



Current probe P32 500-1000-1500A / 5A

The P32 500A-1000-1500A / 5A current probe has been designed for use with multimeters, recorders, safety testers etc. for accurate non intrusive measurement of AC current. Using the latest transformer technology, the P32 500-1000-1500A / 5A probe can measure currents from 1A to 1600A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Ranges I_N	: 500 / 1000 / 1500 A _{RMS}
Measuring Range.....	: 1 A to 1600 A _{RMS}
Output Sensitivity	: 10 mA / A (500 A)
.....	: 5 mA / A (1000 A)
.....	: 3.33 mA / A (1500 A)
Load Impedance	: ≤ 0.1 Ohm (500 A)
.....	: ≤ 0.2 Ohm (1000 A)
.....	: ≤ 0.4 Ohm (1500 A)
Conductor Position Sensitivity.....	: 1.5% @ 50Hz
Error due to adjacent conductor	: ≤ 6mA / A @ 50 Hz
Phase Shift at 2 kHz @ 10A	: 3°
Frequency Range	: 30 Hz to 10 kHz (-3 dB)
Temperature Coefficient	: 0.01% / °C
Working Voltage (see Safety Standards section)	: 600 V AC _{RMS} or DC

Accuracy

500A

Primary Current	1 to 10A	10 to 50A	50 to 500A
Accuracy (of rdg)	2.5% +5 mA	2%	1%
Phase Error (typ)	Not specified	2.5°	1°

1000A

Primary Current	10 to 50A	50 to 100A	100 to 1000A
Accuracy (of rdg)	1.5%	1%	0.75%
Phase Error (typ)	1°	1°	0.75°

1500A

Primary Current	50 to 100A	100 to 200A	200 to 1600A
Accuracy (of rdg)	1%	0.75%	0.5%
Phase Error (typ)	1°	0.75°	0.5°

General Characteristics

Maximum Conductor Size	: 82 mm diameter
Output Connection	: 4 mm socket
Operating Temperature Range	: -10 to +55 °C
Storage Temperature Range	: -40 to +70°C
Operating Humidity	: ≤ 85%
Weight.....	: 1900 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

