

TECHNICAL DATA

Fluke i3000s Flex AC Current Clamp



The i3000s Flex is an ac current clamp utilizing the Rogowski principle. It can be used to measure currents up to 3000 A when used in conjunction with oscilloscopes, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard to reach areas.

SAFETY RATING
CAT III 600 V

**POWERFUL ADDITION TO YOUR
PORTABLE OSCILLOSCOPE.**

- Measure up to 3000 A ac rms
- Flexible probe works in cramped, hard-to-reach spaces
- Switch-selectable 30, 300 and 3000 A ranges

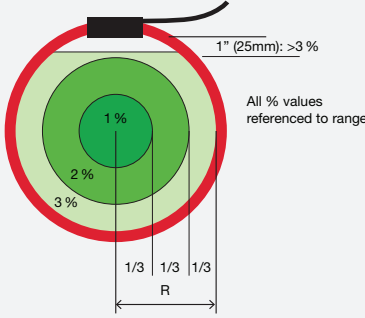


i3000s Flex connected to a Fluke 434 Power Quality Analyzer (The i430 FLEX-4PK can be used with the Fluke 434 and 435, without the need for the control box).



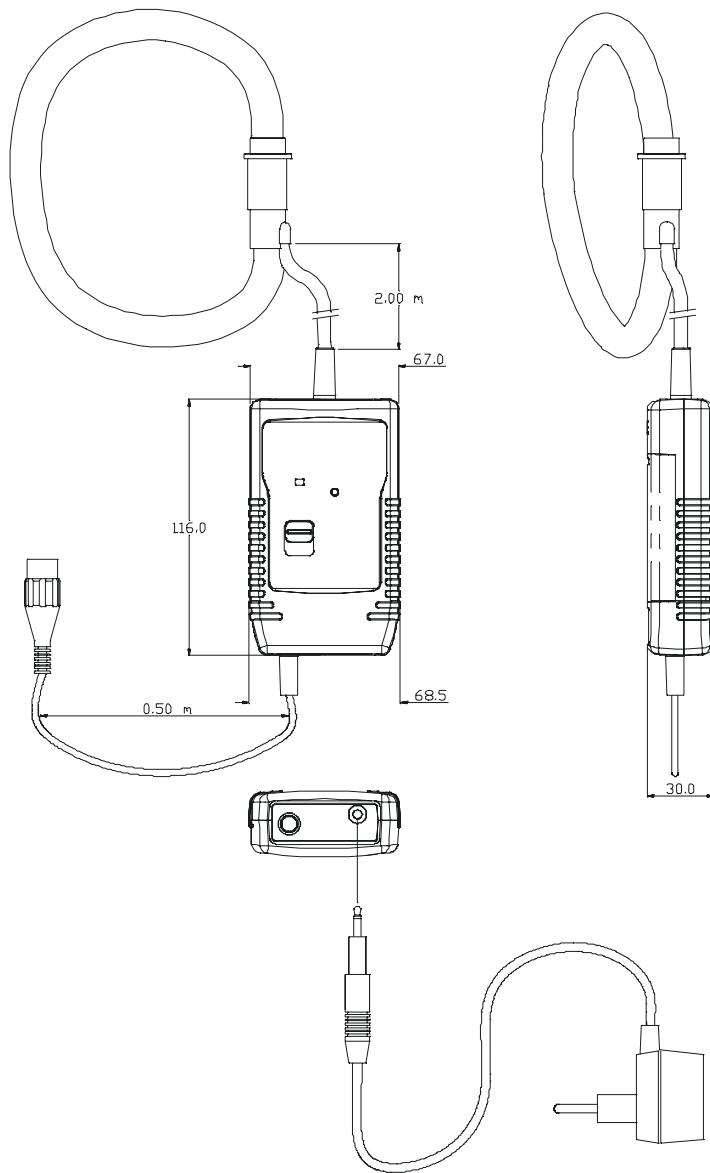
i3000s Flex connected to a Fluke 199C ScopeMeter.

Specifications

Key features	i3000s (SPC 045X060)
Electrical specifications	
Current ranges	30 A/300 A/3000 A ac rms
Output sensitivity (ac-coupled)	100 mV/10 mV/1 mV per A
Load impedance	100 kOhm minimum
Accuracy (at +25 °C)	± 1 % of range (45 Hz to 65 Hz)
Linearity (10 % to 100 % of range)	± 0.2 % of reading
Noise	8 mV ac rms (60 A), 2 mV ac rms (300 A/3000 A)
Frequency range	10 Hz to 50 kHz (-3 dB)
Phase error	< ± 1° (45 Hz to 65 Hz), ± 10° (at 20 kHz)
Position sensitivity (with cable > 25 mm from the coupling)	 <p>Position sensitivity: From 1 % up to 3 % of range with cable, depending on distance from the center (see figure left). Measurements closer than 25 mm from the coupling are typically greater than 3 % of range.</p> <p>External wire influence: 1 % (-40 db) of external current >200 mm from head.</p>
External field (with cable > 200 mm from the head)	± 1 % of range
Power supply	2 x AA MN 1500 LR6 alkaline, 400 hours, low battery indicator
Temperature coefficient	± 0.08 % of reading per °C
Working voltage (see safety standards section)	600 V ac rms or dc
General specifications	
Head cable length (double insulated)	610 mm (24 in) i3000s Flex-24 915 mm (36 in) i3000s Flex-36
Head cable diameter	14.3 mm (0.563 in)
Head bend radius	38.1 mm (1.5 in)
Cable length (head to electronics)	2 meters
Output connection	0.5 m cable terminated with safety BNC connector. Supplied with BNC to Banana safety plug adapter.
Operating temperature range	
Head	-20 °C to +90 °C (-4 °F to 190 °F)
Electronics	-20 °C to +85 °C (-4 °F to 185 °F)
Storage temperature range	
Head	-40 °C to +105 °C (-40 °F to 221 °F)
Electronics	-20 °C to +85 °C (-4 °F to 185 °F)
Operating humidity	15 % to 85 % (non-condensing)
Weight	
Head	180 g (0.397 lb)
Electronics	190 g (0.419 lb)
Safety standards	BS EN 61010-1: 2001 BS EN 61010-2-032: 2002 BS EN 61010-031: 2002 600 V rms, Category III, Pollution Degree 2*
EMC standards	BS EN 61326: 1998 +A1, A2, and A3

* Use of the probe on uninsulated conductors is limited to 600 V ac rms or dc and frequencies below 1 kHz.

Dimensions (in mm)



Ordering information

i3000s FLEX-24 (SPC 045X060) AC Current Probe, 24-inch circumference

i3000s FLEX-36 AC Current Probe, 36-inch circumference

i3000 FLEX-4PK AC Current Probe, 4-pack of i3000s FLEX-24

Optional accessories

FLEX PSU-EU Power supply unit for Europe

FLEX PSU-UK Power supply unit for the United Kingdom

Note: Power supply units only available for Europe and the United Kingdom.