

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

Measurement range up to 0 ... 9,999 mV

Resolution 0,001 mV

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct voltage DC

Measurement range up to 10 ... 99,99 mV

Resolution 0,01 mV

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct voltage DC

Measurement range up to 100 ... 999,9 mV

Resolution 0,1 mV

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct voltage DC

Measurement range up to 1 ... 9,999 V

Resolution 0,001 V

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct voltage DC

Measurement range up to 10 ... 99,99 V

Resolution 0,01 V

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct voltage DC

Measurement range up to 100 ... 999,9 V

Resolution 0,1 V

Accuracy $\pm(0.5\% \text{ of Rd} + 3 \text{ digits})$

Direct current DC

Measurement range up to 0 ... 9999 μ A

Resolution 1 μ A

Accuracy $\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$

Direct current DC

Measurement range up to 10 ... 99,99 mA

Resolution 0,01 mA

Accuracy $\pm(0.8\% \text{ of Rd} + 3 \text{ digits})$

Direct current DC

Measurement range up to 100 ... 999,9 mA

Resolution 0,1 mA

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Direct current DC

Measurement range up to 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.

Automatic power-off can be deactivated Yes

Safety standard CAT III 600 V, CAT II 1000 V

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

Weight 352 g

Operating conditions 0 ... 40 °C, 0 ... 75 % RH

Storage conditions -20 ... 60 °C, 0 ... 80 % RH

(Rechargeable) battery 1 x 3,7 V 18650, lithium

Capacity 2000 mAh

Dimensions (L x W x H) 175 x 90 x 40 mm

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

AC voltage

Measurement range up to 10 ... 99,99 mV

Resolution 0,01 mV

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

AC voltage

Measurement range up to 100 ... 999,9 mV

Resolution 0,1 mV

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

AC voltage

Measurement range up to 1 ... 9,999 V

Resolution 0,001 V

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

AC voltage

Measurement range up to 10 ... 99,99 V

Resolution 0,01 V

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

AC voltage

Measurement range up to 100 ... 750 V

Resolution 0,1 V

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

Alternating current AC

Measurement range up to 0 ... 9999 μA

Resolution 1 μA

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

Alternating current AC

Measurement range up to 10 ... 99,99 mA

Resolution 0,01 mA

Accuracy $\pm(1\% \text{ of Rd} + 3 \text{ digits})$

Frequency range 40 ... 1000 Hz

Alternating current AC

Measurement range up to 100 ... 999,9 mA

Resolution 0,1 mA

Accuracy $\pm(1,2\% \text{ of Rd} + 3 \text{ digits})$

Frequency range	40 ... 1000 Hz
-----------------	----------------

Alternating current AC

Measurement range up to	1 ... 9,999 A
-------------------------	---------------

Resolution	0,001 A
------------	---------

Accuracy	±(1.2 % of Rd +3 digits)
----------	--------------------------

Frequency range	40 ... 1000 Hz
-----------------	----------------

Resistance

Measurement range up to	0 ... 99,99 Ω
-------------------------	---------------

Resolution	0,01 Ω
------------	--------

Accuracy	±(1 % of Rd +3 digits)
----------	------------------------

Resistance

Measurement range up to	100 ... 999,9 Ω
-------------------------	-----------------

Resolution	0,1 Ω
------------	-------

Accuracy	±(0.5 % of Rd +3 digits)
----------	--------------------------

Resistance

Measurement range up to	1000 Ω ... 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	1000 kΩ ... 9,999 MΩ
-------------------------	----------------------

Resolution	0,001 mΩ
------------	----------

Accuracy	±(1.5 % of Rd +3 digits)
----------	--------------------------

Resistance

Measurement range up to	10 ... 99,99 MΩ
-------------------------	-----------------

Resolution	0,01 mΩ
------------	---------

Accuracy	±(3 % of Rd +5 digits)
----------	------------------------

Frequency

Measurement range up to	0 ... 99,99 Hz
-------------------------	----------------

Resolution	0,01 Hz
------------	---------

Accuracy	±(0.1 % of Rd +2 digits)
----------	--------------------------

Frequency

Measurement range up to 100 ... 999,9 Hz

Resolution 0,1 Hz

Accuracy $\pm(0.1\% \text{ of Rd} + 2 \text{ digits})$

Frequency

Measurement range up to 1000 Hz ... 9,999 kHz

Resolution 0,001 kHz

Accuracy $\pm(0.1\% \text{ of Rd} + 2 \text{ digits})$

Frequency

Measurement range up to 10 ... 99,99 kHz

Resolution 0,01 kHz

Accuracy $\pm(0.1\% \text{ of Rd} + 2 \text{ digits})$

Frequency

Measurement range up to 100 ... 999,9 kHz

Resolution 0,1 kHz

Accuracy $\pm(0.1\% \text{ of Rd} + 2 \text{ digits})$

Temperature

Measurement range up to -20 ... +1000 °C

Resolution 1 °C

Accuracy $\pm(2.5\% \text{ of Rd} + 5 \text{ digits})$

Temperature

Measurement range up to -4 ... +1832 °F

Resolution 1 °F

Accuracy $\pm(2.5\% \text{ of Rd} + 5 \text{ digits})$

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 $\pm 3\%$