

ROUGHNESS TESTER

PCE-RT 10



- » **Ra and Rz measurement range**
- » **Induction principle**
- » **LCD display with background lights**
- » **With threshold function**
- » **Easy to transport**
- » **Easy handling**
- » **Diamond sensor**
- » **Low fluctuation on display**

The Roughness Tester PCE-RT 10 is a small, lightweight device with simple navigation. Despite the fact that the device functions on a very complex and elaborate level, the measurement results can be gained quickly and easily. Due to its rugged design the device has a long lifetime. This device is calibrated on ISO, DIN, ABSI and JIS standards. The surface texture meter can be applied for various mechanical manufacturing processes as a controlling equipment. The device indicates all calculated measurement results on its LCD display any time. In order to measure the roughness of a surface, the sensor is to be placed onto that surface. Afterwards the sensor samples evenly the surface following its guide rail. Now the device will calculate the measuring values. Thus the indicated values are a result of the sensor's movement, while it is induced with electricity. The fast DSP processing supports quick measurements results, which are then shown on the surface texture meter's display.

Specification

Roughness	
Roughness value	Ra
Measuring range	0,05 ... 10 µm
Resolution	0,01 µm
Accuracy	±15 %
Roughness	
Roughness value	Rz
Measuring range	0,1 ... 50 µm
Resolution	0,1 µm
Accuracy	±15 %

General technical data	
Measuring functions	Ra, Rz
Units	µm
Display type	LCD with backlight
Interface	RS232
Standard(s)	GB/T6062, ISO4287, DIN4768, JIS B, ANSI46.1
Sensor	Diamond
Reproducibility	10 %
Cut-off wavelength	0.25 mm, 0.8 mm, 2.5 mm
Key	- Probe radius: 10 µm - Probe measuring force: 16 mN(1.6gf) - Probe angle: 90° - Vertical radius of the guide head: 48 mm
Maximum traverse distance	12,5 mm
Menu language	English, English (GB)
Protection class (device)	IP20
Power supply	batteries
(Rechargeable) battery	4 x 1,5 V AA battery , Alkali-manganese
Capacity	3000 mAh
Operating conditions	0 ... 50 °C , 0 ... 80 % RH
Storage conditions	0 ... 50 °C , 0 ... 80 % RH
Dimensions (L x W x H)	128 x 80 x 30 mm
Weight	280 g