



CMP-2000

Indeks: WMXXCMP2000

Digital clamp-on multimeter

CAT IV

600V

CAT III

1000V

Description

Universal clamp meter, enabling the maintenance of current measurements up to 2000 A, with the diameter of the clamp as 57 mm, and bus bar to 70 * 18 mm

The instrument has an electronic overload protection of all functions and ranges.

It provides:

- AC current measurement (TRUE RMS) up to 1500 A and DC up to 2000 A.
- Measurement of INRUSH current in start-up phase of electrical device.
- AC voltage measurement (TRUE RMS) up to 750 V and DC up to 1000 V.
- Resistance measurement and continuity test:
 - continuity test with acoustic signalling (beeper) for resistance

- below 30 Ω .
- Capacitance measurement.
- Temperature measurement (Fahrenheit or Celsius).
- Frequency measurement.
- Duty cycle measurement.
- Diode test.

Technical Specification

AC current measurement (TRUE RMS) up to 1500 A and DC up to 2000 A.

Measurement of INRUSH current in start-up phase of electrical device.

AC voltage measurement (TRUE RMS) up to 750 V and DC up to 1000 V.

Resistance measurement and continuity test:

- continuity test with acoustic signalling (beeper) for resistance below 30 Ω .

Capacitance measurement

Temperature measurement (Fahrenheit or Celsius).

Frequency measurement.

Duty cycle measurement.

Diode test.

Additionally:

- safe, insulated measuring clamp,
- autoranging,
- „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 after 30 min.

Electric security:

- measurement category: CAT IV 600 V acc. to EN 61010 - 1,
- protection class acc. to EN 60529: IP20,

Other technical data:

- power supply, 9 V battery type 6LR61,
- display: 6600 counts, backlit LCD,
- continuity test: threshold 30 Ω ,
- diode test: test current of 0,8 mA , typical open circuit voltage 3,2 V DC, typical,
- low battery indication: BAT displayed,
- over range indication: 'OL' displayed,
- temperature sensor: type K thermocouple,
- input impedance: ca.10 M Ω (V DC and V AC),
- AC bandwidth: 50...500 Hz,
- auto power OFF: 30 minutes,
- dimensions: 281 x 108 x 53 mm,
- weight: 570 g (with battery),
- accordance with following standards: EN 61010 - 1, EN 61010 - 2-032.

Rated operational conditions:

- able to open the clamp: \varnothing 57 mm wire 70 x 18 mm bus bar,
- operating temperature: 0...+50 $^{\circ}\text{C}$,
- storage temperature: -20...+60 $^{\circ}\text{C}$,
- operating altitude: max 2000 m.

DC current measurement

Range	Resolution	Accuracy
0,0...659,9 A	0,1 A	$\pm(2,0\% \text{ m.v.} + 5 \text{ digits})$
660...2000 A	1 A	$\pm(3,0\% \text{ m.v.} + 5 \text{ digits})$ for 660...1000 A
		$\pm(5,0\% \text{ m.v.} + 5 \text{ digits})$ for 1000...2000 A

AC current measurement (TRUE RMS)

Range	Resolution	Accuracy
0,0...659,9 A	0,1 A	$\pm(2,0\% \text{ m.v.} + 10 \text{ digits})$ for 50...60 Hz
		$\pm(3,0\% \text{ m.v.} + 10 \text{ digits})$ for 61...400 Hz
660...1500 A	1 A	$\pm(2,5\% \text{ m.v.} + 10 \text{ digits})$ for 50...60 Hz i 660...1000 A
		$\pm(3,5\% \text{ m.v.} + 10 \text{ digits})$ for 61...400 Hz and 660...1000 A
		$\pm(5,0\% \text{ m.v.} + 10 \text{ digits})$ for 50...400 Hz and 1000...1500

DC voltage measurement

Range	Resolution	Accuracy
0,000...6,599 V	0,001 V	$\pm(0,5\% \text{ m.v.} + 2 \text{ digits})$
6,60...65,99 V	0,01 V	
66,0...659,9 V	0,1 V	
660...1000 V	1 V	

AC voltage measurement (true RMS)

Range	Resolution	Accuracy
0,000...6,599 V	0,001 V	±(1,5% m.v. + 8 digits) for 50...500 Hz
6,60...65,99 V	0,01 V	
66,0...659,9 V	0,1 V	
660...750 V	1	

Resistance measurement

Range	Resolution	Accuracy
0,0...659,9 Ω	0,1 Ω	±(1,0% m.v. + 5 digits)
0,660...6,599 kΩ	0,001 kΩ	
6,60...65,99 kΩ	0,01 kΩ	
66,0...659,9 kΩ	0,1 kΩ	
0,660...6,599 MΩ	0,001 MΩ	±(2,0% m.v. + 5 digits)
6,60...66,00 MΩ	0,01 MΩ	±(3,5% m.v. + 5 digits)

Capacitance measurement

Range	Resolution	Accuracy
0,0...6,599 nF	0,001 nF	±(3,0% m.v. + 30 digits)
6,60...65,99 nF	0,01 nF	±(3,0% m.v. + 10 digits)

66,0...559,9 nF	0,1 nF	±(3,0% m.v. + 30 digits)
6,600...59,999 μF	0,001 μF	
66,00...659,99 μF	0,01 μF	±(3,0% m.v. + 10 digits)
660...659,999 μF	0,100 μF	
0,660...6,600 mF	0,001 mF	

Frequency measurement

Range	Resolution	Accuracy
10...65,99 Hz	0,01 Hz	±(0,1% m.v. + 5 digits)
66,0...659,9 Hz	0,1 Hz	
0,660...6,599 kHz	0,001 kHz	
6,60...65,99 kHz	0,01 kHz	
66,0...659,9 kHz	0,1 kHz	
0,660...1,000 MHz	0,001 MHz	

Temperature measurement

Range	Resolution	Accuracy
-20...0°C		±(2,0% m.v. + 3°C)
0...399°C	1°C	±(1,0% m.v. + 2°C)

400...1000°C		$\pm(2,0\% \text{ m.v.} + 3^\circ\text{C})$
-4...31°F		$\pm(2,0\% \text{ m.v.} + 6^\circ\text{F})$
32..749°F	1°F	$\pm(1,0\% \text{ m.v.} + 4^\circ\text{F})$
750...1832°F		$\pm(2,0\% \text{ m.v.} + 6^\circ\text{F})$

Duty cycle measurement

ange	Resolution	Accuracy
5...95%	0,1%	$\pm(2,0\% \text{ m.v.} + 10 \text{ digits})$

„m.v.”- measured value