

OSCILLOSCOPE

PCE-OC 15



- » **multimeter with oscilloscope functions**
- » **bandwidth 10 MHz**
- » **sampling rate up to 48 MSa/s**
- » **LC display with 4 brightness levels**
- » **auto measurement range selection**
- » **USB-C interface**

The oscilloscope was developed for practical and mobile use and can be used universally thanks to its diverse measurement functions. Our oscilloscope reliably measures voltage, current, frequency, resistance, temperature, capacitance and offers a diode and continuity test. The MODE key makes it easy to switch between digital multimeter and oscilloscope mode. With a bandwidth of 10 MHz and a fast sampling rate of 48 MSa/s, it ensures precise and quick data acquisition.

The device supports the storage of waveform data which can be exported as images and transferred to a PC. An LED backlight with adjustable brightness and power-off time as well as multifunctional keys make operation easier for the user. With a rechargeable battery via the C-type interface and a long standby time, the oscilloscope multimeter is ideal for long working hours, while the measured values are updated three times per second to always provide up-to-date data. The hand-held oscilloscope multimeter is an ideal companion for service technicians on site or in any electrical workshop.

Specification

Direct voltage DC	
Measuring range	0 ... 9,999 mV
Resolution	0,001 mV
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measuring range	10 ... 99,99 mV
Resolution	0,01 mV
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measuring range	100 ... 999,9 mV
Resolution	0,1 mV
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measuring range	1 ... 9,999 V
Resolution	0,001 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measuring range	10 ... 99,99 V
Resolution	0,01 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct voltage DC	
Measuring range	100 ... 999,9 V
Resolution	0,1 V
Accuracy	±(0.5 % of Rd +3 digits)
Direct current DC	
Measuring range	0 ... 9999 µA
Resolution	1 µA
Accuracy	±(0.8 % of Rd +3 digits)
Direct current DC	
Measuring range	10 ... 99,99 mA
Resolution	0,01 mA
Accuracy	±(0.8 % of Rd +3 digits)
Direct current DC	
Measuring range	100 ... 999,9 mA
Resolution	0,1 mA
Accuracy	±(1% of Rd +3 digits)
Direct current DC	
Measuring range	1 ... 9,999 A

General technical data	
Display type	LCD
Display size	2,76 Inch
Measuring rate	3 Hz
Storage medium	Internal memory
Storage capacity	15 MB
Memory information	Screenshot on keystroke
Interface	USB-C, BNC
Automatic power-off from...to	15 ... 120 min.
Safety standard	CAT III 600V, CAT II 1000V
Fuse(s)	Microfuse 10 A
Trigger input	Mode: auto, normal, single Edge: rising, falling
Menu language	English, Chinese, English (GB)
Protection class (device)	IP20
Power supply	100 ... 240 V AC 50/60 Hz
(Rechargeable) battery	1 x 3,7 V 18650 , lithium
Capacity	2000 mAh
Operating conditions	0 ... 40 °C , 0 ... 75 % RH
Storage conditions	-20 ... 60 °C , 0 ... 80 % RH
Dimensions (L x W x H)	175 x 90 x 40 mm
Weight	352 g

Resolution	0,001 A
Accuracy	±(1% of Rd +3 digits)
Capacity	
Measuring range	0 ... 9,999 nF
Resolution	0,001 nF
Accuracy	±(5 % of Rd +20 digits)
Capacity	
Measuring range	10 ... 99,99 nF
Resolution	0,01 nF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measuring range	100 ... 999,9 nF
Resolution	0,1 nF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measuring range	1 ... 9,999 µF
Resolution	0,001 µF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measuring range	10 ... 99,99 µF
Resolution	0,01 µF
Accuracy	±(2 % of Rd +5 digits)
Capacity	
Measuring range	100 ... 999,9 µF
Resolution	0,1 µF
Accuracy	±(5 % of Rd +5 digits)
Capacity	
Measuring range	1 ... 9,999 mF
Resolution	0,001 mF
Accuracy	±(5 % of Rd +5 digits)
Capacity	
Measuring range	10 ... 99,99 mF
Resolution	0,01 mF
Accuracy	±(5 % of Rd +5 digits)
AC voltage	
Measuring range	0 ... 9,999 mV
Resolution	0,001 mV
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

AC voltage

Measuring range	10 ... 99,99 mV
Resolution	0,01 mV
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

AC voltage

Measuring range	100 ... 999,9 mV
Resolution	0,1 mV
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

AC voltage

Measuring range	1 ... 9,999 V
Resolution	0,001 V
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

AC voltage

Measuring range	10 ... 99,99 V
Resolution	0,01 V
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

AC voltage

Measuring range	100 ... 750 V
Resolution	0,1 V
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

Alternating current AC

Measuring range	0 ... 9999 µA
Resolution	1 µA
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

Alternating current AC

Measuring range	10 ... 99,99 mA
Resolution	0,01 mA
Accuracy	±(1% of Rd +3 digits)
Frequency range	40 ... 1000 Hz

Alternating current AC

Measuring range	100 ... 999,9 mA
Resolution	0,1 mA
Accuracy	±(1.2 % of Rd +3 digits)

Frequency range	40 ... 1000 Hz
Alternating current AC	
Measuring range	1 ... 9,999 A
Resolution	0,001 A
Accuracy	±(1.2 % of Rd +3 digits)
Frequency range	40 ... 1000 Hz
Resistance	
Measuring range	0 ... 99,99 Ω
Resolution	0,01 Ω
Accuracy	±(1% of Rd +3 digits)
Resistance	
Measuring range	100 ... 999,9 Ω
Resolution	0,1 Ω
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measuring range	1000 Ω ... 9,999 kΩ
Resolution	0,001 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measuring range	10 ... 99,99 kΩ
Resolution	0,01 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measuring range	100 ... 999,9 kΩ
Resolution	0,1 kΩ
Accuracy	±(0.5 % of Rd +3 digits)
Resistance	
Measuring range	1000 kΩ ... 9,999 M Ω
Resolution	0,001 mΩ
Accuracy	±(1.5 % of Rd +3 digits)
Resistance	
Measuring range	10 ... 99,99 M Ω
Resolution	0,01 mΩ
Accuracy	±(3 % of Rd +5 digits)
Frequency	
Measuring range	0 ... 99,99 Hz
Resolution	0,01 Hz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	

Measuring range	100 ... 999,9 Hz
Resolution	0,1 Hz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measuring range	1000 Hz ... 9,999 kHz
Resolution	0,001 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measuring range	10 ... 99,99 kHz
Resolution	0,01 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Frequency	
Measuring range	100 ... 999,9 kHz
Resolution	0,1 kHz
Accuracy	±(0.1 % of Rd +2 digits)
Temperature	
Measuring range	-20 ... +1000 °C
Resolution	1 °C
Accuracy	±(2.5 % of Rd +5 digits)
Temperature	
Measuring range	-4 ... +1832 °F
Resolution	1 °F
Accuracy	±(2.5 % of Rd +5 digits)
Oscilloscope specifications	
Number of channels	1
Measuring functions	Period, Frequency, Peak-peak, MAX, MIN, RMS value
Sampling rate	48 MSa/s
Input impedance	1 M Ω
Probe factors	X1, X10
Max. input voltage	150 V
Adjustable sampling rate	1.5 Sa/s ... 48 MSa/s
Time base	100 ns/div ... 20 s/div
Accuracy	20 ppm
Vertical sensitivity	20 mV/div ... 10 V/div
Rise time	10 ns
DC gain accuracy	±3%