



Digital Multimeter PCE-DM 15



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Voltmeter with software / Voltage measurement / 61-digit bar chart / Large LCD display / Automatic shutdown / Mini-USB data interface / Current measurement / Temperature measurement via thermocouples type-K

The Digital Multimeter meter is a multimeter with extensive functions. In addition to current and voltage resistance measurements, this multimeter can also be used to measure continuity and temperature with thermocouples. A thermocouple is already included with the multimeter, but alternative type K thermocouples can also be connected to the multimeter.

Another special feature of the multimeter is the mini USB interface. This allows the multimeter to be connected to any PC. LIVE data transmission from the multimeter can be carried out using the software supplied. Another difference between this and other multimeters is that this multimeter can be operated entirely via the keyboard instead of a measuring selector switch. As a result, this multimeter has fewer wear elements than conventional multimeters.

- Software for analyzing the measured values on the PC
- Numerical display with bar chart
- Current measurement up to 10 A for a short time
- Fully operable via the keyboard
- Type K thermocouples can be connected
- Voltage measurement up to 1000V.

Specification

DC

Measuring range	Resolution	Accuracy
600 mV	0.1 mV	$\pm (0.5\% + 4 \text{ digits})$
6V	1 mV	$\pm (0.5\% + 4 \text{ digits})$
60V	10 mV	$\pm (0.5\% + 4 \text{ digits})$
600V	100 mV	$\pm (0.5\% + 4 \text{ digits})$
1000V	1V	$\pm (1.0\% + 4 \text{ digits})$

Input impedance for the measuring range 600 mV: > 60 M Ω

Input impedance for all other measuring ranges: 10 M Ω

Overload protection: 1000V DC / 750V AC peak value

AC

Measuring range	Resolution	Accuracy
6V	1 mV	$\pm (0.8\% + 10 \text{ digits})$

60V	10 mV	± (0.8% + 10 digits)
600V	100 mV	± (0.8% + 10 digits)
750V	1V	± (1.0% + 6 digits)

Input impedance: 10 MΩ

Overload protection: 1000V DC / 750V AC peak value

Frequency range: 40 ... 400 Hz

Display duty cycle: 0.1 ... 99.9%

Alternating current

Measuring range	Resolution	Accuracy
60-mA	10 µA	± (1.5% + 10 digits)
600-mA	100 µA	± (1.5% + 10 digits)
6 A	1-mA	± (2.5% + 15 digits)
10 A	10-mA	± (2.5% + 15 digits)

Maximum input current: 10 A (for no longer than 10 seconds)

Fuses: 0.6 A / 250V, 10 A / 250V

Frequency range: 40 ... 400 Hz

Display duty cycle: 0.1 ... 99.9%

Resistance

Measuring range	Resolution	Accuracy
600 Ω	0.1 Ω	± (0.8% + 5 digits)
6 kΩ	1 Ω	± (0.8% + 4 digits)
60 kΩ	10 Ω	± (0.8% + 4 digits)
600 kΩ	100 Ω	± (0.8% + 4 digits)
6 MΩ	1 kΩ	± (0.8% + 4 digits)
60 MΩ	10 kΩ	± (1.2% + 10 digits)

Surge protection: 250V DC / 250V AC peak value

Measuring voltage open circuit: 600 mV

Capacity

Measuring range	Resolution	Accuracy
40 nF	10 pF	± (5.0% + 30 digits)
400 nF	100 pF	± (3.5% + 8 digits)
4 µF	1 nF	± (3.5% + 8 digits)
40 µF	10 nF	± (3.5% + 8 digits)
200 µF	100 nF	± (5.0% + 10 digits)

Surge protection: 250V DC / 250V AC peak value

Frequency

Measuring range	Resolution	Accuracy
10 Hz	0.01 Hz	± (0.3% + 2 digits)
100 Hz	0.1 Hz	± (0.3% + 2 digits)
1000 Hz	1 Hz	± (0.3% + 2 digits)
10 kHz	10 Hz	± (0.3% + 2 digits)

100 kHz	100 Hz	± (0.3% + 2 digits)
1 MHz	1 kHz	± (0.3% + 2 digits)
20 MHz	10 kHz	± (0.3% + 2 digits)

Input sensitivity: 1.5V

Surge protection: 250V DC / 250V AC peak value

Temperature measurement thermocouple type K

Measuring range	Resolution	Accuracy
-20 ... 400°C	0.1°C	± (1.0% + 50 digits)
400 ... 1000°C	1°C	± (1.5% + 15 digits)
0 ... 750°C	0.1°F	± (1.0% + 50 digits)
750 ... 1832° F	1°F	± (1.5% + 15 digits)

Diode test	Test current	Test voltage	Accuracy
	1-mA	3V	-

Surge protection: 250V DC / 250V AC peak value

Continuity test	Test current	Test voltage	Accuracy
	-	1.2V	-

Surge protection: 250V DC / 250V AC peak value

Beep at < 30 Ω

More specifications

Display	LCD display
Largest display	5999 3 5/6
Bar graph	Scaled in 61 bars
Measuring rate	3 measurements per second
Overrange	"OL" is displayed
Data Interface	Mini USB
Battery status indicator	With a total battery voltage of 2.4V
Operating conditions	0 ... 40°C / 32 ... 104°F
Storage conditions	-10 ... 50°C / 14 ... 122°F, < 80% RH
Power supply	2 x 1.5V AAA batteries
Dimensions	185 x 91 x 49 mm / 7.3 x 3.6 x 1.9 in
Weight	Approx. 410 / < 1 lb (with batteries)

Delivery Scope

- 1 x Digital Multimeter PCE-DM 15
- 1 x Pair of test leads
- 1 x Type K thermocouple
- 2 x 1.5V AAA batteries
- 1 x Mini USB cable

1 x Software CD
1 x Instruction manual