Sonel
test & measurement

CMP-1006

INRUSH CURRENT

CAT III
600 V

CAT IV
300 V

IP40

Advanced measurements by using the CMP-1006 Digital Clamp Meter
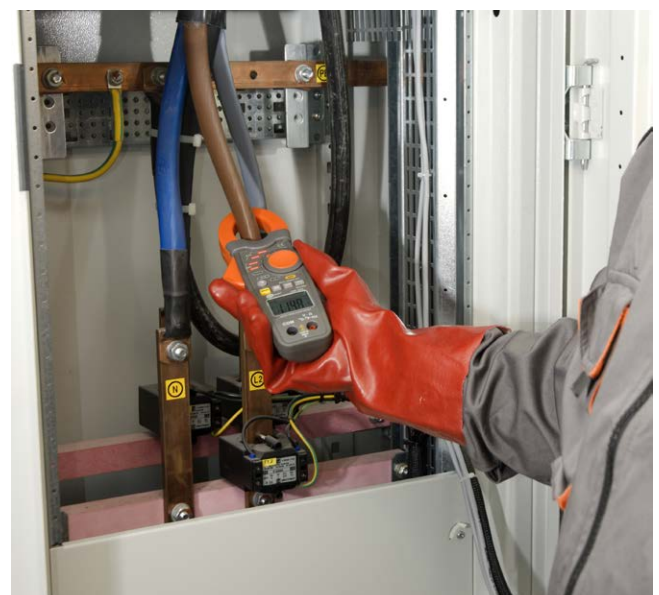
Measurement functions

- INRUSH function for measuring current drawn by an electrical device when first turned on
- AC and DC current measurement up to 1000 A
- True RMS AC voltage and current measurement for accurate and reliable readings of non-sinusoidal signals
- AC and DC voltage measurement up to 600 V
- resistance measurement up to 66 MΩ
- continuity test with acoustic signalling (beeper) for resistance below 40 Ω
- temperature measurement (Fahrenheit and Celsius)
- frequency measurement
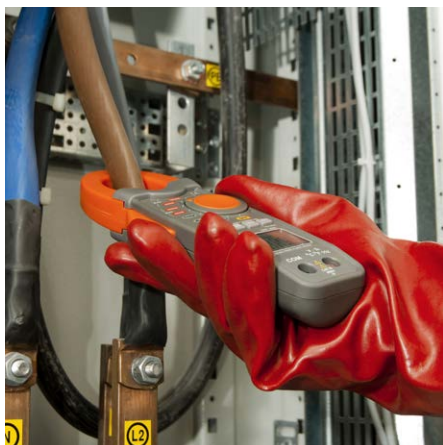- duty cycle measurement
- diode test

Overview

Sonel CMP-1006 Clamp Meter is designed to work in difficult measuring conditions. A special housing, covered with an elastomer coating, provides protection against drops and mechanical damages. CMP-1006 is the best solution for those who expect the device to be reliable at work in industrial and residential environments.

Designed for specialists

- industrial and commercial electricians
- plant maintenance
- facility maintenance
- electrical contractors
- utility technicians
- HVACR specialists

Special features

- large and easy to read LCD display with backlit
- auto range with manual selection mode
- HOLD function, allowing for freezing the result on the display
- DCA ZERO function for relative mode in DC current function
- MAX and MIN results hold function
- large jaw suitable for large conductors and busbars
- automatic power down after 25 minutes

DC current measurement

Range	Resolution	Accuracy
0.0...659.9 A	0.1 A	±(2.5% m.v. + 5 digits)
660...1000 A	1 A	± (2.8% m.v. + 8 digits)

AC current measurement (True RMS)

Range	Resolution	Accuracy
0.0...659.9 A	0.1 A	±(2.5% m.v. + 8 digits) for 45...65 Hz
660...1000 A	1 A	±(2.8% m.v. + 8 digits) for 45...65 Hz

DC voltage measurement

Range	Resolution	Accuracy
0.000...6.599 V	0.001 V	
6.60...65.99 V	0.01 V	±(1.5% m.v. + 3 digits)
66.0...600.0 V	0.1 V	

AC voltage measurement (True RMS)

Range	Resolution	Accuracy
0.000...6.599 V	0.001 V	
6.60...65.99 V	0.01 V	±(1.8% m.v. + 5 digits) for 45...65 Hz
66.0...600.0 V	0.1 V	

Resistance measurement

Range	Resolution	Accuracy
0.0...659.9 Ω	0.1 Ω	±(1.0% m.v. + 4 digits)
0.660...6.599 kΩ	0.001 kΩ	
6.60...65.99 kΩ	0.01 kΩ	±(1.5% m.v. + 2 digits)
66.0...659.9 kΩ	0.1 kΩ	
0.660...6.599 MΩ	0.001 MΩ	±(2.5% m.v. + 3 digits)
6.60...66.00 MΩ	0.01 MΩ	±(3.5% m.v. + 5 digits)

Frequency measurement

Range	Resolution	Accuracy
30.00...659.9 Hz	0.1 Hz	
0.660...6.599 kHz	0.001 kHz	±(1.2% m.v. + 2 digits)
6.60...15.00 kHz	0.01 kHz	

sensitivity:
  30 Hz...5 kHz: 10 V RMS min
  5 kHz...15 kHz: 40 V RMS min. for 20...80% duty cycle

Duty cycle measurement

Range	Resolution	Accuracy
10.0...94.9%	0.1%	unspecified

- frequency range: 30 Hz...15 kHz

Temperature

Range	Resolution	Accuracy *
-20...+760°C	1°C	±(3% m.v. + 5°C)
-4...+1400°F	1°F	±(3% m.v. + 9°F)

* probe accuracy not included

Abbreviation „m.v." used in the specification of measurement means a measured value.

Technical specification

power supply of the meter	9 V battery, type 6LR61
display	6600 readings, backlit LCD
continuity test	threshold 40 Ω, measurement current <0.5 mA
diode test	typical measurement current 0.3 mA typical voltage of open circuit <3 V DC
indication of low battery charge	'BAT' symbol is displayed
indication of range overflow	'OL' symbol is displayed
frequency of measurements	2 readings per second, nominal
INRUSH	integration time 100 ms
temperature sensor	K-type temperature probe
interior clamp diameter	1.4" x 2.0" (36 mm x 52 mm)
input impedance	10 MΩ (V DC and V AC)
AC bandwidth	50...400 Hz (A AC and V AC)
auto-off timeout	25 minutes
dimensions	9.0" x 3.1" x 1.9" 229 mm x 80 mm x 49 mm
weight	0.7 lbs (303 g)
compliance with standards	EN 61010-1, EN 61010-2-032

Nominal operating conditions

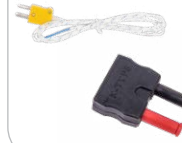|	
operating temperature range	41...104°F (5...40°C)
operating humidity	max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F (40°C)
storage temperature	-4...140°F (-20...+60°C) at humidity <80%
operating altitude	max. 7,000 ft (2,000 m)

Standard accessories

Test lead with probe for CMM/CMP (set)

WAPRZCMP1

Temperature measurement

type K probe
WASONTEMK

adapter
WAADATEMK

Standard carrying case

6LR61 9 V battery

Optional accessories

M13 carrying case

WAFUTM13

Temperature measurement

probe (K-type, bayonet)
WASONTEMP

probe (K-type, metal)
WASONTEMK2

Set of test leads

CAT IV, S
WAPRZCMM1

CAT IV, M
WAPRZCMM2

Crocodile clip mini, 1 kV 10 A (set)

WAKROKPL10MINI