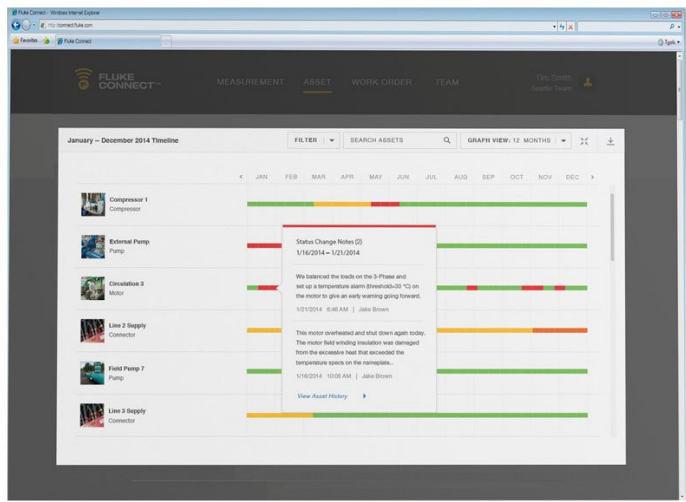
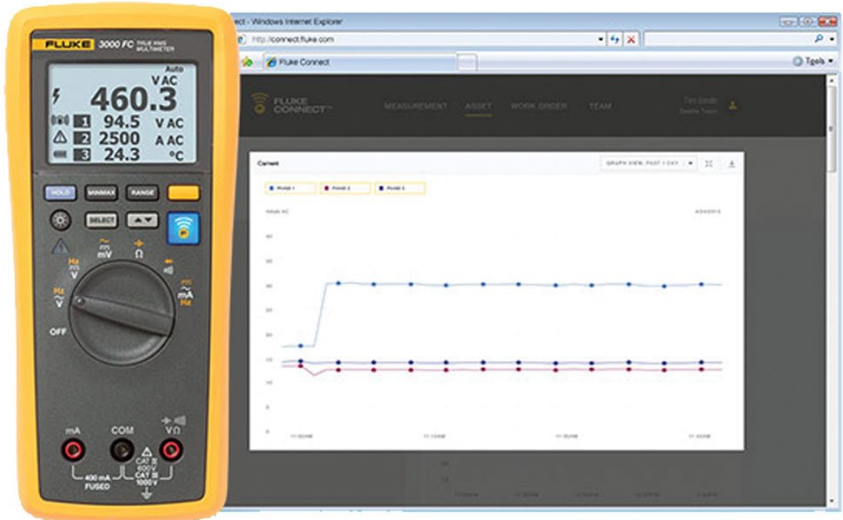




TECHNICAL DATA

# Fluke a3001 FC Wireless iFlex® AC Current Clamp Kit







## Key features

- 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 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 a3001 FC Wireless iFlex® AC Current Clamp Kit

**Fluke a3001 FC Wireless iFlex® AC Current Clamp Kit is part of the Fluke Connect® team of wireless test tools**

Connect the a3001 FC Wireless AC Current Module and flexible current probe 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 AC Current 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 a3001 FC Wireless iFlex® AC Current Clamp Kit

### 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 ]).

AC Voltage		
Range <sup>1</sup> / resolution		600.0 mV / 0.1 mV 6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V
Accuracy <sup>2,3,4</sup>	<b>45 Hz to 500 Hz</b>	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 $\sqrt{3}$ 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		
mV	<b>Range / resolution</b>	600.0 mV / 0.1 mV
	Accuracy	0.09% + 2
V	<b>Range / resolution</b>	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
)))	<b>Range / resolution</b>	600 $\Omega$ / 1 $\Omega$
	Accuracy	Meter beeps at < 25 $\Omega$ , beeper detects opens or shorts of 250 $\mu$ s or longer.

Ω	<b>Range / resolution</b>	600.0 Ω / 0.1 Ω 6.000 kΩ / 0.001 kΩ 60.00 kΩ / 0.01 kΩ 60.00 kΩ / 0.1 kΩ 600.0 kΩ / 0.001 MΩ 50.00 MΩ / 0.01 MΩ
	Accuracy	0.5% + 2 0.5% + 1 1.5% + 3
Diode test	<b>Range / resolution</b>	2.000 V / 0.001 V
	Accuracy	1% + 2
μF	<b>Range / resolution</b>	1000 nF / 1 nF 10.00 μF / 0.01 μF 100.0 μF / 0.1 μF 9999 μF <sup>1</sup> / 1 μF
	Accuracy	1.2% + 2 10% typical

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

#### AC and DC Current

mA AC (45 Hz to 1 kHz)	<b>Range<sup>1</sup> / resolution</b>	60.00 mA / 0.01 mA 400.0 mA <sup>3</sup> / 0.1 mA
	Accuracy	1.5% + 3
mA DC <sup>2</sup>	<b>Range<sup>1</sup> / resolution</b>	60.00 mA / 0.01 mA 400.0 mA <sup>3</sup> / 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.

#### Frequency

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 <sup>1</sup>	0.1% + 1

1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps.

#### Input Characteristics

	<b>Overload protection</b>	1100 Vrms
	Input impedance (nominal)	> 10 MΩ < 100 pF
	Common mode rejection ratio (1 kΩ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz

✘	<b>Overload protection</b>	1100 Vrms
	Input impedance (nominal)	> 10 M $\Omega$ < 100 pF
	Common mode rejection ratio (1 k $\Omega$ unbalance)	> 60 dB, DC to 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
✘	<b>Overload protection</b>	1100 Vrms
	Input impedance (nominal)	> 10 M $\Omega$ < 100 pF
	Common mode rejection ratio (1 k $\Omega$ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
<b>Open Circuit Test Voltage</b>		
✘	<b>Overload protection</b>	1100 Vrms
	Input impedance (nominal)	< 2.7 VDC
	Full scale voltage to 6 M $\Omega$ Full scale voltage 50 M $\Omega$	< 0.7 VDC < 0.9 VDC
	Typical short circuit current	< 350 mA
✘	<b>Overload protection</b>	1100 Vrms
	Input impedance (nominal)	< 2.7 VDC
	Full scale voltage to 6 M $\Omega$ Full scale voltage 50 M $\Omega$	2.000 VDC
	Typical short circuit current	< 1.1 mA
<b>mA Function</b>		
Overload protection	Fused, 44/100 A, 1000 V FAST Fuse	
Overload	600 mA overload for 2 minutes maximum, 10 minutes rest minimum	
<b>MIN/MAX Recording Accuracy</b>		
DC functions	$\pm$ 12 counts for changes > 350 mS in duration.	
AC functions	$\pm$ 40 counts for changes > 900 mS in duration.	
<b>General Specifications</b>		
Maximum voltage between any terminal and earth ground	1000 VDC or AC rms	
$\Omega$ fuse protection from A inputs	0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only	
Display (LCD)	<b>Update rate</b>	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	250 hours minimum	
RF communications	2.4 GHZ ISM Band	
RF communication range	<b>Open air, unobstructed</b>	Up to 20 m
	Obstructed, sheetrock wall	Up to 6.5 m
Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5 m	
Temperature	<b>Operating</b>	-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	<b>Operating</b>	2,000 m
	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 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	<b>Open air, unobstructed</b>	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	<b>Operating</b>	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	
Not compatible with Fluke CNX test tools		



## Ordering information



### **FLK-a3001 FC KIT**

Fluke a3001 FC Wireless iFlex® AC Current Clamp Kit

Includes:

- Fluke 3000 FC Series Wireless Multimeter
- Fluke a3001 FC Wireless iFlex AC Current Module
- TL175 Test Leads
- AC175 Alligator Clips
- iFlex i2500-10 Flexible Current Probe



**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](http://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.**