AC Current Probe **Model SR701**





The Model SR701 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 for Canada and United States.

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 SR701 works as a traditional current transformer (with a ratio of 1000:1) and provides current outputs in mA/A for use on DMMs, power and harmonic meters, data loggers, recorders or instruments with current ranges. The Model SR701 uses a custom Nickel Cove to improve accuracy and phase shift on the low end of the measurement range

Features

- · Measurement range of 1mA 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 output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- · UL approved for Canada and **United States**
- · Double Insulation
- · CE Mark

Applications

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





Specifications

MODEL	SR701*
ELECTRICAL	
Nominal Range	1000A
Measurement Range	1mA to 1200A
Transformation Ratio	1000:1
Output Signal	1mAac/Aac (1Aac @ 1000A)
Accuracy (1000A Range) 1mA to 100mA	≤3% of Reading ± 5mA
0.1 to 1A	\leq 2% of Reading \pm 3mA
1 to 10A	<1% of Reading
10 to 100A	≤0.5% of Reading
100 to 1200A	≤0.3% of Reading
Phase Shift (1000A Range) 1 to 10A	≤2°
10 to 100A	
100 to 1200A	<u>≤1</u> ≤0.7°
Overload	
Overioau	20 min OFF
Frequency Range	30Hz to 5kHz; current derating above 1kHz using the formula: 1000A x 1F (in kHz)
Load Impedance	5Ω max
Working/Common Mode Voltage	600Vrms 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 VO. Jaws: Polycarbonate, Red, UL94 VO
SAFETY	
Electrical	EN 61010-2-032
UL Approval	Yes – Canada and United States
Double Insulation 🔲	Yes
CE Mark	Yes

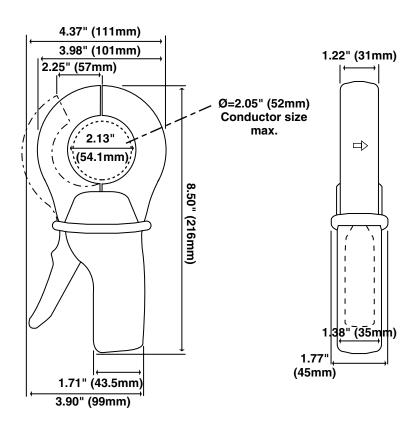
Note: Reference conditions:

 $23\pm3^{\circ}$ 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 5Ω .

*Diode Protection for open secondary (Output)









Jacks: Two standard safety banana jacks (4mm)

ORDERING INFORMATION C	ATALOG NO.
AC Current Probe Model SR701 (Jack – 1mA/A – 1000A max)	Cat. #2116.29
Includes a user manual	
Accessories (Optional)	
Leads, set of two, 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



