

AC/DC OPEN LOOP SPLIT CORE TRANSDUCERS

Accurate, Rugged, Versatile and Reliable

- Two models AT 500 and ATi 500 (TRUE RMS)
- AC/DC up to 500Amps
- Instantaneous Voltage or 4 to 20mACurrent Outputs
- Excellent Accuracy with High Resolution
- Split core for non-invasive Current Measurement
- Compact Lightweight Design
- Broad Bandwidth DC to 10kHz



IP40

High Accuracy with 100mA Resolution

Advanced patented magnetic circuit design results in transducer's accuracy to be little affected by external magnetic fields or off-centre conductor positioning.

EN61010-2-032:2012 and EMC Conformance

Conformance to EMC standards ensures high reliability through reduced susceptibility to electromagnetic interference.

TYPICAL APPLICATIONS

- Railway Trackside Applications
- Battery Charging Systems
- Automotive Applications
- Power Supplies for Telecoms
- Airport Lighting Circuits

AC/DC OPEN LOOP SPLIT CORE TRANSDUCERS_500A_150413_01



SPECIFICATIONS

| NON-INVASIVE AC / DC SPLIT CORE CURRENT TRANSDUCERS | | | | |
|---|--|-------------------------|--|--|
| MODEL | AT 500 | ATi 500 TRMS | | |
| Current Range | 500A DC or AC PEAK | 500A DC or AC RMS | | |
| Output Sensitivity | 20mV/A w.r.t. 0V | 4 to 20mA DC | | |
| Frequency Range | DC to 10kHz (-3dB) | DC to 10kHz (-3dB) | | |
| Basic Accuracy | ± 1% of reading ± 0.5A | ± 1% of range | | |
| Conductor Position Sensitivity | < ± 1.5% relative to centre reading | | | |
| Conductor Diameter | 25 mm maximum | | | |
| Power Supply | ± 15V ± 5% external | + 9V to +36V external | | |
| Current Consumption | 20mA | 35mA + I _{OUT} | | |
| Load Impedance | > 10 kOhms | ≤ 300Ω | | |
| Output Connection | Via 5 pin connector Phoenix MC1, 5/5-G-3, 81 | | | |

ENVIRONMENTAL DATA

Operating Temperature -20°C to +65°C

Temp. Coefficient $\pm 0.1\%$ of reading per °C

Storage Temperature -20°C to +85°C

Ingress Protection IP40 (jaws closed)

SAFETY

EN61010-2-032:2012,

300V, Measurement Category III, Pollution Degree 2.

MAXIMUM SAFE VOLTAGES

300V AC RMS or DC between uninsulated conductor and ground

All accuracies stated at 23°C \pm 1°C (73.4°F \pm 1.8°F)

MECHANICAL DATA

| Dimensions (mm) | 100 (H) x 65 (W) x 25 (D) | Part No's | MODEL |
|-----------------|---------------------------|----------------------------------|---------------------|
| Jaw Capacity | 25mm ∅ | P-16.500.0 P-16.500.1 | AT 500 ATi 500 |
| Weight | 120 g. | Also available with cable output | |
| | | P-16.500.2 P-16.500.3 | AT 500C ATi 500C |

GMC-I PROSyS Ltd. offer a wide range of non-invasive Probes and Clamp Meters for the measurement and analysis of Current and Voltage

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