

Portable Surface Roughness Tester

Brief Introduction:

Portable surface roughness tester used to measure surface roughness of various machinery-processed parts, especially for roughness measurement of complex parts, such as: Flat, Curved surface, Grooves and Holes.

Capable of evaluating surface textures with a variety of parameters according to various national standards and international standard.

The measurement results are displayed digital/graphically on the LCD, and output to the printer.



Main feature:

1. Mechatronics design, small size, light weight and convenient to use;
2. High precision inductive sensor;
- 3, using DSP chip for control and data processing, fast speed, low power consumption;
4. GAUSS filter;
- 5, 128 × 64 dot matrix OLED LCD screen
- 6, built-in lithium ion rechargeable battery and charging control circuit, high capacity, no memory effect, continuous working time is more than 20 hours;
- 7, with automatic shutdown, memory and various information;
- 8, optional curved sensor, small hole sensor, measuring platform, extension rod and other accessories
9. Compatible with ISO, DIN, ANSI and JIS national standards;
- 10, The system language can be switched between Chinese and English.
- 11, The measuring unit can be selected between metric system and inch system.

Technical Parameter:

Item		Parameter
Measuring range	Z axis (vertical)	200 μ m
	X Axis (horizontal)	15mm
Resolution	Z axis (vertical)	0.01 μ m/ \pm 20 μ m
		0.02 μ m/ \pm 40 μ m
		0.04 μ m/ \pm 80 μ m
Measuring project	Parameter	Ra、Rq、Rsm、Rsk、Rz、Rt、Rp、Rv、Rc、Rco
	Standard	ISO,ANSI,DIN,JIS
	Graphics	Bearing rate curve, roughness profile, direct profile
Filter		GAUSS filter
Sampling length		0.25,0.8,2.5mm
Rating length		Ln= lrxn n=1~5
Sensor	Measuring principle	Displacement differential inductance
	Stylus	Natural diamond, 90 cone angle, 5 μ m tip radius
	Force measurement	<4mN
	Lead	Carbide, sliding direction radius 45mm
	Sliding speed	lr=0.25, Vt=0.135mm/s
		lr=0.8, Vt=0.5mm/s
		lr=2.5, Vt=1mm/s
Return Vt=1mm/s		
Indication error		Less than \pm 10%
Indication variability		Less than 6%
Power		Built-in lithium ion rechargeable battery, charged with DC5V, 800mA charger
Dimensions		158x63.5x46mm
Weight		About 300g
Working environment		Temperature: -20 $^{\circ}$ C ~ 40 $^{\circ}$ C Humidity: < 90% RH
Storage and transportation environment		Temperature: -40 $^{\circ}$ C ~ 60 $^{\circ}$ C Humidity: < 90% RH

Measuring range:

Parameter	Display range
Ra,Rq	0.005 μ m ~ 16 μ m
Rz,R3z,Ry,Rt,Rp,Rm	0.02 μ m ~ 160 μ m

The standard configuration:

Main Unit	1	Standard sensor	1
Multi-line standard block	1	Adjustable bracket	1
Power Adapter	1	Instruction manual	1
Certificate	1	Warranty Card	1