

# Clamp Meter PCE-CM 5



## Clamp meter PCE-CM 5

**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

# Specifications

## Alternating current

### Measuring range

200 A  
Frequency range: 40 ... 400 Hz  
Maximum input current: 200 A AC

### Resolution Accuracy

**on**  
0.1 A  $\pm (3.0\% + 3 \text{ digits})$

## Direct current

### Measuring range

600  $\mu\text{A}$   
1000  $\mu\text{A}$   
Maximum input current: 1000  $\mu\text{A}$

### Resolution Accuracy

**on**  
0.1  $\mu\text{A}$   $\pm (1.0\% + 4 \text{ digits})$   
1  $\mu\text{A}$   $\pm (1.0\% + 4 \text{ digits})$

## DC

### Measuring range

600 mV  
6V  
60V  
600V  
Input impedance: 10 M $\Omega$   
maximum input voltage: 600V DC AC rms

### Resolution Accuracy

**on**  
0.1 mV  $\pm (0.7\% + 3 \text{ digits})$   
0.001 V  $\pm (0.7\% + 3 \text{ digits})$   
0.01 V  $\pm (0.7\% + 3 \text{ digits})$   
0.1 V  $\pm (0.7\% + 3 \text{ digits})$

## AC

### Measuring range

6V  
60V  
600V  
Input impedance: 10 M $\Omega$   
Maximum input voltage: 600V DC AC rms  
Frequency range: 40 ... 400 Hz

### Resolution Accuracy

**on**  
0.001V  $\pm (0.8\% + 3 \text{ digits})$   
0.01V  $\pm (0.8\% + 3 \text{ digits})$   
0.1V  $\pm (0.8\% + 3 \text{ digits})$

## LowZ AC / DC

### Measuring range

600V  
Input impedance: 10 M $\Omega$   
Maximum input voltage: 600V DC AC rmsS  
Frequency range: 40 ... 400 Hz

### Resolution Accuracy

**on**  
0.1V  $\pm (2.0\% + 3 \text{ digits})$

## Resistance

### Measuring range

600  $\Omega$   
6 k $\Omega$   
60 k $\Omega$   
600 k $\Omega$   
6 M $\Omega$   
60 M $\Omega$

### Resolution Accuracy

**on**  
0.1  $\Omega$   $\pm (0.8\% + 3 \text{ digits})$   
0.001 k $\Omega$   $\pm (0.8\% + 3 \text{ digits})$   
0.01 k $\Omega$   $\pm (0.8\% + 3 \text{ digits})$   
0.1 k $\Omega$   $\pm (0.8\% + 3 \text{ digits})$   
0.001  $\pm (1.2\% + 3 \text{ digits})$   
M $\Omega$   
0.1 M $\Omega$   $\pm (1.2\% + 3 \text{ digits})$

# More information

Manual



More product info



Similar products



Subject to change

Test voltage (open circuit): 0.4V

Surge protection: 250V AC / DC rms

Continuity test

**Measuring range**

-

Surge protection: 250 V AC / DC rms

Beep at <50 Ω

**Diode test**

**Measuring range**

-

Surge protection: 250V AC / DC rms

Forward current: 1-mA DC

Forward voltage: 3.3V DC

**Capacities**

**Measuring range**

99.99 nF

999.9 nF

9.999 μF

99.99 μF

999.9 μF

9.999 mF

99.99 mF

Surge protection: 250V AC / DC rms

**Temperature (thermocouple type K)**

**Measuring range**

-20 ... 0°C

1 ... 400°C

-4 ... 32°F

33 ... 752°F

Surge protection: 250V AC / DC rms

**Frequency (with current probe)**

**Measuring range**

99.99 Hz

999.9 Hz

> 1 kHz

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**

99.99 Hz

999.9 Hz

9.999 Hz

**Resoluti accuracy**

**on**

0.1 Ω -

**Resoluti Accuracy**

**on**

0.001V -

**Resoluti Accuracy**

**on**

0.01 nF ± (4.0% + 5 digits)

0.1 nF ± (4.0% + 5 digits)

0.001 μF ± (4.0% + 5 digits)

0.01 μF ± (4.0% + 5 digits)

0.1 μF ± (4.0% + 5 digits)

1 μF ± (4.0% + 5 digits)

0.01 mF ± (4.0% + 5 digits)

**Resoluti Accuracy**

**on**

1°C ± (3.0% + 2 digits)

1°C ± (2.0% + 2 digits)

1°F ± (3.0% + 4 digits)

1°F ± (2.0% + 4 digits)

**Resoluti Accuracy**

**on**

0.01 Hz ± (1.5% + 5 digits)

0.1 Hz ± (1.5% + 5 digits)

0.001 for reference only  
kHz

**Resoluti Accuracy**

**on**

0.01 Hz ± (1.5% + 5 digits)

0.1 Hz ± (1.5% + 5 digits)

0.001 ± (1.5% + 5 digits)  
kHz

Subject to change



> 10 kHz 0.01 kHz for reference only

Frequency range: 10 Hz ... 10 kHz

### Frequency (direct measurement)

#### Measuring range

99.99 Hz

999.9 Hz

9.999 Hz

99.99 kHz

999.9 kHz

9.999 kHz

99.99 MHz

#### Resolution Accuracy

##### on

0.01 Hz ± (0.3% + 5 digits)

0.1 Hz ± (0.3% + 5 digits)

1 Hz ± (0.3% + 5 digits)

0.01 kHz ± (0.3% + 5 digits)

0.1 kHz ± (0.3% + 5 digits)

1 kHz ± (0.3% + 5 digits)

0.01 ± (0.3% + 5 digits)

MHz

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

5 ... 95%

##### Resolution Accuracy

###### on

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)

Subject to change

