

# AC/DC OPENLOOP SPLIT CORE TRANSDUCER

## Accurate, Rugged, Versatile and Reliable

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

**IP40**



## Safety and EMC Conformance

Conformance to European standards for safety and EMC ensures a safe product with 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.

## SPECIFICATIONS

NON-INVASIVE AC / DC SPLIT CORE CURRENT TRANSDUCERS		
MODEL	AT 500	ATi 500
Current Range	500A DC or AC <i>PEAK</i>	500A DC or AC <i>RMS</i>
Output Sensitivity	20mV/A w.r.t. 0V	4 to 20mA DC
Output Zero Drift	±10mV/°C	±500mA/°C Primary
Output Connection	Via 5 pin connector Phoenix MC1, 5/5-G-3, 81	
Frequency Range	DC to 10kHz (-3dB)	
Resolution	± 100mA	
Basic Accuracy	± 1% of reading ± 0.5A	± 1% of range
Conductor Position Sensitivity	<± 1% relative to centre reading	
Conductor Diameter	25mm maximum	
Power Supply	± 15V ±10% external	+ 9V to +36V external
Current Consumption	20mA	35mA + I <sub>OUT</sub>
Load Impedance	> 10 kOhms	≤ 300Ω

### Environmental data

Operating Temperature: -20°C to 65°C (-4°F to 149°F)

Temp. Coefficient: ±0.02% of reading per °C

Storage Temperature: -20°C to 85°C (-4°F to 185°F)

All accuracies stated at: 23°C ± 1°C (73.4°F ± 1.8°F)

Ingress Protection: IP40 (Jaws closed)

### Part / Model Number

P-16.500.0 AT 500

P-16.500.2 ATi 500

Also available with cable output option:

P-16.500.1 AT 500C

P-16.500.3 ATi 500C

### Safety

BS EN 61010-1:2010, BS EN 61010-2-032:2012  
300V RMS Measurement Category III  
Pollution Degree 2

300V AC RMS or DC between uninsulated  
conductor and ground

BS EN 61326-1:2013 for equipment intended to be  
use in an industrial electromagnetic environment

### Mechanical Data

Dimensions: (mm) 100(H) x 65(W) x 25(D)

Jaw Capacity: Ø25mm

Weight: 120g

**GMC-I PROSYS Ltd** offers a wide range of non-invasive Probes, Clamp Meters and Transducers for the measurement and analysis of Current and Voltage.