

General specifications

Fluke 3000 FC Series Wireless Multimeter

Detailed specifications (Not compatible with Fluke CNX test tools)

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]).

AC voltage

Range ¹	Resolution	Accuracy ^{2,3,4}	
		45 Hz to 500 Hz	500 Hz to 1 kHz
600.0 mV	0.1 mV	1.0 % + 3	2.0 % + 3
6.000 V	0.001 V		
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 ≤ 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V.

³ For non-sinusoidal 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
V	6.000 V	0.001 V	0.09 % + 2
	60.00 V	0.01 V	
	600.0 V	0.1 V	
	1000 V	1 V	0.15 % + 2
Ω	600 Ω	1 Ω	Meter beeps at $< 25 \Omega$, beeper detects opens or shorts of 250 μs or longer.
Ω	600.0 Ω	0.1 Ω	0.5 % + 2
	6.000 k Ω	0.001 k Ω	0.5 % + 1
	60.00 k Ω	0.01 k Ω	
	600.0 k Ω	0.1 k Ω	
	6000.0 k Ω	0.001 M Ω	
	50.00 M Ω	0.01 M Ω	1.5 % + 3
Diode test	2.000 V	0.001 V	1 % + 2
μF	1000 nF	1 nF	1.2 % + 2
	10.00 μF	0.01 μF	
	100.0 μF	0.1 μF	
	9999 μF ¹	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	1.5 % + 3
	400.0 mA ³	0.1 mA	
mA DC ²	60.00 mA	0.01 mA	0.5 % + 3
	400.0 mA ³	0.1 mA	

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	0.1 % + 1
999.9 Hz	0.1 Hz	
9.999 kHz	0.001 kHz	
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 Mode Rejection Ratio (1 k Ω unbalance)	Normal Mode Rejection
$\overline{\sim}$ V	1100 V rms	> 10 M Ω < 100 pF	> 120 dB at dc, 50 Hz or 60 Hz	> 60 dB at 50 Hz or 60 Hz
\sim V	1100 V rms	> 10 M Ω < 100 pF	> 60 dB, dc to 60 Hz	
\sim mV	1100 V rms	> 10 M Ω < 100 pF	> 120 dB at dc, 50 Hz or 60 Hz	> 60 dB at 50 Hz or 60 Hz
Open circuit test voltage		Full scale voltage		Typical short circuit current
		To 6 M Ω	50 M Ω	
Ω /+/-	1100 V rms	< 2.7 V dc	< 0.7 V dc	< 350 mA
\sim /+/-	1100 V rms	< 2.7 V dc	2.000 V dc	< 1.1 mA

Function	Overload Protection	Overload
mA	Fused, 44/100 A, 1000 V FAST Fuse	600 mA overload for 2 minutes maximum, 10 minutes rest minimum

MIN/MAX recording

Function	Accuracy
DC functions	The specified accuracy of the measurement function \pm 12 counts for changes > 350 ms in duration.
AC functions	The specified accuracy of the measurement function \pm 40 counts for changes > 900 ms in duration.

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Maximum voltage between any terminal and earth ground	1000 V dc 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
Display (LCD)	Update rate: 4/sec Volts, amps, ohms: 6000 counts Frequency: 10,000 counts Capacitance: 1,000 counts
Battery type	Three AA Alkaline batteries, NEDA 15A IEC LR6
Battery life	250 hours minimum
RF communications	2.4 GHZ ISM Band
RF communication range	Open air, unobstructed: Up to 20m Obstructed, sheetrock wall: Up to 6.5m Obstructed, concrete wall, or steel electrical enclosure: Up to 3.5m
Temperature	Operating: -10 °C to 50 °C 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 Storage: 12,000 m
Electromagnetic compatibility EMI, RFI, EMC, RF	EN 61326-1:2013, EN 61326-2-2:2013, 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): 3 rd edition CAN/CSA-C22.2 No 61010-1-12: 3 rd edition UL 61010-1: 3 rd edition IEC/EN 61010-1:2010
Certifications	cCSAus, FCC, CE
Ingress Protection (IP) rating	IP54
Pollution Degree	2
Size (H x W x L)	4.75 cm x 9.3 cm x 20.7 cm (1.87 in x 3.68 in x 8.14 in)
Weight	340 g (12 oz)