

AC Current Probe Model SR651



The Model SR651 is designed for use in industrial and utility environments. The unique ergonomic design allows it to easily clamp onto cables or small bus bars. It is built to the highest safety and performance standards including the CE Mark and is UL approved.

Excellent transformation and low phase shift, plus a broad frequency response, permit accurate measurements of current for power and power quality measurements. The high quality magnetic cores and uniform windings provide sensitivity for very low level current measurements, as well as measurements up to 1200Aac. The Model SR651 provides an accurate voltage output of 1mV/A to 100mV. This voltage output enables instruments without current ranges to measure, display log currents through an AC voltage range or measure very low AC.

Features

- Measurement range of 100mA to 1000Aac
- Large jaw opening accommodates conductors up to two 500MCM conductors
- Improved ergonomic design and easy operation
- Conforms to EN 61010, 600V, Cat. III safety standard
- Low phase shift for power measurements
- Available with mA or mV output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- CE Mark

Applications

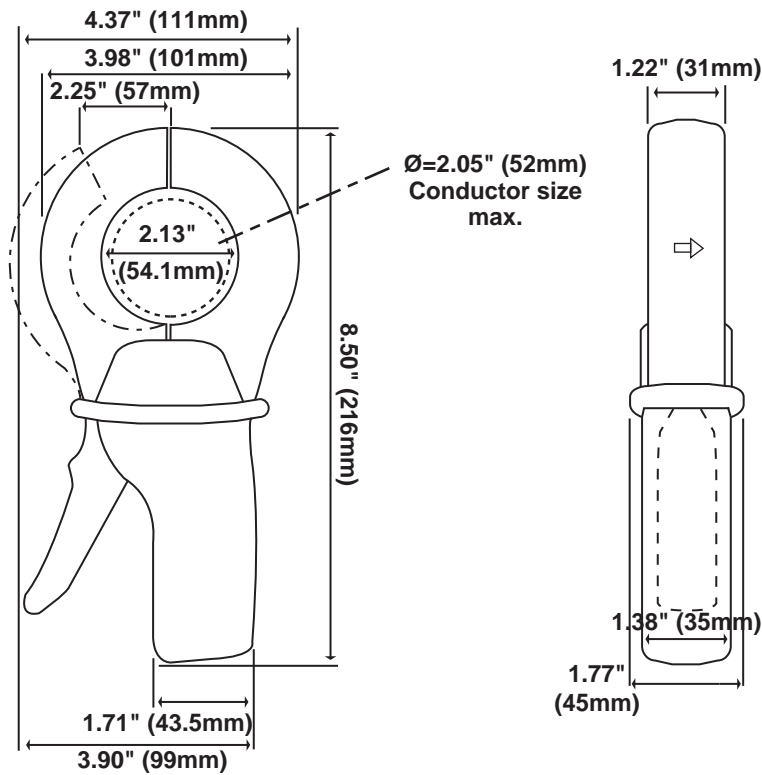
- Power quality measuring
- Low industrial loads
- Measuring around cable bundles
- Power load monitoring
- Waveform analysis

Specifications

MODEL	SR651
ELECTRICAL	
Nominal Range	1000A
Measurement Range	0.1 to 1200A
Transformation Ratio	Voltage output
Output Signal	mV output signal (2V Peak max), 3 range switch selectable on handle 100mV/A: 10mA to 20A Peak; 10mV/A: 0.1mA to 200A Peak; 1mV/A: 1mA to 2000A Peak
Accuracy (1000A Range)	≤3% ± 0.1A
1 to 50A	1% of Reading
50 to 200A	0.75% of Reading
200 to 1000A	0.5% of Reading
1000 to 1200A	
Phase Shift (1000A Range)	1.5°
50 to 200A	0.75°
200 to 1000A	0.5°
1000 to 1200A	
Overload	1200A for 40 min ON, 20 min OFF
Frequency Range	30Hz to 5kHz; current derating above 1kHz using the formula: 1000A x 1/F (in kHz)
Load Impedance	100kΩ min
Crest Factor	≤6
Working/Common Mode Voltage:	600V, Cat. III
Output Termination	Jack
MECHANICAL	
Operating Temperature	14° to 122°F (-10° to 50°C)
Storage Temperature	-4° to 158°F (-20° to 70°C)
Operating Relative Humidity	0 to 85% @ 35°C
Jaw Opening	2.25" (57mm) max
Maximum Conductor Size	2.05" (52mm)
Maximum Bus Bar Size	One 1.95 x 0.19" (50 x 5mm)
Dimensions	4.37 x 8.50 x 1.77" (111 x 216 x 45mm)
Weight	1.21 lbs (550g)
Polycarbonate Material	Handles: Polycarbonate + ABS, Gray, UL94 V0. Jaws: Polycarbonate, Red, UL94 V0
SAFETY	
Electrical	EN 61010-2-32
CE Mark	Yes

Note: Reference conditions:

23 ± 3°K, 20 to 75% RH, 48 to 65Hz, external magnetic field <40A/m, no DC component, no external current carrying conductor, test sample centered. Load impedance 1Ω.



Jacks:
Two standard safety banana jacks (4mm)

ORDERING INFORMATION

CATALOG NO.

AC Current Probe Model SR651 (Jack – 1mA/A – 1000A max)	Cat. #2113.45
Includes a user manual	
Accessories (Optional)	
Leads, set of 2, 5 ft safety (1000V)	Cat. #2111.29
Banana plug adaptor (Safety Leads to nonrecessed plug)	Cat. #1017.45
Banana (Female) – BNC (Male) Adaptor	Cat. #2118.46

To Order Contact: Cal-Tek Company, Inc.
20 Republic Road, North Billerica, MA 01862
Phone: (800) 447-4020 Fax: (978) 667-8901 www.repaircalibration.com