



Current probe M3.UB 20A / 5V

The M3.UB 20A / 5V 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.UB 20A / 5V can measure currents from 20mA to 20A over a frequency range of 30Hz 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 : 20 A AC_{RMS}
Measuring Range..... : 20mA to 20A $_{RMS}$
Output Sensitivity..... : 250mV / A
Load Impedance..... : > 1 MOhm
Conductor Position Sensitivity..... : < 0.5% @ 50/60Hz
Frequency Range..... : 30 Hz to 10 kHz
Temperature Coefficient..... : 0.015% / °C
Working Voltage (see Safety Standards section)..... : 600 V AC_{RMS} or DC

Accuracy

Primary Current	20mA to 50mA	100mA to 500mA	500mA to 20A
Accuracy (of rdg)	5%	2%	1%
Phase shift (typ)	Not specified	7°	6°

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

