

DIGITAL MULTIMETER

PCE-DM 3



- » **display range: 9999 counts**
- » **non-contact voltage detection (NCV)**
- » **live test**
- » **hold function**
- » **3.3-inch LC display**
- » **automatic power-off**
- » **integrated torch**
- » **small and compact design**

The digital multimeter is a practical and versatile meter that can be used in many areas such as electronics, electrical engineering and DIY. The digital multimeter enables the measurement of DC and AC voltage, resistance, capacitance, frequency and temperature. With True RMS technology, it can also accurately measure complex AC voltages.

The live test function indicates whether a circuit is energised using only a test tip. The NCV (Non-Contact Voltage) function helps to detect live wires without direct contact. The digital multimeter also offers a diode test which can be used to check the functionality of diodes, as well as a continuity test. The multimeter is barely thicker than a smartphone, making it easy to transport and store.

The digital multimeter is powered by a rechargeable lithium battery that boasts a long service life and reliable performance. It has an automatic power-off function after 10 minutes to extend battery life. Thanks to its compact design, the device is easy to transport and can be used in hard-to-reach areas. The 3.3-inch LC display ensures clear and easy-to-read values, while the integrated torch is useful in dark environments.

Specification

Direct voltage DC	
Measurement range up to	0 ... 9,999 V
Resolution	0,001 V
Accuracy	±(0.8 % of Rd +3 digits)
Overload	1000 V RMS

Direct voltage DC	
Measurement range up to	10 ... 99,99 V
Resolution	0,01 V
Accuracy	±(0.8 % of Rd +3 digits)

Direct voltage DC	
Measurement range up to	100 ... 999,9 V
Resolution	0,1 V
Accuracy	±(0.8 % of Rd +3 digits)

Direct voltage DC	
Measurement range up to	999,9 ... 1000 V
Resolution	1 V
Accuracy	±(1.2 % of Rd +3 digits)

Capacity	
Measurement range up to	0 ... 9,999 nF
Resolution	0,001 nF
Accuracy	±(4.5 % of Rd + 5 digits)

Capacity	
Measurement range up to	10 ... 99,99 nF
Resolution	0,01 nF
Accuracy	±(4.5 % of Rd + 5 digits)

Capacity	
Measurement range up to	100 ... 999,9 nF
Resolution	0,1 nF
Accuracy	±(4.5 % of Rd + 5 digits)

Capacity	
Measurement range up to	1 ... 9,999 µF
Resolution	0,001 µF
Accuracy	±(4.5 % of Rd + 5 digits)

Capacity	
Measurement range up to	10 ... 99,99 µF
Resolution	0,01 µF
Accuracy	±(4.5 % of Rd + 5 digits)

Capacity	
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General technical data	
Measuring functions	HOLD, Diode test, Continuity test
Display type	LCD
Display size	3,3 Inch
Measuring rate	3 x per second
Interface	USB-C
Automatic power-off	10 min
Safety standard	CAT III 1000V
Alarm	Acoustic, optical
Measurement range selection	Automatic
Diode test	Test current: 1 mA Voltage: approx. 3.2 V
Display range	9999 counts
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	5 V DC
(Rechargeable) battery	1 x 3,7 V internal , Lithium-ion battery
Capacity	1000 mAh
Operating conditions	0 ... 40 °C , 0 ... 80 % RH
Storage conditions	-10 ... 60 °C , 0 ... 70 % RH
Dimensions (L x W x H)	145 x 75 x 20 mm
Weight	142 g

Measurement range up to	100 ... 999,9 μ F
Resolution	0,1 μ F
Accuracy	$\pm(4.5\% \text{ of Rd} + 5 \text{ digits})$
Capacity	
Measurement range up to	1 ... 9,999 mF
Resolution	0,001 mF
Accuracy	$\pm(4.5\% \text{ of Rd} + 5 \text{ digits})$
AC voltage	
Measurement range up to	0 ... 9,999 V
Resolution	0,001 V
Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Overload	1000 V RMS
Frequency range	50 ... 1000 Hz
AC voltage	
Measurement range up to	10 ... 99,99 V
Resolution	0,01 V
Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Frequency range	50 ... 1000 Hz
AC voltage	
Measurement range up to	100 ... 999,9 V
Resolution	0,1 V
Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Frequency range	50 ... 1000 Hz
AC voltage	
Measurement range up to	999,9 ... 1000 V
Resolution	1 V
Accuracy	$\pm(1.2\% \text{ of Rd} + 3 \text{ digits})$
Frequency range	50 ... 1000 Hz
Resistance	
Measurement range up to	0 ... 999,9 Ω
Resolution	0,1 Ω
Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Resistance	
Measurement range up to	1 ... 99,99 k Ω
Resolution	0,01 k Ω
Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Resistance	
Measurement range up to	100 ... 999,9 k Ω
Resolution	0,1 k Ω

Accuracy	$\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$
Resistance	
Measurement range up to	1 ... 99,99 m Ω
Resolution	0,01 Ω
Accuracy	$\pm(1.2\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	0 ... 9,999 Hz
Resolution	0,001 Hz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	10 ... 99,99 Hz
Resolution	0,01 Hz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	100 ... 999,9 Hz
Resolution	0,1 Hz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	1 ... 9,999 kHz
Resolution	0,001 kHz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	10 ... 99,99 kHz
Resolution	0,01 kHz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	100 ... 999,9 kHz
Resolution	0,1 kHz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Frequency	
Measurement range up to	999,9 ... 1000 kHz
Resolution	1 kHz
Accuracy	$\pm(0.1\% \text{ of Rd} + 3 \text{ digits})$
Temperature sensor	
Measurement range up to	-20 ... 0 °C
Resolution	1 °C
Accuracy	$\pm(5.0\% \text{ of Rd} + 4 \text{ digits})$
Temperature sensor	
Measurement range up to	1 ... 400 °C

Resolution	1 °C
Accuracy	±(1,0 % v.Mw. +3 Digits)
Temperature sensor	
Measurement range up to	401 ... 1000 °C
Resolution	1 °C
Accuracy	±(2,0 % of Rd +5 digits)
Temperature sensor	
Measurement range up to	-4 ... +32 °F
Resolution	1 °F
Accuracy	±(5,0 % of Rd +8 digits)
Temperature sensor	
Measurement range up to	33,8 ... 752 °F
Resolution	1 °F
Accuracy	±(1,0 % of Rd +6 digits)
Temperature sensor	
Measurement range up to	753,8 ... 1832 °F
Resolution	1 °F
Accuracy	±(2,0 % of Rd +10 digits)