

HANDHELD SURFACE ROUGHNESS TESTER

PCE-RT 1200



- » **Very compact**
- » **Easy to handle**
- » **A large OLED display**
- » **4 measurable parameters of roughness**
- » **The probe of the roughness meter consists of a high-quality diamond**
- » **The display of the roughness meter outputs the measured values in tabular form**
- » **The measured values can also be output by the roughness meter as a graph**
- » **A micro-USB interface for online data transmission to a PC (for example useful for serial measurement or laboratory measurement)**

Handheld Surface Roughness Tester

The handheld roughness tester is used to determine the surface roughness. The compact surface handheld roughness meter is a handheld device for mobile use. Due to the power supply via a powerful battery, it can be used directly on site. This handheld surface roughness meter is used in the laboratory, production and generally wherever the roughness of the surfaces is to be determined. The measured values are displayed on the very clear OLED display directly on the meter. In addition, the handheld roughness meter has a storage option for up to 20 measured values, which can later be read out via the micro USB interface. For this purpose, the measurement software can be used, which, as well as the USB cable, is in the delivery. The built-in rechargeable battery is also charged via the micro USB interface. The already mentioned measurement software is particularly suitable if some series of measurements are available. The data is then transferred to the software and can be evaluated directly on the screen.

The handheld roughness meter has a protective cap for the sensor, which protects it from external influences and can be easily screwed to the device. A calibration plate with roughness standard also belongs to the standard equipment and serves to check the correctness of the measurement results.

Specification

Roughness	
Roughness value	Ra, Rq
Measuring range	0,005 ... 16 µm
Resolution	0,001 µm
Accuracy	<±10 %
Roughness	
Roughness value	Rz, Rt
Measuring range	0,02 ... 200 µm
Resolution	0,01 µm
Accuracy	<±10 %

General technical data	
Repeat accuracy	<6 %
Measuring functions	Ra, Rz, Rq, Rt
Measuring functions (additional information)	Ra / Rq - 0.005 µm ... 16 µm Rz / Rt - 0.02 µm ... 200 µm
Units	µm, µinch
Display type	OLED
Storage medium	Internal memory
Storage capacity	20 Values
Interface	Micro-USB
Standard(s)	ANSI B46.1/ASME B46.1, DIN EN ISO 4287, ASME B46.1
Sensor	inductive
Operating time	3000 Measurements
Automatic power-off from...to	1 ... 30 min.
Cut-off wavelength	0.25 mm / 0.8 mm / 2.5 mm
Key	- Probe tip radius - 5 µm - Probe tip material - diamond, 90° angled - Probing speed: 0.135 mm/s at limit wavelength: 0.25 mm 0.5 mm/s at limit wavelength: 0.8 mm 1 mm/s at limit wavelength: 2.5 mm - Return speed: 1 mm/s
Maximum traverse distance	15 mm
Menu language	English, English (GB)
Protection class (device)	IP31
Power supply	3.7 V
Connector type	Device-europlug
(Rechargeable) battery	1 x 3,7 V internal , Lithium-ion polymer battery
Capacity	1500 mAh
Operating conditions	0 ... 50 °C , 10 ... 90 % RH
Storage conditions	0 ... 50 °C , 10 ... 90 % RH
Dimensions (L x W x H)	150 x 60 x 43 mm
Weight	370 g