TECHNICAL DATA

Fluke CNX™ i3000 iFlex® AC Current Measurement Kit

Key features

The Fluke CNX i3000 iFlex® AC Current Measurement Kit provides measurement of all common electrical parameters.

The CNX 3000 Wireless Multimeter Offers:

- True RMS AC and DC voltage measurements to 1000V
- True RMS 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 CNX i3000 iFlex® AC Wireless Current Module Offers:

- True RMS AC current measurements to 2500 A
- 3% accuracy
- Memory recording up to 65,000 readings
- iFlex® Current Probe allows you to get into tight, awkward spaces
- Backlit LCD Display
- CAT III 1000, CAT IV 600 V; IP42

Using the optional PC adapter, the CNX wireless troubleshooting system can track up to 10 measurement modules

simultaneously, with results sent to a PC for further analysis.

Product overview: Fluke CNX™ i3000 iFlex® AC Current Measurement Kit

The Fluke CNX i3000 iFlex® AC Current Measurement Kit is part of the Fluke team of wireless troubleshooting tools.

Connect the CNX i3000 iFlex® AC Wireless Current Module to your test point, and view the results up to 20 meters away on the CNX Wireless Multimeter. You'll save time, with less run-around collecting multiple measurements. Use multiple modules for measurements on three-phase systems. Or use as a stand-alone measurement tool or combine with other CNX 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 CNX i3000 current module captures up to 65,000 sets of time stamped min/max/avg readings, using the optional PC adapter. CNX 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 CNX™ i3000 iFlex® AC Current Measurement Kit

CNX 3000 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 ± ([% of Reading] + [Number of least significant digits]).

Detailed Specifications			
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		
Notes: [1] All AC voltage ranges are specified from 1 % of range to 100 % of range. [2] Crest factor of 3 at full scale p to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V. [3] For non-sinusoidal 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

Notes:
[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	

Notes:
[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	

Notes:
[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 V RMS	> 10 MΩ < 100 pF	> 120 dB at DC, 50 Hz or 60 Hz	> 60 dB at 50 Hz or 60 Hz
✖	1100 V RMS	> 10 MΩ < 100 pF	> 60 dB, DC to 60 Hz	
✖	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**	**Typical Short Circuit Current**
✖	1100 V RMS	< 2.7 V DC	**To 6 MΩ:** < 0.7 V DC **50 MΩ:** < 0.9 V DC	< 350 mA
✖	1100 V RMS	< 2.7 V DC	**To 6 MΩ:** 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 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	300 hours minimum
Temperature	Operating: -10 °C to 50 °C Storage: -40 °C to 60 °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

Temperature coefficient	0.1 X (specified accuracy) / °C (<18 °C or >28 °C)
Wireless frequency	2.4 GHz ISM Band 20 meter range
Size (HxWxL)	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)
Safety standards	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
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 : T68-FWCS IC:6627A-FWCS
Ingress Protection (IP) rating	IP54
Notes: • 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.	

Fluke CNX i3000 iFlex® AC Wireless Current Module

Specifications	
Range	2500 A AC
Resolution	0.1 A to 999.9, 1A from 1000 to 2500
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
Display	3-1/2 digits, LCD w/backlight
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	20 Meters
Operating temperature	-10 °C to +50 °C
Storage temperature	-40 °C to +60 °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
Pollution degree	2
Temperature coefficient	Add 0.1 X (specified accuracy) / °C per °C (<18 °C or >28 °C)
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 3.56 cm (6.5 in x 2.5 in x 1.4 in)
Weight	.22 kg (8 oz)
Jaw opening	25.4 cm (10 in) coil

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