

Current Probe TR2500B

(UT model S.UE 500 A / 1.5V)

The S.UE 500A / 1.5V 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 S.UE 500A/1.5V can measure currents from 100mA to 600A over a frequency range of 40Hz to 5kHz.



Electrical Characteristics

Current Range I_N : 600 A_{RMS}
Measuring Range..... : 0.1A to 200 A_{RMS}
Output Sensitivity..... : 3mV/A
Load Impedance..... : $\geq 100 \text{ k}\Omega$
Conductor Position Sensitivity..... : 0.5% @ 50 Hz
Error due to adjacent conductor..... : $\leq 1\text{mA} / \text{A} @ 50 \text{ Hz}$
Phase Shift at 2 kHz @ 10A..... : ± 1 degree
Frequency Range..... : 30 Hz to 5 kHz
Temperature Coefficient..... : 0.01%/°C
Working Voltage for input and output circuits..... : 600 V AC_{RMS} or DC

Accuracy

500A

Primary Current	1 to 10 A	10 to 100 A	100 to 600 A
Accuracy (of rdg)	2.5% + 2 mV	$\pm 1\%$	$\pm 1\%$
Phase Error	Not specified	3°	1.5°

General Characteristics

Maximum Conductor Size..... : 50 mm diameter
Output Connection..... : 3 m shielded cable with D01 conn.
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

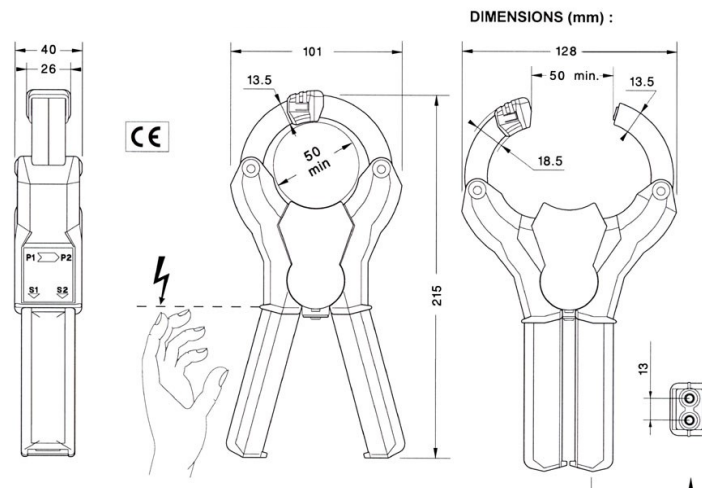
600 V_{RMS}, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC_{RMS} or DC and frequencies below 1 kHz.

EMC Standards

IEC61326: 1998

Dimensions



Special note: the actual probe is equipped with 3 meters shielded cable 3 conductors with connector D01PB406MRT (Hypertronics)