FLUKE®

Fluke CNX 3000 Series Test Tools

The Fluke Wireless Team

Technical Data

The new Fluke wireless troubleshooting team lets you see live measurements from multiple modules simultaneously and remotely on a single screen. This customizable tool set, built with the durability, reliability and quality you've come to expect from Fluke tools, will change the way you work.

Wireless multimeter displays readings from up to three wireless modules, plus the meter from up to 20 meters away. Add a laptop and review ten measurements at once.

Fluke CNX 3000 Series

- Digital Multimeter
- AC Voltage Module
- AC True-rms Current Clamp Module
- iFlex True-rms AC Current Clamp Module
- K-Type Temperature Module
- PC Adapter

Productivity

- Save money and time by taking multiple measurements simultaneously
- Isolate intermittent events or record signal fluctuations without even being there using the log function on the modules
- Work with fewer interruptions by recording multiple sessions before downloading. Data is saved to a PC in .csv format (comma separated variable) file format for easy viewing at your convenience
- Capture readings at different intervals, with user-set recording intervals from one second to one hour
- Choose the module(s) that work best for your applications

Convenience

- No more run-around. See up to four measurements (DMM and 3 modules) on one screen, in one place at the same time.
- No more writing data down. Capture up to 65000 sets of min/max/avg readings over single or multiple logging sessions using the recording capability. Each reading and session is time stamped
- Avoid awkward or uncomfortable measurement positions. Set up the measurement once, step back and read it as many times as you want, when you want
- Identify up to 10 placed modules with meter or PC and choose only the ones you need
- View up to 10 live readings at once on a PC to get a complete understanding of the situation
- Easily see backlit displays in dark or dimly lit work environments
- Choose auto or manual ranging
- Use the optional TPak magnetic hanger for even more hands-free working
- Integrated holster protects the meters, while probe holders keep accessories organized

Safety

- Increase safety by taking readings in a separate location than the point of measurement
- Fluke CNX meets Measurement Category 1000 V CAT III and Category IV 600 V safety standards: AC current clamp 600 V CAT III; AC Voltage Module and iFlex Clamp Meters 600 V CAT IV / 1000 CAT III

Specifications

Fluke CNX 3000 Series Wireless Multimeter

Detailed specifications

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 ± ([% of Reading] + [Number of least significant digits]).

AC voltage

Range[1]	Resolution	Accuracy[2,3]	
		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-sinusoidial waveforms, add –(2 % of reading + 2 % full scale) typical, for crest factor up to 3.

DC voltage, continuity, resistance, diode test and capacitance

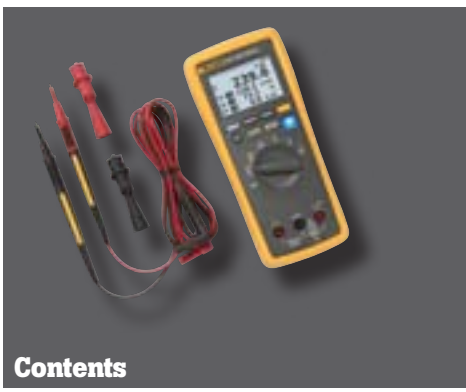
Function	Range	Resolution	Accuracy
mV	600.0 mV	0.1 mV	0.09 % + 2
V	6.000 V	0.001 V	0.09 % + 2
	60.00 V	0.01 V	
	600.0 V	0.1 V	
	1000 V	1 V	0.15 % + 2
Ω	600 Ω	1 Ω	Meter beeps at < 25 Ω, beeper detects opens or shorts of 250 µs or longer.
Ω	600.0 Ω	0.1 Ω	0.5 % + 2
	6.000 kΩ	0.001 kΩ	0.5 % + 1
	60.00 kΩ	0.01 kΩ	
	60.00 kΩ	0.1 kΩ	
	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
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	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 kΩ unbalance)		Normal Mode Rejection
V⎓	1100 V rms	> 10 MΩ < 100 pF	> 120 dB at dc, 50 Hz or 60 Hz		> 60 dB at 50 Hz or 60 Hz
V~	1100 V rms	> 10 MΩ < 100 pF	> 60 dB, dc to 60 Hz		
mV~⎓	1100 V rms	> 10 MΩ < 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 MΩ	50 MΩ	
Ω/⊣⊢	1100 V rms	< 2.7 V dc	< 0.7 V dc	< 0.9 V dc	< 350 mA
))))/⊣⊢	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 ± 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 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 Votls, amps, ohms: 6000 counts Frequency: 10,000 counts Capacitance: 1,000 counts
Battery type	Three AA Alkaline batteries, NEDA 15A IEC LR6
Battery life	300 hours minimum
RF communications	2.4 GHZ ISM Band
RF communication range	20 meters
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 compatibilty 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 : T68-FWCS IC:6627A-FWCS
Safety compliance	US ANSI: ANSI/ISA 61010-1 / (82.02.01): 3rd edition CSA: CAN/CSA-C22.2 No 61010-1-12: 3rd edition CE European: IEC/EN 61010-1:2010
Certifications	CSA, FCC, CE
Ingress Protection (IP) rating	IP54
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)

Fluke CNX 3000 Series AC Voltage Module

Accuracy is specified as ± ([% 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.

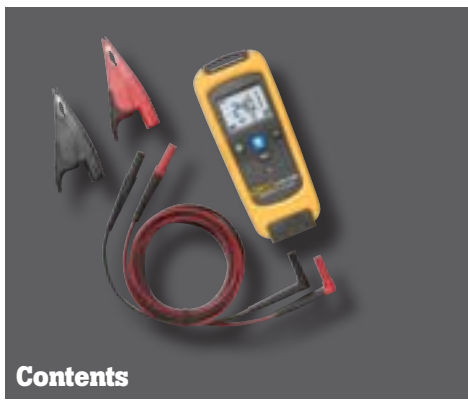
AC voltage

Range[1]	Resolution	Accuracy[2,3]	
		45 Hz to 500 Hz	500 Hz to 1 kHz
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		

[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 –(2 % of reading + 2 % full scale) typical, for crest factor up to 3.

General specifications

LCD w/backlight	3½ digits, 6000 counts, updates 4/sec
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 Hours
Memory	Record up to 65000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	20 meters
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
EMC	EN 61326-1:2006
Safety compliance	EN/IEC 61010-1:2010 to 1000 V Measurement Category (CAT) III 600 V Measurement Category (CAT) IV EN/IEC 61010-2-030:2010 EN/IEC 61010-031:2002+A1:2008
Safety rating	CAT IV 600 V, CAT III 1000 V
Certifications	CSA, FCC T68-FWCS IC:6627A-FWCS
Ingress Protection (IP) rating	IP42
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)



Fluke CNX 3000 Series
True-rms AC Current Clamp Module

General specifications

Range	0.5 A to 400.0 A
Resolution	0.1 A
Accuracy	400.0 A: 2 % ± 5 digits (10 Hz to 100 Hz), 2.5 % ± 5 digits (100 Hz to 500 Hz)
Inrush	Max displayed reading: 999.9A
Crest factor (50 Hz/60 Hz)	3 at 500 A, 2.5 at 600 A, 1.42 at 1000 A, add 2 % for C.F. > 2
LCD w/backlight	3½ digits
Log rate/interval	1 sec minimum/adjustable by PC
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	20 meters
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
EMC	EN 61326–1:2006
Safety compliance	EN/IEC 61010–1–030:2010 to 600 V Measurement Category (CAT) III EN/IEC 61010–2–030:2010 EN/IEC 61010–032:2002
Safety rating	CAT III 600 V
Certifications	CSA, FCC T68–FWCS IC:6627A–FWCS
Ingress Protection (IP) rating	IP30
Jaw opening	34 mm (1.33 in)
Size (HxWxD)	20.3 cm x 7.49 cm x 3.55 cm (8 in x 2.95 in x 1.4 in)
Weight	.22 kg (8 oz)

Fluke CNX 3000 Series
iFlex True-rms AC Current Clamp Module

General specifications

Range	0.5 A to 2500 A AC
Resolution	0.1 A
Accuracy	3 % ± 5 digits
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
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	20 meters
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
EMC	EN 61326-1:2006
Safety compliance	EN/IEC 61010-1:2010 to 1000 V Measurement Category (CAT) III 600 V Measurement Category (CAT) IV EN/IEC 61010-2-030:2010 EN/IEC 610101-2-031:2002 EN/IEC 61010-2-032:2002
Safety rating	CAT IV 600 V, CAT III 1000 V
Certifications	CSA, FCC T68-FWCS IC:6627A-FWCS
Ingress Protection (IP) rating	IP42
Jaw opening	25.4 cm (10 in) coil
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)

Fluke CNX 3000 Series
K-Type Temperature Module

General specifications

Range	K-type: -200 °C to 1372 °C
Resolution	0.1 °C
Accuracy	± [0.5 % + 0.3 °C] counts
Input terminals	K-type mini
LCD w/backlight	3 ½ digits
Log rate/interval	1 sec minimum/adjustable by PC
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	400 hours
Memory	Record up to 65,000 readings
RF communications	2.4 GHZ ISM Band
RF communication range	20 meters
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °C
Temperature coefficient	0.01 % of reading +0.03 °C per °C
Temperature scale	ITS-90
Operating humidity	90 % at 35 °C, 75 % at 40 °C, 45 % at 50 °C
EMC	EN 61326-1:2006
Safety compliance	CAT I per IEC/EN 61010-1:2010, EN/IEC 61010-2-030:2010
Certifications	CSA, FCC T68-FWCS IC:6627A-FWCS
Ingress Protection (IP) rating	IP30
Size (HxWxD)	16.5 cm x 6.35 cm x 1.4 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)

Ordering information

Models	Description
Kits	
FLK-CNX Industrial Kit	Fluke CNX 3000 Industrial System includes Multimeter, 3 iFlex Clamp Modules, 1 Voltage Module and accessories
FLK-CNX 3000 General Maintenance Kit	Fluke CNX 3000 General Maintenance System includes Multimeter, iFlex Clamp Module, Voltage Module and accessories
FLK-CNX 3000 HVAC Kit	Fluke CNX 3000 HVAC Kit System includes Multimeter, AC Current Clamp Module, Temperature Module and accessories
FLK-CNX T3000 Kit	Fluke CNX T3000 Kit includes Multimeter, Temperature Module and accessories
FLK-CNX I3000 Kit	Fluke CNX I3000 Kit includes Multimeter, iFlex Clamp Module and accessories
FLK-CNX A3000 Kit	Fluke CNX A3000 Kit includes Multimeter, AC Current Clamp Module and accessories
FLK-CNX V3000 Kit	Fluke CNX V3000 Kit includes Multimeter, Voltage Module and accessories
Modules	
FLK-CNX 3000 Series Digital Multimeter	FLK-CNX 3000 Digital Multimeter and accessories
FLK-CNX 3000 Series iFlex AC Current Clamp Module	FLK-CNX 3000 iFlex Module and iFlex Clamp
FLK-CNX 3000 Series AC Current Clamp Module	FLK-CNX 3000 AC Current Clamp Module
FLK-CNX 3000 Series AC Voltage Module	FLK-CNX 3000 AC Voltage Module and accessories
FLK-CNX 3000 Series K-Type Temperature Module	FLK-CNX 3000 K-Type Temperature Module and accessory

Fluke. *The Most Trusted Tools in the World.*

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