



Current Probe SM.UB 1A / 1V

The SM.UB 1A / 1V 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 SM.UB 1A / 1V can measure currents from 1mA to 1.2A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Range	: 1 A _{RMS}
Continuous Measuring Range	: 1 mA to 1.2 A
Output Sensitivity	: 1V / A
Load Impedance (ohm).....	: ≥ 10 kOhm
Conductor Position Sensitivity.....	: 0.5% @ 50Hz
Error due to adjacent conductor	: ≤ 1mA / 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	1mA to 100 mA	100mA to 500mA	500mA to 1.2A
Accuracy (of rdg)	3% ± 0.5mV	2% ± 1mV	1% ± 1mV
Phase shift (typ)	Not specified	Not specified	<10°

General Characteristics

Maximum Conductor Size	: 54 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.....	: 650 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: $\geq 1\text{M}\Omega$, <100pF for voltage 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

