Technical Data

**Fluke i310s Current Probe**

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

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i310s connected to a Fluke 199C ScopeMeter.