



Current probe M3.UB5 1A/1V

The M3.UB5 1A/1V 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 M3.UB5 1A/1V can measure currents from 10mA to 5A over a frequency range of 40Hz to 10kHz.

The very small head facilitates the insertion of the probe in places where ease of access is of crucial importance.



Electrical Characteristics

Current Range I_N	1 A AC _{RMS}
Measuring Range.....	10mA to 5A _{RMS}
Output Sensitivity.....	1mV / mA
Load Impedance.....	> 1 MOhm
Conductor Position Sensitivity.....	< 0.5% @ 50/60Hz
Phase Shift at 2 kHz @ 10A.....	not specified
Frequency Range.....	40 Hz to 10 kHz
Temperature Coefficient.....	0.015% / °C
Working Voltage (see Safety Standards section).....	600 V AC _{RMS} or DC

Accuracy

Primary Current	10mA to 50mA	50mA to 100mA	100mA to 5A
Accuracy (of rdg)	±5%	±3%	±1%
Phase Error	Not specified	11°±3°	8°±2°

General Characteristics

Maximum Conductor Size.....	15 mm diameter, bus bar 15 x 17mm
Output Connection.....	Safety sockets 4mm
Operating Temperature Range.....	-10 to +55 °C
Storage Temperature Range.....	-20 to +70 °C
Operating Humidity.....	15% to 85% (non condensing)
Weight.....	165 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, alternative 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

in mm

