

# AC Current Probe Model SR631



The Model SR631 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 SR631 works as a traditional current transformer (with a ratio 1000:5) and provides current outputs in mA/A for use on DMMs, power and harmonic meters, data loggers, recorders or instruments with current ranges.

## Features

- Measurement range of 100mA to 1200Aac
- Large jaw opening accommodates conductors up to two 500MCM conductors
- 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

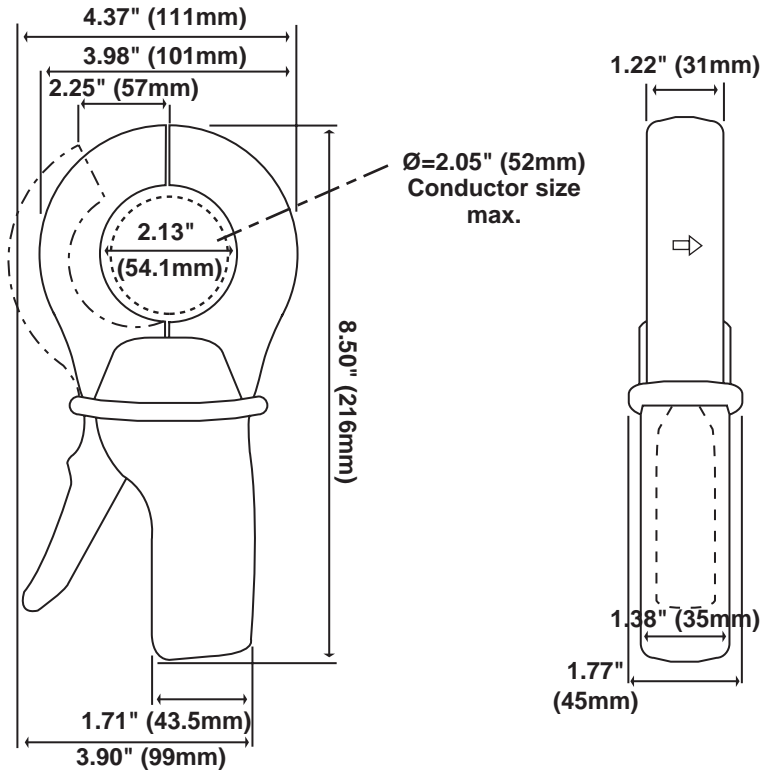
- Power quality measuring
- Low industrial loads
- Measuring around cable bundles
- Power load monitoring
- Waveform analysis

# Specifications

MODEL	SR631*
<b>ELECTRICAL</b>	
Nominal Range	1000A
Measurement Range	0.1 to 1200A
Transformation Ratio	1000:5
Output Signal	5mA <sub>AC</sub> /A <sub>AC</sub> : (5A <sub>AC</sub> @ 1000A)
Accuracy (1000A Range)	
1 to 20A	≤6% ± 0.1A
20A	5% of Reading
50A	3% of Reading
200A	1.5% of Reading
1000A	1% of Reading
1200A	1% of Reading
Phase Shift (1000A Range)	
20A	5°
50A	3°
200A	1.5°
1000A	1°
1200A	1°
Overload	1200A for 30 min ON, 15 min OFF
Frequency Range	30Hz to 5kHz; current derating above 1kHz using the formula: 1000A x 1/F (in kHz)
Load Impedance	0.6Ω max
Crest Factor	≤6
Working/Common Mode Voltage	600V Cat. III
Output Termination	Jack
<b>MECHANICAL</b>	
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
<b>SAFETY</b>	
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 0.2Ω @ lead <40mΩ for 250A range.

\*Diode Protection for open secondary (Output)



**Jacks:**  
Two standard safety banana jacks (4mm)

<b>ORDERING INFORMATION</b>	<b>CATALOG NO.</b>
AC Current Probe Model SR631 (Jack – 5mA/A – 1000A max) .....	Cat. #2113.47
Includes a user manual	
<b>Accessories (Optional)</b>	
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

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