ARTEMES

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AC/DC Closed Loop Splitcore Transducers

Accurate, Rugged, Versatile and Reliable

- Two models AM-TR-30DC and AM-TR-300DC
- AC / DC up to 300Amps
- Single and dual supply versions
- Excellent accuracy with 1mA resolution
- Split core for non-invasive current measurement
- Compact lightweight design
- Broad bandwidth DC to 100kHz



High Accuracy with 1mA 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 eg., leakage current measurement on car battery lead, detection of ECU sleep mode and current profiling, all requiring high accuracy and superior resolution.
- Power supplies for telecoms
- Airport lighting circuits

Specifications

Non-Invasive AC/DC lit Core C		Current Transdurcers	
MODEL		AM-TR-30DC	AM-TR-300DC
current range		30A DC or AC RMS	300A DC or AC PEAK
output sensitivity		100mV/A	10mV/A
frequency range		DC to 100kHz (-3dB)	DC to 100kHz (-3dB)
resolution		± 1mA	
basic accuracy		± 1% of reading ± 5mA	
output zero drift		± 1mV/°C	± 0.1mV/°C
conductor position sensitivity		< ± 1% relative to centre reading	
conductor diameter		25 mm maximum	
power supply		+12V ± 5% external	± 15V ± 10%
current consumption		25mA + 1mA/A measured	
load impedance		>10 kΩ	
output connection		Via 5 pin connector Phoenix MC1, 5/5-G-3, 81	

Environmental Data

operating temperature -20°C to +65°C

temp. coefficient ± 0.02% 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.

Mechanical Data

dimensions in mm 100 x 65 x 25

HxWxD

jaw capacity 25 mm

weight 120 g

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)

Measurements for Power Applications

System Integration and Monitoring Solution

convenient generation of reports

energy management systems for commerce and industry

data compression and data base solutions for easy and individual use

load profile measurings and multi-channel power analyses

cloud solutions for continuous and distributed measurement tasks

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power quality analyses according to definded standards

qualification of power plants with renewables

automated test sequences for repeated testings

software and hardware solutions for individual test bench systems

