



Current Probe Model S 500A/0.5A

The S 500A / 0.5A current probe has been designed for use with multimeters, recorders, power analysers, safety testers etc. for accurate non intrusive measurement of AC current. Using the latest transformer technology, the S 500A / 0.5A can measure currents from 10 A to 600 A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Range	: 500 A _{RMS}
Continuous Measuring Range	: 10A to 600 A _{RMS}
Output Sensitivity	: 1 mA / A
Load Impedance (ohm).....	: ≤ 1 Ohm
Conductor Position Sensitivity.....	: 0.5% @ 50Hz
Error due to adjacent conductor	: ≤ 2mA / A @ 50 Hz
Frequency Range	: 30 Hz to 10 kHz
Temperature coefficient.....	: 0.01% / °C
Working Voltage (see Safety Standards section)	: 600 V AC _{RMS} or DC

Accuracy

Primary Current	10 to 50A	50 to 100A	100 to 500A
Accuracy (of rdg)	2.5%	1%	1%
Phase Error	Not specified	0.5°	0.5°

General Characteristics

Maximum Conductor Size	: 50 mm diameter
Output Connection	: 4mm safety sockets
Operating Temperature Range	: -10 to +55 °C
Storage Temperature Range	: -40 to +70 °C
Operating Humidity	: 15% to 85% (non condensing)
Weight.....	: 620 g

Reference conditions: Temperature : +18°C to 26 °C, humidity: 20 to 75% RH, sinusoidal current: 48 to 65Hz, distortion factor: < 1%, DC current: none, DC magnetic field: 40 A/m earth's magnetic field, alternating magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance: $\leq 1\Omega$ for current output.

Safety Standards

IEC61010-1: 2010
IEC61010-2-032: 2012
IEC61010-2-031: 2008

600 V_{RMS}, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC_{RMS} or DC and frequencies below 1 kHz.

EMC Standards

EN 61326 :1998

Dimensions

