

**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

- Current Ranges: 30 A and 300 A AC<sub>RMS</sub> or ±45 A and 450 A DC
- 450 A ±Measuring Ranges: ±45 A and
- 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

<b>Electrical Characteristics</b>	
<b>Current Ranges</b>	30 A and 300 A AC <sub>RMS</sub> or ±45 A and 450 A DC
<b>AC<sub>RMS</sub> or DC</b>	±45 A and 450 A
<b>Inrush Current</b>	600A AC <sub>RMS</sub> MAX
<b>Output Sensitivity</b>	10 mV/A (30 A) 1 mV/A (300 A)
<b>Accuracy (at +25°C)</b>	<b>(30A range)</b> ±1% of reading ±50 mA <b>(300A range)</b> ±1% of reading ±300 mA
<b>Bandwidth to meet accuracy specification</b>	1 kHz
<b>Phase Shift below 1 kHz</b>	< 2 degrees
<b>Resolution</b>	±50 mA (30 A) ±100 mA (300 A)
<b>Load Impedance</b>	> 10 k Ohms and ≤100 pF
<b>Conductor Position Sensitivity</b>	±1.5% relative to centre reading
<b>Frequency Range</b>	<b>(small signal)</b> DC to 20 kHz (- 3 dB)
<b>Temperature Coefficient</b>	±0.1% of reading / °C
<b>Power Supply</b>	9 V Alkaline, MN1604/PP3
<b>Battery Life</b>	30 Hours, low battery indicator
<b>Working Voltage (see Safety Standards section)</b>	300 V AC <sub>RMS</sub> or DC

**General Characteristics**

<b>Maximum Conductor Size</b>	19 mm diameter
<b>Output Connection</b>	Safety BNC connector Supplied with safety 4mm adaptor
<b>Output Zero</b>	Manual adjust via thumbwheel
<b>Cable Length</b>	2 metres
<b>Operating Temperature Range</b>	-10 to +50 °C
<b>Storage Temperature Range (with battery removed)</b>	-20 to +85 °C
<b>Operating Humidity</b>	15% to 85% (non-condensing)
<b>Weight</b>	250 g

**Safety Standards**

<b>BS EN 61010-1</b>	2001
<b>BS EN 61010-2-032</b>	2002
<b>BS EN 61010-031</b>	2002
<b>300 V<sub>RMS</sub>, Category III, Pollution Degree 2</b>	
<b>Note</b>	Use of the probe on un-insulated conductors is limited to 300 V AC RMS or DC and frequencies below 1 kHz.
<b>EMC Standards</b>	<b>BS EN 61236</b> 1998 +A1, A2, & A3