

# CMP-400 CMP-401

## DIGITAL CLAMP-ON MULTIMETERS



### Standard accessories:

- test leads (2 pcs.)
- battery 9V
- K type temperature probe

WAPRZCMP1  
WASONTEMK

- carrying case
- operating manual

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# CMP-400 and CMP-401

- DC current measurement (CMP-401 only) and AC current.
- AC/DC voltage measurement up to 600V.
- Resistance measurement and continuity test:
  - continuity test with acoustic signalling (beeper) for resistance below 50Ω.
- Temperature measurement (Fahrenheit and Celsius units).
- Frequency measurement.
- Capacitance measurement (CMP-401 only).
- Diode test.
- Additionally:
  - safe, insulated measuring clamps,
  - double molded housing,
  - autoranging/manual range selection,
  - „DATA HOLD” function, for holding measured values,
  - backlit LCD,
  - „REL” function,
  - over range indication,
  - „AUTO-OFF” function.

## Temperature measurement

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

\*) probe (K type) accuracy not included

## Electric security:

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

## Other technical data:

- power supply 9V battery type 6LR61
- display 4000 counts, backlit LCD
- continuity test <math>I < 0,5\text{mA}</math>, sound signal for  $R < 50\Omega$
- diode test  $I = 0,3\text{mA}$ ,  $U_c = 1,5\text{V DC}$
- over range indication OL displayed
- sampling rate 2 times per second
- input impedance 10MΩ (V DC and V AC)
- clamp size opening 30mm (1,2")
- auto power OFF approx. 30 min.
- dimensions 197 x 70 x 40 mm
- weight 183 g
- accordance with following standards EN 61010-1:2004  
EN 61010-2-032  
ISO 9001
- quality standard

## Rated operational conditions:

- operating temperature 0...+40°C
- storage temperature -20...+60°C
- operating humidity max 80% up to 31°C  
decreasing linearly to 50% at 40°C
- operating altitude max 2000 m

## Additional equipment of CMP-400/401:

- AC line splitter (AC-16)

WAADAAC16



## Frequency measurement

Range	Accuracy
10Hz ... 10kHz	±(1,5% m.v. + 2 digits)

- sensitivity: 100V(<math>< 50\text{Hz}</math>), 50V(50...400Hz); 15V(401Hz...10kHz)

## AC current measurement

Range	Resolution	Accuracy CMP-400	Accuracy CMP-401
4,000 A	0,001 A	±(2,5% m.v. + 12 digits)	no range
40,00 A	0,01 A	±(2,5% m.v. + 8 digits)	±(2,5% m.v. + 8 digits)
400,0 A	0,1 A	±(2,8% m.v. + 8 digits)	±(2,8% m.v. + 5 digits)

- frequency range: 50...60Hz.

## DC current measurement (CMP-401 only)

Range	Resolution	Accuracy
40,00 A	0,01 A	±(2,5% m.v. + 5 digits)
400,0 A	0,1 A	±(2,8% m.v. + 5 digits)

## AC voltage measurement

Range	Resolution	Accuracy CMP-400	Accuracy CMP-401
400,0 mV	0,1 mV	no range	±(1,5% m.v. + 30 digits)
4,000 V	0,001 V	±(1,8% w.m. + 8 digits)	±(1,5% m.v. + 5 digits)
40,00 V	0,01 V		
400,0 V	0,1 V	±(2,5% w.m. + 8 digits)	±(2% m.v. + 5 digits)
600,0 V	0,1 V		

- frequency range: 50...400Hz.

## DC voltage measurement

Range	Resolution	Accuracy
400,0 mV	0,1 mV	±(0,8% m.v. + 2 digits)
4,000 V	0,001 V	±(1,5% m.v. + 2 digits)
40,00 V	0,01 V	
400,0 V	0,1 V	
600,0 V	0,1 V	±(2% m.v. + 2 digits)

## Resistance measurement

Range	Resolution	Accuracy
400,0 Ω	0,1 Ω	±(1,0% m.v. + 4 digits)
4,000 kΩ	0,001 kΩ	±(1,5% m.v. + 2 digits)
40,00 kΩ	0,01 kΩ	
400,0 kΩ	0,1 kΩ	
4,000 MΩ	0,001 MΩ	±(2,5% m.v. + 3 digits)
40,00 MΩ	0,01 MΩ	±(3,5% m.v. + 5 digits)

## Capacitance measurement (CMP-401 only)

Range	Resolution	Accuracy
40,00 nF	0,01 nF	±(4% m.v. + 20 digits)
400,0 nF	0,1 nF	±(3% m.v. + 5 digits)
4,000 μF	0,001 μF	
40,00 μF	0,01 μF	
100,0 μF	0,1 μF	±(4% m.v. + 10 digits)

„m.v.”- measured value