

Fluke i310s Current Probe

Technical Data



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 specifications

Current ranges: 30 A and 300 A ac rms or ± 45 A and 450 A dc

Inrush current: 600 A ac rms max.

Output sensitivity: 10 mV/A (30 A), 1 mV/A (300 A)

Accuracy (at +25 °C):

30 A range: ± 1 % of reading ± 50 mA

300 A range): ± 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 kOhms and ≤ 100 pF

Conductor position sensitivity: ± 1.5 % relative to centre reading

Frequency range (small signal): DC to 20 kHz (-3 dB)

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 av rms or dc

General specifications

Maximum conductor size: 19 mm (0.75 in) diameter

Output connection: Safety BNC connector, supplied with safety 4 mm (0.157 in) adapter

Output zero: Manual adjust via thumbwheel

Cable length: 2 m (6.56 ft)

Operating temperature range: -10 °C to +50 °C (14 °F to 122 °F)

Storage temperature range (with battery removed): -20 °C to +85 °C (-4 °F to 185 °F)

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 V rms, Category III, Pollution Degree 2

Use of the probe on uninsulated conductors is limited to 300 V ac rms or dc and frequencies below 1 kHz.

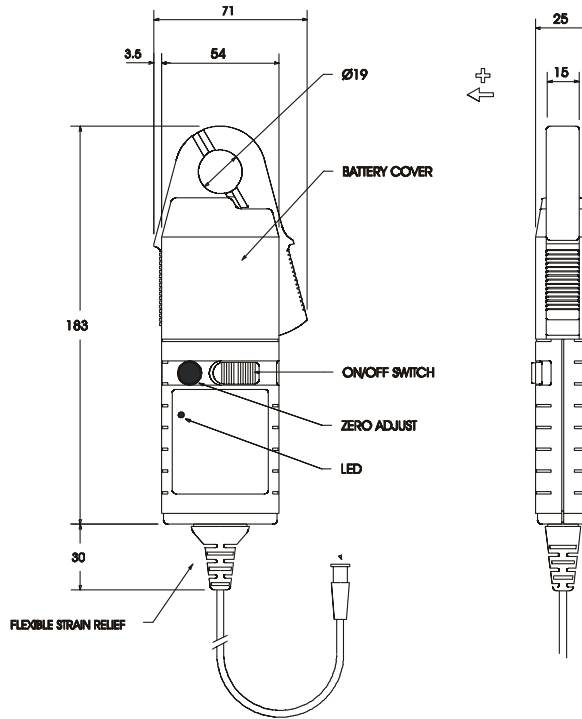
EMC standards

BS EN 61236:1998 +A1, A2, & A3

Ordering information

i310s Current Probe

Dimensions (in mm)



i310s connected to a Fluke 199C ScopeMeter.

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