified from the range obtained by autoranging, from 18°C to 28°C.

Function			
mVDC	Range ¹ / Resolution	600.0 mV / 0.1 mV	
	Accuracy	0.09% + 3	
VDC	Range ¹ / Resolution	6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V	
	Accuracy	0.09% + 3	
	Range ¹ / Resolution	1000 V / 1 V	
	Accuracy	0.15% + 2	
General Specifications			
.CD w/ backlight	3 ½ digits, 6000 counts, 4/sec update rate		
Baery type	2 AA Alkaline baeries, NEDA 15A, IEC LR6		
_og rate/interval	Adjustable by PC from 1 sec to 1 hr, default 1 min		
Baery life	400 hours minimum		
Nemory	Record up to 65,000 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	
	Obstructed, concrete wall or steel electrical enclosure	Up to 3.5 m	
Operating temperature	-10°C to +50°C		
orage temperature	-40°C to +60°C		
emperature 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		
ngress Protection (IP) ating	IP42		
Size (H x W x D)	160 x 66 x 38 mm (6.3 x 2.6 x 1.5 ir	1)	
Veight	0.255 kg (9 oz)		



Ordering information



FLK-v3001 FC Kit

Fluke v3001 FC Wireless DC Voltage Kit

Includes:

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3001 DC Voltage Module
- TL175 Test Leads
- TL222 Test Leads
- AC175 Alligator Clips
- AC220 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™ 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.