

TECHNICAL DATA

# Fluke i6000s Flex AC Current Probe



## High amperage, flexible probe for portable oscilloscopes

The i6000s Flex is an ac current probe utilizing the Rogowski principle. It can be used to measure currents up to 6000 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.

The i6000s Flex is available in 2 models, i6000s Flex-24 with a 24 inch measuring head and i6000s Flex-36 with a 36 inch measuring head to allow use on larger diameter conductors.

### SAFETY RATING CAT III 600 V

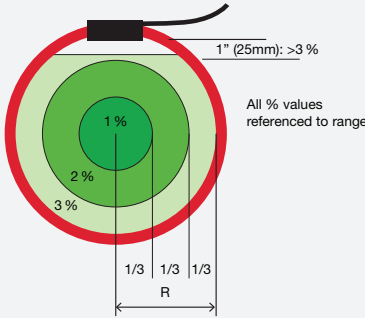
### POWERFUL ADDITION TO YOUR PORTABLE OSCILLOSCOPE .

- Measure up to 6000 A ac rms
- Flexible probe works in cramped, hard-to-reach spaces
- Switch-selectable 60, 600 and 6000 A ranges
- Available in 24 and 36 inch versions



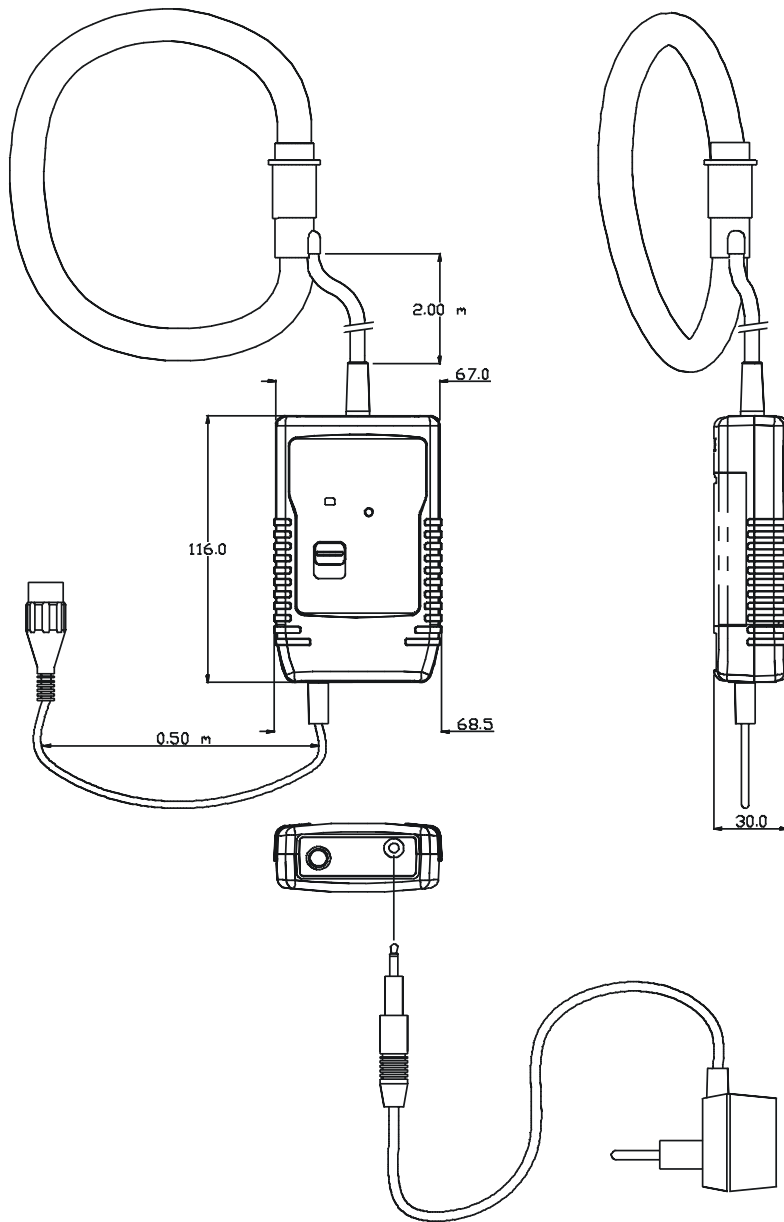
i6000s connected to a Fluke 199C ScopeMeter.

# Specifications

Key features	i6000
Electrical specifications	
Current ranges	60 A/600 A/6000 A ac rms
Output sensitivity (ac-coupled)	50 mV/5 mV/0.5 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 (600 A/6000 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 &gt;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 or dedicated ext power supply (power supply only available in Europe and UK)
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) RR6030, 915 mm (36 in) RR6030/36
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 and supplied with 4 mm safety plug adapter
Operating temperature range	
Head	-20 °C to +90 °C (-4 °F to 194 °F)
Electronics	-20 °C to +90 °C (-4 °F to 194 °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**

i6000s Flex AC Current Probe 24 in  
 i6000s Flex AC Current Probe 36 in

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