

SRT6200 Roughness Tester



Features:

This instrument is compatible with four standards of ISO, DIN, ANSI and JIS and is widely used in production site to measure surface roughness of various machinery-processed parts, calculate corresponding parameters according to selected measuring conditions and clearly display all measurement parameters.

When measuring the roughness of a surface, the sensor is placed on the surface and then uniformly slides along the surface by driving the mechanism inside the tester. The sensor gets the surface roughness by the sharp built-in probe. This roughness causes displacement of the probe which results in change of inductive amount of induction coils so as to generate analogue signal, which is in proportion to the surface roughness at output end of phase-sensitive rectifier.

The exclusive DSP processes and calculates and then outputs the measurement results on LCD.

- * Very easy to operate
- * Multiple parameter measurement: Ra, Rz
- * Highly sophisticated inductance sensor
- * Built-in lithium ion rechargeable battery and control circuit with high capacity
- * Small in size, light in weight and easy to use
- * Can communicate with PC computer for statistics, printing and analysing by the optional cable and the software for RS232C interface.
- * Manual or automatic shut down. The tester can be switched off by pressing the Power key at any time. On the other hand, the tester will power itself off about 5 minutes after the last key operation.

Specifications:

Display: 4 digits, 10 mm LCD, with blue backlight

Parameters: Ra, Rz

Display Range

Ra: 0.05-10.00um/1.000-400.0uinch

Rz: 0.020-100.0um/0.780-4000uinch

Accuracy: Not more than 10%

Fluctuation of display value: Not more than 6%

Sensor :

Test Principle: Inductance type

Radius of Probe Pin: 10um

Material of Probe Pin: Diamond

Measurement Force of Probe: 16mN(1.6gf)

Probe Angle: 90°

Vertical Radius of Guiding Head: 48mm

Maximum driving stroke: 17.5mm/0.7inch

Cutoff length (l): 0.25mm / 0.8mm / 2.5mm optional

Evaluation length: 1~5 cut off optional

Driving speed:

sampling length = 0.25mm Vt=0.135mm/s

sampling length = 0.8mm Vt=0.5mm/s

sampling length = 2.5mm Vt=1mm/s

returning Vt=1mm/s

Resolution : 0.001 μ m if reading <10 μ m

0.01 μ m if 10 μ m \leq reading<100 μ m

0.1 μ m if reading \geq 100 μ m

Power Li-ion battery: rechargeable

Operating conditions: Temp. 0~50°C

Humidity <80%

Size: 140x57x48 mm (5.5x2.2x1.9 inch)

Weight: about 420 g

Standard Delivery:

Main Unit	1
Carrying Case	1
Standard Sensor	1
Standard Sample Plate	1
Power Adapter	1
Operation Manual	1
Screwdriver	1
Adjustable Leg	1
Sensor Protector	1

Optional Accessories:

Cable and Software for RS-232

Extension Rod

Measurement Support

Special pick-up for grooves,bores and holes

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