CMP-1006

Indeks: WMXXCMP1006

Digital Clamp-on multimeter

CAT IV 300V

CAT III 600V

IP 40

Description

(TRUE RMS) up to 1000 A.

Measurement of INRUSH current in start-up phase of electrical device (high frequency of sampling)

AC/DC voltage measurement (TRUE RMS) up to 600 V.

Resistance measurement and continuity test:

- continuity test with acoustic signalling (beeper) for resistance below 40.

Temperature measurement (Fahrenheit and Celsius units).

Frequency measurement.

Duty cycle measurement.

Diode test.

Additionally:

- safe, insulated measuring clamps,
- autoranging/manual range selection,
- DATA HOLD function, for holding measured values,
- backlit LCD,
- DC ZERO mode of measurement for DC current, possibility to zero the display and reading relative actual value less stored zero value,
- MAX/MIN function,
- over range indication,
- AUTO-OFF function.

Technical Specification

Electric security:

- measurement category: CAT III 600 V acc. to EN 61010 - 1:2004
- protection class acc. to EN 60529: IP40

Other technical data:

- power supply: 9 V battery type 6LR61
- display: 6600 counts, backlit LCD
- continuity test: threshold 40 Ω; test current < 0,5 mA
- diode test: test current of 0,3 mA, typical open circuit voltage < 3 V DC, typical
- low battery indication: BAT displayed
- over range indication: 0L displayed
- sampling rate: 2 times per second
- INRUSH: integration time 100 ms
- temperature sensor: type K thermocouple
- input impedance: 10 MΩ (V DC and V AC)
- AC bandwidth: 50...400 Hz (A AC and V AC)
- auto power OFF: approx. 25 min.
- dimensions: 229 x 80 x 49 mm
- weight: 303 g
- accordance with following standards: EN 61010 - 1:2004, EN 61010 - 2 - 032

- quality standard: ISO 9001

Rated operational conditions:

- internal clamp diameters: d1 = 36 mm/d2 = 52 mm
- operating temperature: +5...+40°C
- storage temperature: -20...+60°C
- operating humidity: max 80% up to 31°C decreasing linearly to 50% at 40°C
- storage humidity: <80%
- operating altitude: max 2000 m

AC/DC current measurement (TRUE RMS)

Range	Resolution	Accuracy (DC)	Accuracy (AC)
0...659,9 A	0,1 A	±(2,5% m.v. +5 dgt)	±(2,5% m.v + 8 dgt) for f=50...60 Hz
660...1000 A	1 A	±(2,8% m.v. +8 dgt)	±(2,8% m.v. + 8 dgt) for f=50...60 Hz

DC voltage measurement

Range	Resolution	Accuracy
0...6,599 V	0,001 V	±(1,5% m.v. + 3 dgt)
6,60...65,99 V	0,01 V	
66,0...600,0 V	0,1 V	

AC voltage measurement (TRUE RMS)

Range	Resolution	Accuracy
0...6,599 V	0,001 V	±(1,8% m.v. + 5 dgt) for f=50...60 Hz
6,60...65,99 V	0,01 V	
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 dgt)
0,660...6,599 kΩ	0,001 kΩ	
6,60...65,99 kΩ	0,01 kΩ	±(1,5% m.v. + 2 dgt)
66,0...659,9 kΩ	0,1 kΩ	
0,660...6,599 MΩ	0,001 MΩ	±(2,5% m.v. + 3 dgt)
6,60...66,00 MΩ	0,01 MΩ	±(3,5% m.v. + 5 dgt)

Frequency measurement

Range	Resolution	Accuracy
30,0...999,9 Hz	0,1 Hz	±(1.2% m.v. + 2 dgt) sensitivity:30...5 kHz:10 Vrms min. 5 kHz...15 kHz:40 Vrms
1,000...9,999	0,001 kHz	

kHz		min. for 20%...80% duty cycle
10,00...15,00 kHz	0,01 kHz	

Temperature measurement

Range	Resolution	Accuracy
-20...760°C	0,1°C	±(3,0% m.v. + 5°C)
-4...1400°F	0,1°F	±(3,0% m.v. + 9°F)

Duty cycle measurement

Range	Resolution	Accuracy
10,0...94,9%	0,1%	±(1,2% m.v. + 2 dgt)

• pulse width: 100µs...100 ms,
?• frequency range: 30 Hz...5 kHz,
• sensitivity: 30 Hz...5 kHz: 10 Vrms, 5 kHz...15 kHz: 40 Vrms.

„m.v.”- measured value