



## Current probe M3.UB 50A / 1V

The M3.UB 50A / 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.UB 50A / 1V can measure currents from 100mA to 50A 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 In.....: 50 A AC<sub>RMS</sub>  
Measuring Range.....: 100mA to 50A<sub>RMS</sub>  
Output Sensitivity.....: 20mV / 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<sub>RMS</sub> or DC

### Accuracy

Primary Current	100 to 500mA	500 to 5A	5 to 50A
Accuracy (of rdg)	3%	2%	1%
Phase shift (typ)	Not specified	2°	1.6°

### 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<sub>RMS</sub>, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

## EMC Standards

EN 61326 :1998

## Dimensions

in mm

