

# 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.

- Three ranges: 30 A, 300 A & 3000 A, 1, 10 or 100 mV/A output
- Ideal for current measurement on thick and hard to reach conductors without breaking the circuit
- Maximum conductor diameter 178 mm (7 in.)
- CAT III 600V safety rating

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 k $\Omega$ minimum
Accuracy	at +25 °C $\pm$ 1 % of range (45 Hz to 65 Hz)
Linearity	10 % to 100 % of range $\pm$ 0.2 % of reading
Noise	8 mV ac rms (30 A) 2 mV ac rms (300 A, 3000 A)
Frequency range	10 Hz to 50 kHz (-3 dB)
Phase error	< $\pm$ 1 ° (45 Hz to 65 Hz) $\pm$ 10 ° (at 20 kHz)
Position sensitivity	with cable > 25 mm from the coupling $\pm$ 2 % of range
External field	with cable > 200 mm from the head $\pm$ 1 % of range
Power supply	2 x AA/MN 1500/LR6 Alkaline, , 400 hours, low battery indicator or dedicated external power supply
Temperature Coefficient	$\pm$ 0.08% of reading per °C
Working voltage	see Safety standards section 600 V AC rms or DC

General Specifications	
Head Circumference	610 mm (24 in)
Head cable diameter	14.3 mm (0.56 in)
Head bend radius	38.1 mm (1.5 in)
Cable length (head to electronics)	2 m (6.56 ft)
Output connection	0.5 m cable terminated with safety BNC connector. Supplied with 4mm safety plug adapter
Operating temperature range	-20 °C to +90 °C (-4 °F to 190 °F) (head) -20 °C to +85 °C (-4 °F to 185 °F) (electronics)
Storage temperature range	-40 °C to +105 °C (-40 °F to 221 °F) (head) -20 °C to +85 °C (-4 °F to 185 °F) (electronics)
Operating humidity	15 % to 85 % (non-condensing)
Weight	180 g (0.396 lb) (head) 190 g (0.419 lb) (electronics)
Safety standards	BS EN 61010-1: 2001 BS EN 61010-2-032: 2002 BS EN 61010-031: 2002 600 Vrms, Category III, Pollution Degree 2 Use of the probe on uninsulated conductors is limited to 600 V AC rms or dc and frequencies below 1 kHz.
EMC standards	EN 61326: 1998 +A1, A2, & A3
Maximum conductor size	610 mm or 914 mm, depending on model

