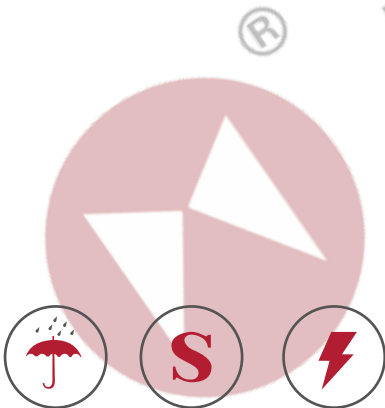


# MR100

## Pocket Surface Roughness Tester

- Professional manufacturer, best quality with competitive price ●
- Recommended by the world UT NDT inspection association for training and examination ●
- Core technology with independent intellectual property rights, certificate of CE, GOST and etc.. ●



### Product Overview

MITECH MR100 pocket surface roughness tester instrument, based on the principle of needle drawing method, with advanced sensor systems and DSP technology, it can detect the mental surface roughness accurately and sensitively. And it's the latest product. High precision, easy to carry, stable and reliable, it is widely used in a variety of metal and non-metallic surface roughness detection. It's a necessary products that improve production efficiency, reduce the cost of production.

## Technical Specifications

### Technical Specifications

Measurement Parameters( $\mu\text{m}$ )
Stroke Length(mm)
Lr(mm)
Assessment Length(mm)
Measurement Range( $\mu\text{m}$ )
Indication Error
Indication Variation
Probe tip's Arc Radius And Angle
Measuring Force and Change Rate
Sensor Head Pressure
Battery
Charger
Dimensions
Net Weight

### Technical Parameters

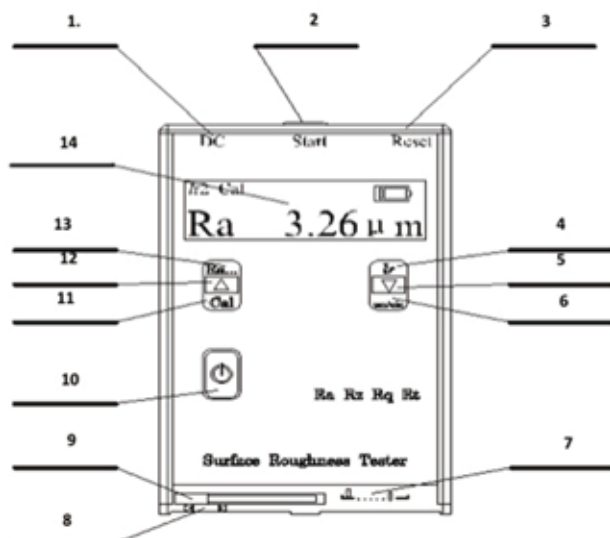
Ra、Rz、Rq、Rt
6
0.25、0.80、2.5
1.25、4.0、5.0
Ra : 0.05 ~ 10.0 , Rz : 0.1 ~ 50
$\pm 15\%$
< 12%
$10.0 \pm 2.5 \mu\text{m}$ ; $90^\circ$
$\leq 0.016\text{N}$ ; $\leq 800\text{N/m}$
$\leq 0.5\text{N}$
3.7V Lithium-polymer battery
DC 5V, 500mAh
105 mm $\times$ 70 mm $\times$ 24 mm
200g

## Features

- Measurement parameters: Ra, Rq, Rz, Rt.
- Using high-precision piezoelectric crystal transducer.
- Mechatronics design, smaller and lighter.
- 128 $\times$ 32 OLED dot matrix LCD displays clearly and without backlight.
- Using DSP chip execute control and data processing.
- Built-in lithium polymer rechargeable batteries and charging protection circuit.
- Set the sensor probe protection door, after the end of the measurement should be closed to protect the door to effectively protect the sensor probe.
- Mini-USB charging interface, available for phone charger.
- Widely used in a variety of metal and non-metallic surface roughness detection.
- Meet the relevant standards at home and abroad.
- Can manually select the sampling length.

## Structure

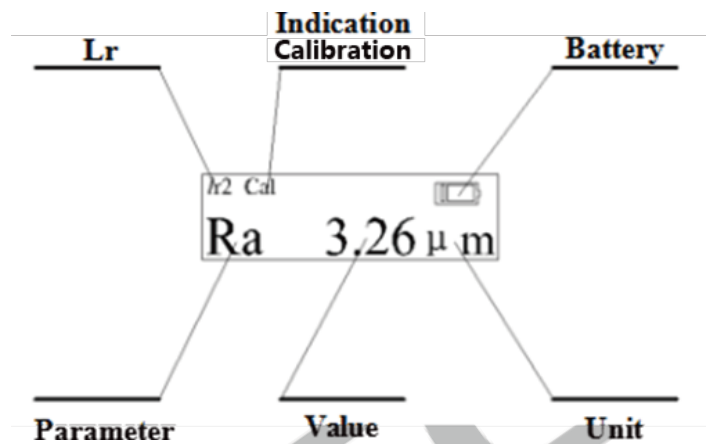
1. Charger port
2. Start key
3. Reset key
4. Lr key
5. Down arrow
6. Unit transform
7. Gate switch
8. Probe
9. Probe protection gate
10. Power Switch
11. Indication calibrate
12. Up arrow
13. Parameter switch
14. OLED display



## Measuring Principle

Needle scanning method, the inside probe detects the surface of the work piece, reciprocate along vertically. makes the piezoelectric wafer deform and output electric signal. Amplified and level translated to. DSP chip conduct digital filtering and parameter calculation for the collected data.

## Screen Display



## Application areas

- A variety of machined parts of the roughness detection;
- All kinds of metal and non-metallic processing surface detection;
- Detection, measurement, commodity inspection and other departments sampling;
- Large parts and production lines roughness quality control links.

## Working conditions

- Temperature: 0 °C ~ 40 °C;
- Relative humidity: <80%;
- No vibration around, no corrosive media.

## Configuration

	NO.	Item	QTY.	Remarks
Standard Config	1	Main unit	1	
	2	Calibration Model	1	
	3	Power Adapter	1	
	4	Attached Files	1	