

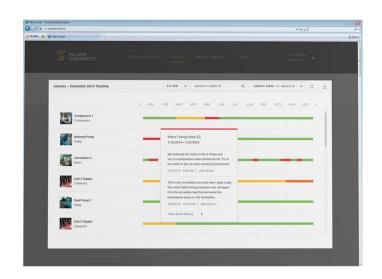
TECHNICAL DATA

Fluke 3000 FC General Maintenance System













Key features

The Fluke 3000 FC General Maintenance System provides measurement of all 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 1000V
- 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 v3000 FC Wireless AC Voltage Module offers:

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

The Fluke v3001 FC Wireless DC Voltage Module lets you:

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

The Fluke a3001 FC Wireless iFlex® AC Current Module allows you to measure around awkward sized conductors or get into tight spaces and makes wire access easier:

- 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

Product overview: Fluke 3000 FC General Maintenance System

The Fluke FC Wireless General Maintenance System lets you work on electrical panels faster, safer, easier

Connect the FC Wireless iFlex® AC Current Module to your test point, and view the results up to 20 meters away on the FC Wireless Digital Multimeter. Or connect the FC Wireless AC Voltage Module and view both voltage and current measurements simultaneously.

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 Fluke Connect remote modules capture 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.

Connect the FC Wireless iFlex® AC Current Module to your test point, and view the results up to 20 meters away on the FC Wireless Digital Multimeter. Or connect the FC Wireless AC Voltage Module and view both voltage and current measurements simultaneously.

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 Fluke Connect remote modules capture 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 3000 FC General Maintenance System

Fluke 3000 FC Series Wireless 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		
600.0 mV / 0.1 mV 6.000 V / 0.001 V Range ¹ / Resolution 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 $\pm (2\% \text{ of reading} + 2\% \text{ full scale})$ typical, for crest factor up to 3.
- 4. Do not exceed 107 V-Hz.

DC Voltage, Continuity, Resistance, Diode Test and Capacitance

Function

Tarretori		
m\/	Range / Resolution	600.0 mV / 0.1 mV
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 Ω , beeper detects opens or shorts of 250 μ s or longer.
Ω	Range / Resolution	$600.0\ \Omega\ /\ 0.1\ \Omega$ $6.000\ k\Omega\ /\ 0.001\ k\Omega$ $60.00\ k\Omega\ /\ 0.01\ k\Omega$ $60.00\ k\Omega\ /\ 0.1\ k\Omega$ $600.0\ k\Omega\ /\ 0.001\ M\Omega$ $50.00\ M\Omega\ /\ 0.01\ M\Omega$
	Accuracy	0.5% + 2 0.5% + 1 1.5% + 3
5: 1	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 ¹ / 1 μF
	Accuracy	1.2% + 2 10% typical

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

AC and DC Current

			n

mA AC (45 Hz to 1 kHz)	Range ¹ / Resolution	60.00 mA / 0.01 mA 400.0 mA ³ / 0.1 mA
(45 112 to 1 ki iz)	Accuracy	1.5% + 3
mA DC ²	Range ¹ / Resolution	60.00 mA / 0.01 mA 400.0 mA ³ / 0.1 mA
	Accuracy	0.5% + 3

- 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.

Free	aue	ncv
	que	ııcy

riequency		
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 ¹ 0.1% + 1		
¹ Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps.		

⁵ Fluke Corporation Fluke 3000 FC General Maintenance System



Input Characte	eristics					
Function	Overload protection	Input impedance (nominal)			Normal mode rejection	
×	1100 Vrms	> 10 MΩ < 100 pF	> 120 dB at D0 Hz	C, 50 Hz or 60	> 60 dB at 50 Hz or 60 Hz	
×	1100 Vrms	> 10 MΩ < 100 pF	> 60 dB, DC to	60 Hz	> 60 dB at 50 Hz or 60 Hz	
×	1100 Vrms	> 10 MΩ < 100 pF	> 120 dB at D0 Hz	C, 50 Hz or 60	> 60 dB at 50 Hz or 60 Hz	
			Full scale volta	ge	Typical short circuit current	
Open circuit tes	t voltage		Το 6 ΜΩ	50 ΜΩ	Typical short 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 protec	ction	Fused, 44/100 A, 1000 V F	AST Fuse			
Overload		600 mA overload for 2 mi	nutes maximum	, 10 minutes res	st minimum	
MIN/MAX Reco	ording Accuracy					
DC functions The specified account of the spe		The specified accuracy of 350 mS in duration.	accuracy of the measurement function ± 12 counts for changes > ration.			
AC functions The specified accurace 900 mS in duration.		The specified accuracy of 900 mS in duration.	the measureme	nt function ±40	counts for changes >	
General Specif	ications					
Maximum voltag terminal and ea		1000 VDC or AC rms				
Ω fuse protectio	n from A inputs	0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only				
		Update rate	4/sec			
D: 1 (1 CD)		Volts, amps, ohms	6000 counts			
Display (LCD)		Frequency	10,000 counts	10,000 counts		
		Capacitance	1,000 counts			
Baery type		Three AA Alkaline baeries	, NEDA 15A IEC I	_R6		
Baery life		250 hours minimum				
RF communicati	ons	2.4 GHZ ISM Band				
		Open air, unobstructed			Up to 20 m	
RF communicati	on range	Obstructed, sheetrock wall			Up to 6.5 m	
		Obstructed, concrete wall, or steel electrical enclosure		cal enclosure	Up to 3.5 m	
.		Operating	ting -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)		
Altitude	Operating	2,000 m	
Ailitude	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 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	
A 55 USD 51 4 2 3 4	45 Hz to 500 Hz	1.0% + 3
Accuracy ^{2 3 4}	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 \Box 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	

⁷ Fluke Corporation Fluke 3000 FC General Maintenance System



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	5% at 50°C	
Albita al -	Operating	2,000 m	
Altitude	Storage	12,000 m	
EMC	EN 61326-1:2006		
	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	
Safety rating	CAT IV 600 V, CAT III 1000 V		
Certifications	CSA, CE, FCC: T68-FBLE IC: 60	627A-FBLE	
Ingress Protection (IP) rating	IP42		
Pollution Degree	2		
Size (H x W x D)	16.5 x 6.35 x 1.4 cm (6.5 x 2.5 x 1.4 in)		
Weight	.22 kg (8 oz)		
Warranty	Three years		
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 ([% 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.

Voltage Specifications					
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				
LCD w/backlight	3 ½ digits, 6000 counts, 4/sec update rate			
Baery type	2 AA Alkaline baeries, NEDA 15A, IEC LR6			
Log rate/interval	Adjustable by PC from 1 sec to 1 hr, default 1 min			
Baery life	400 hours minimum			
Memory	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	-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 (H x W x D)	160 x 66 x 38 mm (6.3 x 2.6 x 1.5 in)			
Weight	0.255 kg (9 oz)			
Warranty	Three years			
Not compatible with Fluke C	CNX test tools			

Fluke a3001 FC Wireless iFlex® AC Current Module

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		
Baery type	2 AA, NEDA 15 A, IEC LR6		
Baery 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		
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 (H x W x D)	16.5 x 6.35 x 1.4 cm (6.5 x 2.5 x 1.4 in)		
Weight	.22 kg (8 oz)		
Warranty	Three years		
vvarrancy	52) 53.12		



Ordering information



FLK-3000 FC GM

Fluke 3000 FC General Maintenance System

Includes:

- Fluke 3000 FC Series Wireless Multimeter
- Fluke v3000 Voltage Module
- Fluke v3001 Voltage Module
- Fluke a3001 FC Wireless iFlex AC Current Module
- TL224 Test Leads
- TL222 Test Leads
- TL175 Test Leads
- AC285 Alligator Clips
- AC220 Alligator Clips
- AC175 Alligator Clips
- iFlex i2500-10 Flexible Current Probe
- 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.