

Surface Roughness Tester (res. 0.001 μm)

LEEB432

Product Description

The surface roughness tester is suitable for shop floor use and mobile measurement. Due to the need for a small handheld instrument, its operation is simple, its function is overall, its measurement is fast, its accuracy is stable, and it is convenient. This tester is applicable to production sites and can be used to measure the surface roughness of various machinery-processed parts. This tester is capable of evaluating surface textures with a variety of parameters according to various national standards and international standards. The measurement results are displayed digitally/graphically on the OLED, and output to the printer.



Standards

- ISO
- DIN
- ANSI
- JIS
- multiple other national standards

Technical Specification

- Electromechanical integration design, small size, light weight, easy to operation
- DSP chip control and data processing, high speed, low power consumption
- Large measurement range
- 14 parameters: Ra Rq Rz Rt Rp Rv Rz Rz JIS Rs Rsk Rku Rsm Rmr
- 128 × 64 OLED dot matrix display, digital or graphic highlight display; no viewing angle
- Display full information, intuitive and graphical displays all parameters
- Compatible with ISO, DIN, ANSI, JIS multiple national standards
- Built-in lithium-ion rechargeable battery and control circuit, high capacity, no memory effect
- Remaining charge indicator, charging signal
- Tester has charging instructions, the operator can readily understand the level of charge
- Can work more than 20 hours while the power is enough
- Large capacity data storage, can store 100 items of raw data and waveforms
- Real-time clock setting and display for easy data recording and storage
- With automatic sleep, automatic shutdown power-saving features
- Reliable circuit and software design of prevent the motor stuck
- Instrument can display a variety of information tips and instructions. For example Measurement result display, the menu

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prompts and error messages

- Metal case design, rugged, compact, portable, high reliability
- Can connected to the computer and printer
- All parameters can be printed or print any of the parameters which set by the user
- Optional curved surface pickup sensor, holes sensors, measurement stand, Sheath of sensor, extension rod, printer and analysis software

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Main Technical Parameters

| Name | | Content |
|---|-------------------------|--|
| Measurement Range | Z-Axis (vertical) | 160 μm |
| | X-Axis (horizontal) | 17.5 mm |
| Resolution ratio | Z-Axis | 0.01 μm / \pm 20 μm |
| | | 0.02 μm / \pm 40 μm |
| | | 0.04 μm / \pm 80 μm |
| Measurement item | Parameter | Ra Rz=Ry(JIS) Rq Rt=Rmax |
| | | Rp Rv R3z R3y Rz(JIS) |
| | | Rs Rsk Rku Rsm Rmr |
| | Standard | ISO, ANSI, DIN, JIS |
| | Graphic | Material ratio curve |
| Filter | | RC, PC-RC, Gauss, D-P |
| The sample length (<i>lr</i>) | | 0.25, 0.8, 2.5 mm |
| Assessment length (<i>ln</i>) | | $ln=lr \times n$ $n=1\sim 5$ |
| Sensor | Principle | Displacement differential inductance |
| | Stylus | Natural diamond, 90° cone angle, 5m tip radius |
| | Force | <4mN |
| | Skid | Ruby, Longitudinal radius 40mm |
| | Traversing speed | <i>lr</i> =0,25, <i>Vt</i> =0.135mm/s |
| | | <i>lr</i> =0.8, <i>Vt</i> =0.5mm/s |
| | | <i>lr</i> =2.5, <i>Vt</i> =1mm/s |
| | Return <i>Vt</i> =1mm/s | |
| Accuracy | | \pm 10% |
| Repeatability | | \pm 10% |
| Power supply | | Built-in 3.7V Li-ion battery; Charger: DC5V, 800ma/3hour |
| Working time | | More than 20 hours |
| Outline dimension (l \times w \times h) | | 141 \times 55 \times 40 mm |
| Weight | | About 400g |
| Working Environment | | Temperature: -20°C~40°C ; Humidity: < 90% RH |
| Store and transportation | | Temperature: -40°C~60°C ; Humidity: < 90% RH |

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Packing List:

- Main unit
- Sensor (precision parts)
- Adjustable support
- Calibration block
- Block bracket
- Charger
- USB Charging cable
- Operation manual
- Certificate
- Guarantee card
- Instrument container
- Thermal printer (optional)

Disclaimer

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