

# Fluke i310s Current Probe



## Key features

- Current Ranges: 30 A and 300 A AC<sub>RMS</sub> or ±45 A and 450 A DC
- Measuring Ranges: ±45 A and 450 A dc
- Output Sensitivity: 10 mV/A (40 A) to 1 mV/A (400 A)
- Resolution: ±50 mA (40 A) to ±100 mA (400 A)
- Load Impedance: > 10 k Ohms and £ 100 pF
- Frequency Range (small signal): DC to 20 kHz (- 3 dB)
- Phase Shift below 1 kHz, < 2 degrees
- Temperature Coefficient: ±0.1% of reading / °C
- Power Supply: 9 V Alkaline

## Product overview: 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.

## Specifications: Fluke i310s Current Probe

### 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)                              | <b>(30 A range)</b>              | ±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 k Ohms and ≤100 pF          |                        |
| Conductor position sensitivity                   | ±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               |                        |
| <b>General Characteristics</b>                   |                                  |                        |
| 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                            |                        |

|                   |  |  |
|-------------------|--|--|
| <b>Safety</b>     | <b>IEC 61010-1, Pollution Degree 2</b>   |  |
|                   | IEC 61010-2-032: CAT III 300V  |  |
|                   | Use of the probe on uninsulated conductors is limited to 300 V ac rms or dc and frequencies below 1 kHz. |  |
| EMC Compatibility | IEC 61326-1: Portable Electromagnetic Environment  |  |

## Ordering information



### **Fluke-i310s**

Current Probe

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**Fluke.** *Keeping your world up and running.®*

**Fluke (UK) Ltd.**  
52 Hurricane Way  
Norwich, Norfolk  
NR6 6JB  
United Kingdom  
Tel.: +44 (0)20 7942 0708  
E-mail: [cs.uk@fluke.com](mailto:cs.uk@fluke.com)  
[www.fluke.com](http://www.fluke.com)

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