

TECHNICAL DATA

# 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 $\pm 45$ A and 450 A DC	
Measuring ranges	$\pm 45$ A and 450 A DC	
AC rms or DC	$\pm 45$ 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>	$\pm 1\%$ of reading $\pm 50$ mA
	(300 A range)	$\pm 1\%$ of reading $\pm 300$ mA
Bandwidth to meet accuracy specification	1 kHz	
Phase shift below 1 kHz	< 2 degrees	
Resolution	$\pm 50$ mA (30 A)	
	$\pm 100$ mA (300 A)	
Load impedance	> 10 k Ohms and $\leq 100$ 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	$\pm 0.1\%$ 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	



<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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