

DIGITAL MULTIMETER

PCE-DM 8



- » **display range: 9999 counts**
- » **measurement range selection: automatic**
- » **non-contact voltage detection**
- » **3 display modes**
- » **live test**
- » **monitoring mode**
- » **recording mode**
- » **diode test**

The digital multimeter is a versatile meter that is used in various areas of electrical engineering and electronics. The digital multimeter enables precise measurements of voltage, current and resistance and supports both direct and alternating parameters. It also offers practical functions such as checking electrical connections using continuity testing and testing diodes for functionality.

For specialised applications, the device offers additional functions such as capacitance and frequency measurement, temperature monitoring and non-contact voltage detection (NCV), which enables electrical fields and live wires to be reliably detected. The digital multimeter is equipped with overload protection, which prevents damage, particularly during high-current measurements, thanks to an integrated fuse. The meter is charged via a modern USB-C interface and it complies with the CAT III 1000 V and CAT IV 600 V safety standards, which ensures safe use even in demanding environments.

The device has three operating modes that can be easily switched via the menu. These modes are suitable for immediate measurements as well as for monitoring and recording maximum and minimum values with curve progression. The internal ring buffer for 8 measured values cannot be output via the interface. After setting threshold values, the multimeter can issue an alarm.

Specification

Direct voltage DC	
Measurement range up to	0 ... 9,999 V
Resolution	0,001 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measurement range up to	10 ... 99,99 V
Resolution	0,01 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measurement range up to	100 ... 999,9 V
Resolution	0,1 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct current DC	
Measurement range up to	0 ... 9999 µA
Resolution	1 µA
Accuracy	±(1.2 % of Rd +3 digits)
Direct current DC	
Measurement range up to	10 ... 99,99 mA
Resolution	0,01 mA
Accuracy	±(1.2 % of Rd +3 digits)
Direct current DC	
Measurement range up to	100 ... 999,9 mA
Resolution	0,1 mA
Accuracy	±(1.2 % of Rd +3 digits)
Direct current DC	
Measurement range up to	1 ... 9,999 A
Resolution	0,001 A
Accuracy	±(1.2 % of Rd +3 digits)
Capacity	
Measurement range up to	0 ... 9,999 nF
Resolution	0,001 nF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	10 ... 99,99 nF
Resolution	0,01 nF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	100 ... 999,9 nF

General technical data	
Measuring functions	HOLD, Continuity test, Diode test
Display type	TFT colour display
Display size	2,4 Inch
Display resolution	240 x 320
Storage medium	Internal memory
Storage capacity	8 Values
Safety standard	CAT III 1000V, CAT IV 600 V
Fuse(s)	Low current range: 1 A fuse and high current range: 10 A fuse
Measurement range selection	Automatic
Display range	9999 counts
Menu language	English, Chinese, English (GB)
Protection class (device)	IP20
Power supply	5 V DC
Capacity	1500 mAh
Operating conditions	0 ... 40 °C , 0 ... 75 % RH
Storage conditions	-20 ... 60 °C , 0 ... 80 % RH
Dimensions (L x W x H)	153 x 80 x 38 mm
Weight	191 g

Resolution	0,1 nF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	1 ... 9,999 µF
Resolution	0,001 µF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	10 ... 99,99 µF
Resolution	0,01 µF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	100 ... 999,9 µF
Resolution	0,1 µF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measurement range up to	1 ... 9,999 mF
Resolution	0,001 mF
Accuracy	±(5 % of Rd +20 digits)
Capacity	
Measurement range up to	10 ... 99,99 mF
Resolution	0,01 mF
Accuracy	±(5 % of Rd +20 digits)
AC voltage	
Measurement range up to	0 ... 9,999 V
Resolution	0,001 V
Accuracy	±(1 % of Rd +3 digits)
AC voltage	
Measurement range up to	10 ... 99,99 V
Resolution	0,01 V
Accuracy	±(1 % of Rd +3 digits)
AC voltage	
Measurement range up to	100 ... 750 V
Resolution	0,1 V
Accuracy	±(1 % of Rd +3 digits)
Alternating current AC	
Measurement range up to	0 ... 9999 µA
Resolution	1 µA
Accuracy	±(1.5 % of Rd +3 digits)
Alternating current AC	

Measurement range up to	10 ... 99,99 mA
Resolution	0,01 mA
Accuracy	±(1.5 % of Rd +3 digits)
Alternating current AC	
Measurement range up to	100 ... 999,9 mA
Resolution	0,1 mA
Accuracy	±(1.5 % of Rd +3 digits)
Alternating current AC	
Measurement range up to	1 ... 9,999 A
Resolution	0,001 A
Accuracy	±(1.5 % of Rd +3 digits)
Resistance	
Measurement range up to	0 ... 999,9 Ω
Resolution	0,1 Ω
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measurement range up to	1 ... 9,999 kΩ
Resolution	0,001 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measurement range up to	10 ... 99,99 kΩ
Resolution	0,01 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measurement range up to	100 ... 999,9 kΩ
Resolution	0,1 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measurement range up to	1 ... 9,999 mΩ
Resolution	0,001 mΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measurement range up to	10 ... 99,99 mΩ
Resolution	0,01 mΩ
Accuracy	±(1.5 % of Rd +3 digits)
Frequency	
Measurement range up to	0 ... 9,999 Hz
Resolution	0,001 Hz
Accuracy	±(0.1 % of Rd +2 digits)

Frequency	
Measurement range up to	10 ... 99,99 Hz
Resolution	0,01 FPM
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measurement range up to	100 ... 999,99 Hz
Resolution	0,01 Hz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measurement range up to	1 ... 9,999 kHz
Resolution	0,001 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measurement range up to	10 ... 99,99 kHz
Resolution	0,01 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measurement range up to	100 ... 999,9 kHz
Resolution	0,1 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measurement range up to	1 ... 9,999 MHz
Resolution	0,001 MHz
Accuracy	±(0.1 % of Rd +2 digits)
Temperature sensor	
Measurement range up to	-55 ... +1300 °C
Resolution	1 °C
Accuracy	±(2.5 % of Rd +5 digits)
Temperature sensor	
Measurement range up to	-67 ... +2372 °F
Resolution	1 °F
Accuracy	±(2.5 % of Rd +5 digits)