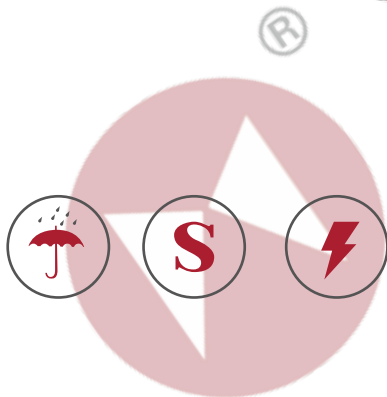


# MR200

- 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.. ●

## Portable Surface Roughness Tester



### Product Overview

The MR200 surface roughness tester is a new upgrade instrument which adopts the newest processor. This instrument adopts 2.7 inch OLED display, combines accurate measurement, exquisite design, fast process rate and complete protection in one host. It is highly favored by users since it was produced, it has large measurement range, superior than other similar products and can meet different needs of users. By connecting with Micro-USB port, Bluetooth, SD card, it can do wireless remote control, measurement, print and communicate with PC and store massive data. It has been widely used in the quality control process of various precision metals, plays an important and necessary role in rising production qualification rate and saving cost.

## Technical Specifications

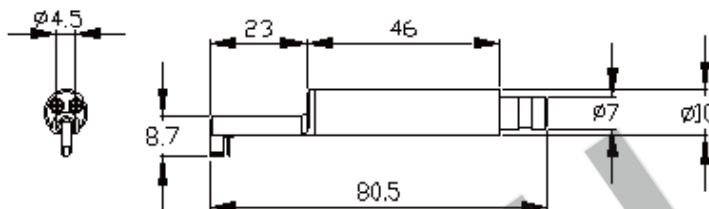
Technical Specifications	Technical Parameters
Z Axis(Vertical)	320 $\mu$ m(Ra=80 $\mu$ m)
X Axis(Horizontal)	17.5mm
	0 . 01 $\mu$ m/ $\pm$ 20 $\mu$ m
	0 . 02 $\mu$ m/ $\pm$ 40 $\mu$ m
	0 . 04 $\mu$ m/ $\pm$ 80 $\mu$ m
Z Axis(Vertical)	0 . 08 $\mu$ m/ $\pm$ 160 $\mu$ m
Parameter	Ra , Rq , Rz , Rt , Rp , Rv , RS , RSm , Rz(JIS) , Ry(JIS) , RSk , R3z , Rmax , Rpc , Rmr , Rku , R $\Delta$ a , R $\Delta$ q , R $\delta$ c , Ry ; Rk , Rpk , Rvk , Mr1 , Mr2 , A1 , A2 , V0
Standard	ISO,ANSI,DIN,JIS
Graphic	Roughness Profile ,Material Ratio Curve,Direct Profile
Filter	RC,PC-RC,Gauss,D-P
Sampling Length(Lr)	0.25,0.8,2.5mm
Assessment Length(ln)	Ln= Lr $\times$ n, n=1~5
Principle	Differential Inductance
Stylus	Natural Diamond, 90 cone ange,Radius 5 5 $\mu$ mTip Radius
Force	<4mN
Skid	Ruby, Longitudinal radius 40mm
	Lr=0.25,Vt=0.15mm/s
	Lr=0.8,Vt=0.5mm/s
	Lr=2.5,Vt=1mm/s
Traversing Speed	Return Vt=1mm/s
Accuracy	<= $\pm$ 10%
Repeatability	<=6%
Power Supply	Built-in Lithium ion battery, AC adapter 8.4V,800mA
Dimensions	112 $\times$ 50 $\times$ 47mm
Net Weight	360g

## Features

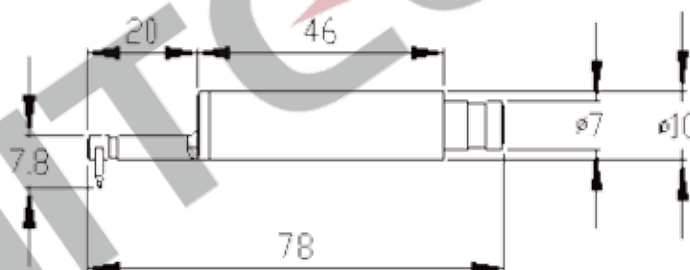
- 28 parameters : Ra , Rq , Rz , Rt , Rp , Rv , RS , RSm , Rz(JIS) , Ry(JIS) , RSk , R3z , Rmax , R $\Delta$ a , R $\Delta$ q , R $\delta$ c , Ry ; Rk , Rpk , Rvk , Mr1 , Mr2 , A1 , A2 , V0.
- Adopt 320 $\mu$ m high accuracy inductance probe.
- Four filtering methods of RC, PC-RC, GAUSS and D-P.
- Compatible with four standards of ISO, DIN, ANSI and JIS.
- Adopt 2.7inch ,128 $\times$ 64 dot OLED display , No need backlight, Displays all parmeters and graphs.
- DSP chip is used to control and process data with high speed and low power consumption.
- Can store 20 sets of measurements results.
- External SD card can store massive data.
- Built-in wireless remote control module, remote control measurement.
- Built-in bluetooth module, can be connected to bluetooth printer to print all parameters and graphs.
- Built-in Micro-USB port, can connect to PC via Datapro Software to analyze and manage the tests results.
- Built-in lithium polymer rechargeable batteries and charging protection circuit.
- Mechatronics design, smaller, easy to carry.
- Automatic off, each operation has a prompt.
- Curved surface sensor, the deep grooves sensor, small holes sensor, micro-adjusting platform, Extension bar and others.

## Probe types and sizes

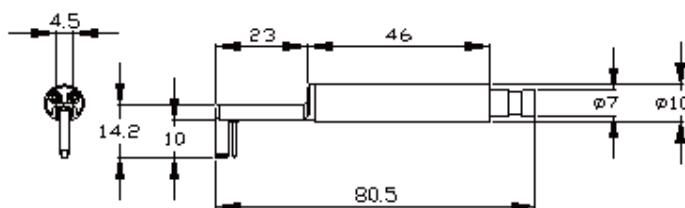
- **Standard Probe** — Standard probe is the standard configuration of the instrument, it can meet most of the surface roughness measurement, such as plane, slope, conical surface, inner hole, groove and others. It can do convenient hand-held measurement. Except this type probe, other probes require the use of special measuring platforms.



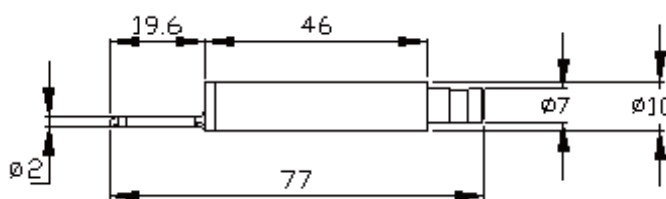
- **Curved Surface Probe** — Curved surface probe is used to measure smooth cylindrical surface roughness with radius bigger than 3mm. Even bigger radius spherical surfaces can be achieved the approximation. The larger curvature radius, smoother surface, the better the measurement result.






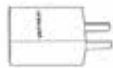





- **Deep Groove Probe** — Deep groove probe is similar with standard probe, the only difference is the depth of measurement. Compared with standard probe, it can not be hand-held, require the use of measure platform.



- **Small Hole Probe** — Small hole probe is mainly used to test hole inner surface diameter bigger than 2.5mm, other applications are similar with standard probe.



## Configurations

	NO.	Item	QTY.	Remarks
Standard Configuration	1	MR200 Main Unit	1	
	2	Standard Pick-up	1	
	3	Roughness Specimen	1	
	4	Charger	1	
	5	Cable	1	
	6	Control	1	
	7	Screw Driver	1	
	8	Specimen Plate	1	
	9	Operation Manual	1	
	10	Packing List	1	
	11	Product Certificate	1	
	12	Warranty Card	1	
Optional Configuration	1	Bluetooth Printer	1	
	2	Printer Paper	1	

## Datapro Software

This instrument can connect with PC Datapro software. The software has functions like database management, graphic display, parameters reveal, measure operation, print management, file management etc.

