DIGITAL CLAMP METER

PCE-CM 6



- **display range: 6000 counts**
- **measurement range selection: automatic and manual**
- **min, max and hold function**
- **2-inch LC display**
- **integrated LED torch**
- **automatic power-off**

The digital clamp meter is a multifunctional meter for the precise measurement of alternating and direct voltage as well as alternating current that can be measured without direct contact to the line. The digital clamp meter is suitable for measuring resistance, temperature, diodes, continuity, frequencies and capacitance and is particularly useful for diagnosing electrical and electronic components.

For maximum measurement accuracy, the digital clamp meter supports True RMS for non-sinusoidal waveforms and a Low Impedance (LoZ) function to reduce interference. The non-contact voltage test enables reliable detection of voltages in cables and sockets.

The 2-inch LC display ensures clear readability, even under poor lighting conditions and an integrated LED torch makes it easier to work in dark environments. The device also offers automatic and manual measurement range selection, allowing it to be flexibly adapted to different measuring situations. Other functions include overload protection, data hold, min, max and an automatic power-off after 15 minutes to conserve battery life. The power-off can also be deactivated for longer measurements.

Compact and easy to use, the digital clamp meter is ideal for electrical installations, maintenance work and use in automation technology. It enables safe and efficient measurements, often without direct intervention in the circuit.

Specification

Direct voltage DC	
Measuring range	0,1 ... 600 mV
Resolution	0,1 mV
Accuracy	±(0.5 % of Rd +5 digits)
Overload	1000 V
Direct voltage DC	
Measuring range	600 mV ... 6 V
Resolution	0,001 V
Accuracy	±(0.5 % of Rd +5 digits)
Direct voltage DC	
Measuring range	6 ... 60 V
Resolution	0,01 V
Accuracy	±(0.5 % of Rd +5 digits)
Direct voltage DC	
Measuring range	60 ... 600 V
Resolution	0,1 V
Accuracy	±(0.5 % of Rd +5 digits)
Direct voltage DC	
Measuring range	600 ... 1000 V
Resolution	1 V
Accuracy	±(0.8 % of Rd +5 digits)
Capacity	
Measuring range	1 ... 10 nF
Resolution	0,001 nF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	10 ... 100 nF
Resolution	0,001 nF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	100 ... 1000 nF
Resolution	0,01 nF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	1000 nF ... 10 µF
Resolution	0,1 nF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	

General technical data	
Measuring functions	MIN, MAX, HOLD
Display type	LCD
Display size	2 Inch
Standard(s)	IEC61010-1, IEC 61010-2-032, IEC 61010-2-033
Maximum cable diameter	35 mm
Automatic power-off	15 min
Safety standard	CAT III 1000V, CAT IV 600V
max. input impedance	10 M Ω
Measuring range selection	Automatic, Manual
Diode test	Test current: approx. 1.5 mA Test voltage: approx. 1 V Overload protection: 250 V
Display range	6000 counts
Protection class (device)	IP20
(Rechargeable) battery	3 x 1,5 V AAA battery , Alkali-manganese
Capacity	1200 mAh
Operating conditions	0 ... 40 °C , 0 ... 80 % RH
Storage conditions	-10 ... 60 °C , 0 ... 70 % RH
Dimensions (L x W x H)	240 x 85 x 45 mm
Weight	327 g

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Measuring range	10 ... 100 µF
Resolution	0,001 µF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	100 ... 1000 µF
Resolution	0,01 µF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	1000 µF ... 10 mF
Resolution	0,1 µF
Accuracy	±(4.0 % of Rd +5 digits)
Capacity	
Measuring range	10 ... 100 mF
Resolution	0,001 mF
Accuracy	±(5.0 % of Rd +10 digits)
AC voltage	
Measuring range	0,1 ... 600 mV
Resolution	0,1 mV
Accuracy	±(0.8 % of Rd +5 digits)
Overload	750 V
Frequency range	40 ... 1000 Hz
AC voltage	
Measuring range	600 mV ... 6 V
Resolution	0,1 mV
Accuracy	±(0.8 % of Rd +5 digits)
Frequency range	40 ... 1000 Hz
AC voltage	
Measuring range	6 ... 60 V
Resolution	0,001 V
Accuracy	±(0.8 % of Rd +5 digits)
Frequency range	40 ... 1000 Hz
AC voltage	
Measuring range	60 ... 600 V
Resolution	0,01 V
Accuracy	±(0.8 % of Rd +5 digits)
Frequency range	40 ... 1000 Hz
AC voltage	
Measuring range	600 ... 750 V
Resolution	0,1 V

Accuracy	±(1.0 % of Rd +5 digits)
Frequency range	40 ... 1000 Hz
Alternating current AC	
Measuring range	0,1 ... 60 A
Resolution	0,01 A
Accuracy	±(2,5 % of Rd +8 digits) / VFD: ±(5.0 % of Rd +10 digits) / INRUSH: ±(5.0 % of Rd +10 digits)
Frequency range	40 ... 400 Hz
Alternating current AC	
Measuring range	60 ... 600 A
Resolution	0,1 A
Accuracy	±(2,5 % of Rd +8 digits) / VFD: ±(5.0 % of Rd +10 digits) / INRUSH: ±(5.0 % of Rd +10 digits)
Frequency range	40 ... 400 Hz
Alternating current AC	
Measuring range	600 ... 1000 A
Resolution	1 A
Accuracy	±(2,5 % of Rd +8 digits) / VFD: ±(5.0 % of Rd +10 digits) / INRUSH: ±(5.0 % of Rd +10 digits)
Frequency range	40 ... 60 Hz
Resistance	
Measuring range	0,1 ... 600 Ω
Resolution	1 Ω
Accuracy	±(1.0 % of Rd +5 digits)
Resistance	
Measuring range	600 Ω ... 6 kΩ
Resolution	1 Ω
Accuracy	±(1.0 % of Rd +5 digits)
Resistance	
Measuring range	6 ... 60 kΩ
Resolution	0,001 kΩ
Accuracy	±(1.0 % of Rd +5 digits)
Resistance	
Measuring range	60 ... 600 kΩ
Resolution	0,01 kΩ
Accuracy	±(1.0 % of Rd +5 digits)
Resistance	
Measuring range	600 kΩ ... 6 M Ω
Resolution	0,1 kΩ
Accuracy	±(1.0 % of Rd +5 digits)
Resistance	

Measuring range	6 ... 60 M Ω
Resolution	0,001 M Ω
Accuracy	±(1.0 % of Rd +5 digits)
Frequency	
Measuring range	0 ... 10 Hz
Resolution	0,001 Hz
Accuracy	±(1.0 % of Rd +3 digits)
Frequency	
Measuring range	10 ... 100 Hz
Resolution	0,001 Hz
Accuracy	±(1.0 % of Rd +3 digits)
Frequency	
Measuring range	100 ... 1000 Hz
Resolution	0,01 Hz
Accuracy	±(1.0 % of Rd +3 digits)
Frequency	
Measuring range	1000 Hz ... 10 kHz
Resolution	0,1 Hz
Accuracy	±(1.0 % of Rd +3 digits)
Frequency	
Measuring range	10 ... 100 kHz
Resolution	0,001 kHz
Accuracy	±(1.0 % of Rd +3 digits)
Frequency	
Measuring range	100 ... 1000 kHz
Resolution	0,01 kHz
Accuracy	±(1,0 % v.Mw. +3 Digits)
Frequency	
Measuring range	1000 kHz ... 10 MHz
Resolution	0,1 kHz
Accuracy	±(3.0% v.Mw. +3 Digits)
Temperature	
Measuring range	-20 ... 0 °C
Resolution	0,1 °C
Accuracy	±3°C
Temperature	
Measuring range	0 ... 400 °C
Resolution	0,1 °C
Accuracy	±1.0 % or ±2 °C

Temperature	
Measuring range	400 ... 1000 °C
Resolution	0,1 °C
Accuracy	±2.0 %
Temperature	
Measuring range	-4 ... +32 °F
Resolution	1 °F
Accuracy	±6 °F
Temperature	
Measuring range	32 ... 752 °F
Resolution	1 °F
Accuracy	±1.0 % or ±4 °F
Temperature	
Measuring range	752 ... 1832 °F
Resolution	1 °F
Accuracy	±2.0 %

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