

Fluke i310s Current Probe

The i310 current probe offered by Fluke can be used to measure both DC and AC current for accurate measurements.



The i310s current probe is based on Hall Effect technology for use in measurement of both DC and AC current. The i310s may be used in conjunction with oscilloscopes and other suitable recording instruments for accurate non-intrusive current measurement.

Electrical Characteristics		
Current ranges	30 A and 300 A AC rms or ± 45 A and 450 A DC	
Measuring ranges	± 45 A and 450 A DC	
AC rms or DC	± 45 A and 450 A	
Inrush current	600A AC rms MAX	
Output sensitivity	10 mV/A (30 A)	
	1 mV/A (300 A)	
Accuracy (at +23°C)	(30 A range)	$\pm 1\%$ of reading ± 50 mA
	(300 A range)	$\pm 1\%$ of reading ± 300 mA
Bandwidth to meet accuracy specification	1 kHz	
Phase shift below 1 kHz	< 2 degrees	
Resolution	± 50 mA (30 A)	
	± 100 mA (300 A)	
Load impedance	> 10 k Ohms and ≤ 100 pF	
Conductor position sensitivity	$\pm 1.5\%$ relative to centre reading	

Frequency range (small signal)	DC to 20 kHz (-3 dB)
Phase shift below 1 kHz	< 2°
Temperature coefficient	±0.1% of reading / °C
Power supply	9 V Alkaline, MN1604/PP3
Battery life	30 Hours, low battery indicator
Working voltage (see Safety Standards section)	300 V AC rms or DC
General Characteristics	
Maximum conductor size	19 mm diameter
Output connection	Safety BNC connector Supplied with safety 4mm adaptor
Output zero	Manual adjust via thumbwheel
Cable length	2 metres
Operating temperature range	-10 to +50°C
Storage temperature range (with battery removed)	-20 to +85°C
Operating humidity	15% to 85% (non-condensing)
Weight	250 g
Safety Standards	
BS EN 61010-1	2001
BS EN 61010-2-032	2002
BS EN 61010-031	2002
300 Vrms, Category III, Pollution Degree 2	
EMC standards	BS EN 612361998 +A1, A2, and A3

Use of the probe on un-insulated conductors is limited to 300 V AC rms or DC and frequencies below 1 kHz