## Surface Roughness Tester (Affordable Type)



Model: SRT-6100
Applications
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.

Principle

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.

Features

- \* Be compatible with standards of ISO, DIN, ANSI and JIS.
- \* Small in size, light in weight and easy to use.
- \* Highly sophisticated inductance sensor.
- \* Can measure parameters of: Ra, Rz.
- \* Manual or automatic power off. Metric /Imperial.
- \* Use RS-232 data output to connect with PC.
- \* Provide Bluetooth data output choice.



## Specifications

Model		SRT-6100	
Standards		GB/T6062, ISO4287, DIN4768, JIS B, ANSI46.1	
Display		LCD	
Parameters		Ra, Rz	
Range		Ra: $0.05 \sim 10.00 \mu m$ Rz: $0.1 \sim 50.0 \mu m$	
Accuracy		≤±15%	
Fluctuation of Display Value		≤10%	
Resolution		0.001 / 0.01 / 0.1	
Sensor	Radius of Probe Pin	10µm	
	Material of Probe Pin	Diamond	
	Measurement Force of Probe	16mN (1.6gf)	
	Probe Angle	90°	
	Vertical Radius of Guiding Head	48mm	
	Maximum Driving Stroke	12.5mm / 0.5inch	
	Cutoff length (l)	0.25mm, 0.8mm, 2.5mm	
Driving Speed	Sampling	When Length = 0.25 mm, $Vt = 0.135$ mm/s	
		When Length = $0.8 \text{ mm}$ , Vt = $0.5 \text{ mm/s}$	
		When Length = $2.5 \text{ mm}$ , Vt = $1 \text{ mm/s}$	
	Returning	Vt = 1mm/s	
Evaluation Length		1~2 L Optional	
Operating Conditions		Temp.: 0~50°C	Humidity: <80%RH
Power Supply		4x1.5V AA (UM-3) Battery	
Dimensions		128x80x30 mm	
Weight		280g	

Standard Accessories	Remarks
Main Unit	$\checkmark$
Standard Sensor SRP-100	$\checkmark$
Standard Sample Plate SSP-100	$\checkmark$
Small Screwdriver	$\checkmark$
Carrying Case	B04
Operation Manual	$\checkmark$

Optional Accessories	Remarks
RS-232C Cable with Software	$\checkmark$
Bluetooth Adapter with Software	$\checkmark$

