

PCE Americas Inc. 711 Commerce Way Suite 8 Jupiter FL-33458 USA From outside US: +1 Tel: (561) 320-9162 Fax: (561) 320-9176

info@pce-americas.com

PCE Instruments UK Ltd.
Units 12/13
Southpoint Business Park
Ensign way
Hampshire / Southampton
United Kingdom, SO31 4RF
From outside UK: +44
Tel: (0) 2380 98703 0
Fax: (0) 2380 98703 9
info@pce-instruments.com

www.pce-instruments.com/english www.pce-instruments.com

## Technical Specification Roughness Tester PCE-RT 11

## Roughness Tester PCE-RT 11

## Roughness tester for accurate determination of roughness according to Ra, Rz, Rq and Rt / with piezoelectric probe / big OLED display with backlight

The Roughness Tester PCE-RT-11 is a portable measuring instrument for determination of surface roughness according to Ra, Rz, Rq and Rt in just one device. The small roughness tester is especially designed for fast measuring of roughness. The roughness (obsolete: throatiness) is a term of surface physics that describes unevenness of surface height. The roughness tester works according to the same piezoelectric micro probe principle like the highly accurate laboratory measuring instruments. The easy handling of the roughness tester as well as the high repetitive accuracy characterizes this device. After touching the button the piezoelectric micro probe of the roughness tester scans the surface within seconds and shows digitally, according to the preselected cut-off length, either the value Ra, Rz, Rq or Rt.

- With real time battery display
- USB interface
- Simple calibration
- Also for cylinder and inclined area
- With slider to protect the probe
- Wide measuring area
- OLED display
- With roughness standard
- Piezoelectric probe
- With backlight

## **Technical Specifications**

Roughness parameters Ra, Rz, Rq, Rt
Accuracy ± 15 %
Repeatability < 12 %

Measuring area Rz, Rt  $0.1 \dots 50 \ \mu m$  Measuring area Ra, Rq  $0.05 \dots 10 \ \mu m$ 

Cut-off length f0.25 mm, 0.8 mm, 2.5 mm

Scanning path in total 6 mm
Probing speed 1 mm / s

Probe system piezoelectric probe Probe diamante piezoelectric probe  $10 \ \mu m \pm 1 \ \mu m$  tip radius

Inclination angle OLED display
Ambient temperature -20 ... +40 °C
Humidity < 90 %

Power supply 3.7 V Li-Ion-accumulator

Load-time 3 hours

Dimension 106 x 70 x 24 mm

Weight 200 g