Clamp Meter PCE-CM 5

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Digital multimeter with NCV measurement / Current measurement up to 200 A AC /Frequency measurement directly at the current clamp / Ready for immediate use / Simple operation

The digital multimeter is a multimeter with a multitude of different functions. Thus, with the digital multimeter, current measurements up to 200 A AC can be carried out without contact. This current range of the digital multimeter already covers a large range of current measurements. Thanks to the contactless current measurements of the digital multimeter can be measured during operation. Thus, no measurement preparation must be made with the digital multimeter, since it is possible to measure directly on the line to be measured.

Another contactless feature of the digital multimeter is the NCV (Not Connected Voltage) measurement. In this measurement, the digital multimeter can indicate whether a voltage is applied to a line. Again, no measurement preparation must be carried out during operation with the digital multimeter. These two features of the digital multimeter reduce the risk of injury from electric shock.

Other useful functions of the ammeter are the measurement of the resistance and the continuity test. With the continuity check of the digital multimeter, it can be determined, for example, whether a relay in a switch box is completely closed. Thanks to the fast measuring frequency of the digital multimeter, possible power fluctuations can be determined. This makes the digital multimeter an indispensable tool for every electrician.

- Inductive current measurement up to 200 A AC
- Voltage measurement with frequency meter
- "Hold" function for freezing the measured value
- Temperature measurement with thermocouple
- Small and compact design
- Smaller internal resistance with the LowZ function

Subject to change

Specifications

Alternating current

Measuring range	Resolution	Accuracy
200 A	0.1 A	± (3.0% + 3 digits)

Frequency range: 40 ... 400 Hz

Maximum input current: 200 A AC

Direct current

Measuring range	Resolution	Accuracy
600 µA	0.1 µA	± (1.0% + 4 digits)
1000 µA	1 µA	± (1.0% + 4 digits)

Maximum input current: 1000 µA

DC

Measuring range	Resolution	Accuracy
600 mV	0.1 mV	± (0.7% + 3 digits)
6V	0.001 V	± (0.7% + 3 digits)
60V	0.01 V	± (0.7% + 3 digits)
600V	0.1 V	± (0.7% + 3 digits)

Input impedance: 10 MΩ

maximum input voltage: 600V DC AC rms

AC

Measuring range	Resolution	Accuracy
6V	0.001V	± (0.8% + 3 digits)
60V	0.01V	± (0.8% + 3 digits)
600V	0.1V	± (0.8% + 3 digits)

Input impedance: 10 MΩ

Maximum input voltage: 600V DC AC rms

Frequency range: 40 ... 400 Hz

LowZ AC / DC

Measuring range	Resolution	Accuracy
600V	0.1V	± (2.0% + 3 digits)

Input impedance: 10 MΩ

Maximum input voltage: 600V DC AC rmsS

Frequency range: 40 ... 400 Hz

Resistance

Measuring range	Resolution	Accuracy
600 Ω	0.1 Ω	± (0.8% + 3 digits)
6 kΩ	0.001 kΩ	± (0.8% + 3 digits)
60 kΩ	0.01 kΩ	± (0.8% + 3 digits)
600 kΩ	0.1 kΩ	± (0.8% + 3 digits)
6 MΩ	0.001 MΩ	± (1.2% + 3 digits)
60 MΩ	0.1 MΩ	± (1.2% + 3 digits)

Subject to change

Test voltage (open circuit): 0.4V

Surge protection: 250V AC / DC rms

Continuity test

Measuring range	Resolution	accuracy
-	0.1 Ω	-

Surge protection: 250 V AC / DC rms

Beep at <50 Ω

Diode test

Measuring range	Resolution	Accuracy
-	0.001V	-

Surge protection: 250V AC / DC rms

Forward current: 1-mA DC

Forward voltage: 3.3V DC

Capacities

Measuring range	Resolution	Accuracy
99.99 nF	0.01 nF	± (4.0% + 5 digits)
999.9 nF	0.1 nF	± (4.0% + 5 digits)
9.999 µF	0.001 µF	± (4.0% + 5 digits)
99.99 µF	0.01 µF	± (4.0% + 5 digits)
999.9 µF	0.1 µF	± (4.0% + 5 digits)
9.999 mF	1 µF	± (4.0% + 5 digits)
99.99 mF	0.01 mF	± (4.0% + 5 digits)

Surge protection: 250V AC / DC rms

Temperature (thermocouple type K)

Measuring range	Resolution	Accuracy
-20 ... 0°C	1°C	± (3.0% + 2 digits)
1 ... 400°C	1°C	± (2.0% + 2 digits)
-4 ... 32°F	1°F	± (3.0% + 4 digits)
33 ... 752°F	1°F	± (2.0% + 4 digits)

Surge protection: 250V AC / DC rms

Frequency (with current probe)

Measuring range	Resolution	Accuracy
99.99 Hz	0.01 Hz	± (1.5% + 5 digits)
999.9 Hz	0.1 Hz	± (1.5% + 5 digits)
> 1 kHz	0.001 kHz	for reference only

Frequency range: 10 Hz ... 1 kHz

Maximum input current: 200 A AC rms

Input range: > 60 A AC rms (if the input current increases, the frequency also increases)

Frequency (when measuring voltage)

Measuring range	Resolution	Accuracy
99.99 Hz	0.01 Hz	± (1.5% + 5 digits)
999.9 Hz	0.1 Hz	± (1.5% + 5 digits)
9.999 Hz	0.001 kHz	± (1.5% + 5 digits)

> 10 kHz	0.01 kHz for reference only

Frequency range: 10 Hz ... 10 kHz

Frequency (direct measurement)

Measuring range	Resolution	Accuracy
99.99 Hz	0.01 Hz	± (0.3% + 5 digits)
999.9 Hz	0.1 Hz	± (0.3% + 5 digits)
9.999 Hz	1 Hz	± (0.3% + 5 digits)
99.99 kHz	0.01 kHz	± (0.3% + 5 digits)
999.9 kHz	0.1 kHz	± (0.3% + 5 digits)
9.999 kHz	1 kHz	± (0.3% + 5 digits)
99.99 MHz	0.01 MHz	± (0.3% + 5 digits)

Measuring range: 10 Hz ... 60 MHz

Input impedance: 10 MΩ

Input range:> 0.2V AC rms (the input voltage increases, the frequency also increases)

Maximum input voltage: 250V AC rms

Duty cycle

Measuring range	Resolution	Accuracy
5 ... 95%	0.1%	± 0.3%

More specifications

Range selection	Automatically and manually
Maximum working height	2000 m / 6561.7 ft
Display	LCD display
Largest display value	5999
Overrange	"OL" display
Measuring range underflow	"-OL" display
Measuring rate	3 measurements per second
Automatic shutdown	After 15 minutes of inactivity
Power supply	1 x 9V block battery
Operating conditions	0 ... 40°C / 32 ... 104°F
Storage conditions	-10 ... 50°C / 14 ... 122°F
Dimensions	201 x 65 x 43 mm / 7.9 x 2.6 x 1.7 in
Weight	Approx. 265 g / < 1 lb (with battery)