



# Roughness Tester PCE-RT 1200



## PCE-RT 1200

The Roughness Tester PCE-RT 1200-ICA is used to determine surface roughness. The compact roughness tester is a handheld device for mobile use. Due to the power supply via a powerful battery, it can be used directly on site. The roughness tester is used in the laboratory, in production and everywhere where the roughness of surfaces is to be determined. The measured values are displayed on the clear and user-friendly OLED display directly on the measuring device. In addition, the roughness tester 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, and a USB cable is included in the delivery. The built-in rechargeable battery is also charged via the micro USB interface. The above mentioned measurement software is particularly suitable when measurement series are pending. The data is then transferred to the software and can be evaluated directly on the screen.

The 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 is also part of the standard equipment and serves to check the correctness of the measurement results.

- ▶ 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)
- ▶ An internal rechargeable battery (3000 measurements with one battery charge (Li-ion))
- ▶ Incl. ISO calibration certificate

### General Features PCE- RT 1200

Measurement parameters	Ra, Rz, Rq, Rt
Measuring ranges	Ra, Rq: 0.005 ... 16.00 µm / 0.197 ... 629.921 µin Rz, Rt: 0.002 ... 200.0 µm / 0.079 ... 7874.016 µin
Radius probe tip	5 µm/ 196.850 µin
Material probe tip	Diamond, 90° angled
Max. recommended force for static measurement	4 mN (0.4 gf)
Radius longitudinal guide bar	45 mm / 1.77"
Maximum driving distance	15 mm / 0.59"
Measuring principle	Inductive
Cut-off wavelength	0.25 mm / 0.8 mm / 2.5 mm 0.009" / 0.03" / 0.098"
Testing speed	0.135 mm/s at cut-off wavelength: 0.25 mm 0.5 mm/s at cut-off wavelength: 0.8 mm 1 mm/s at cut-off wavelength: 2.5 mm Reversing speed: 1 mm/s
Measuring accuracy	< ± 10%
Repeatability	< 6%
Display	OLED
Units	µm / µinch (switchable)
Interface	Micro-USB
Power supply	Rechargeable Li-ion battery
Dimensions L x W x H	150 x 60 x 43 mm / 5.9 x 2.36 x 1.69 in
Weight	370 g / < 1 lb

Subject to change