



SURFACE ROUGHNESS TESTER

- *VALUE*
- *VERSATILITY*
- *PERFORMANCE*



BSRT-6210

**DESCRIPTION:**

This instrument is compatible with four standards of site to measure surface roughness of various machinery-processed parts, calculate corresponding 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 by the sharp built-in-probe. This roughness cause 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 then outputs the measurement results on LCD

TECHNICAL SPECIFICATION:

Model No.	BSRT-6210
Display	4 digits, 10 mm LCD, with blue backlight
Parameters	Ra, Rz, Rq, Rt
Measuring Range	Ra, Rq: 0.005-16.00um/0.020-629.9uinch Rz, Rt: 0.020-160.0um/0.780-6299uinch
Accuracy	±10%
Fluctuation of Display Value	Not more than 6%
Sensor	Test Principle: Inductance type Radius of Probe Pin: 5um Material of Probe Pin: Diamond Dynamo-measurement of Probe: 4mN(0.4gf) 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	5L
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
Profile Digital Filter	Filtered Profile: RC Filtered Profile: PC-RC Filtered Profile: Gauss Non-Filtered Profile: D-P
Resolution	0.001µm if reading < 10µm 0.01µm if 10µm ≤ reading < 100µm 0.1µm if reading ≥ 100µm
Power Li-Ion Battery	rechargeable
Operating Conditions	Temp. 0-50°C
Size	140x57x48 mm (5.5x2.2x1.9 inch)
Weight	about 420 g

* Due to continuous product development, Image & specification can be upgrade.