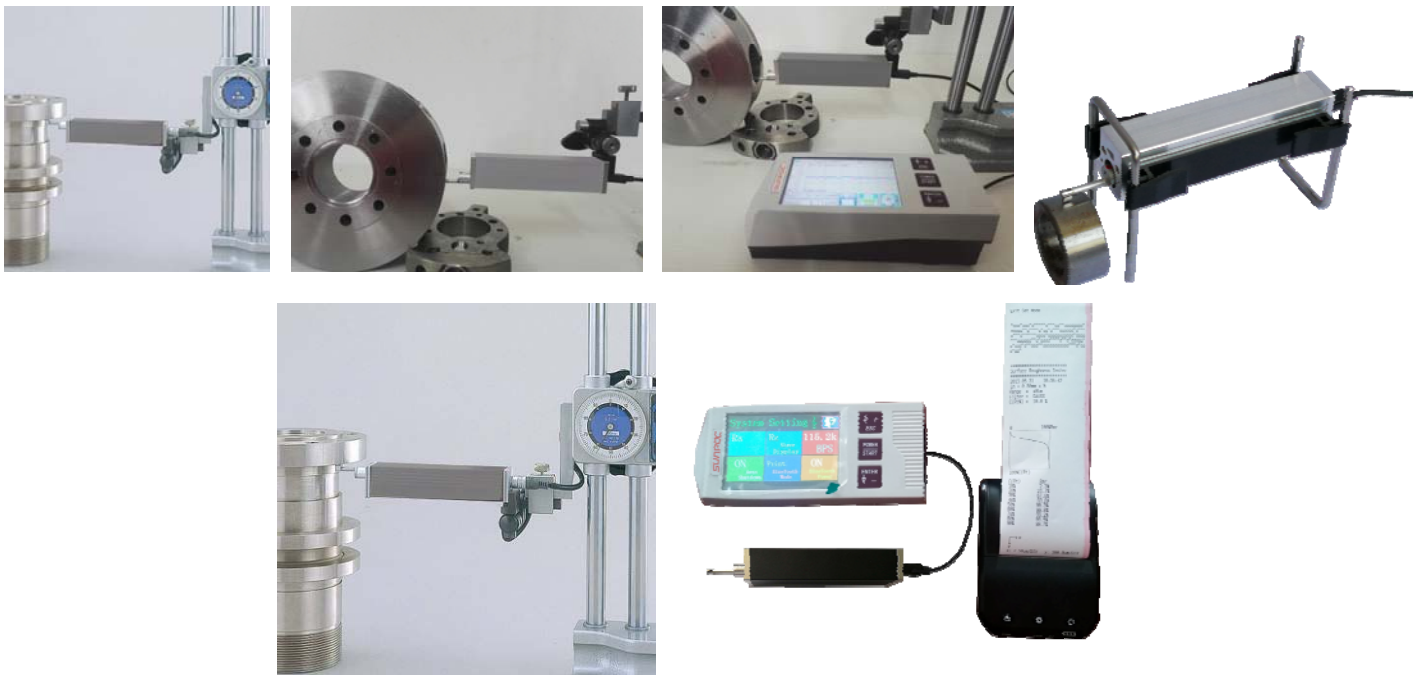


SRT-310 Surface Roughness Tester



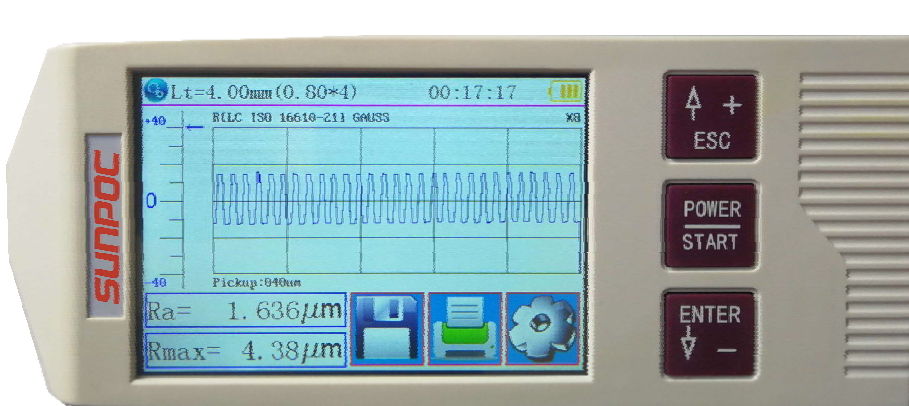
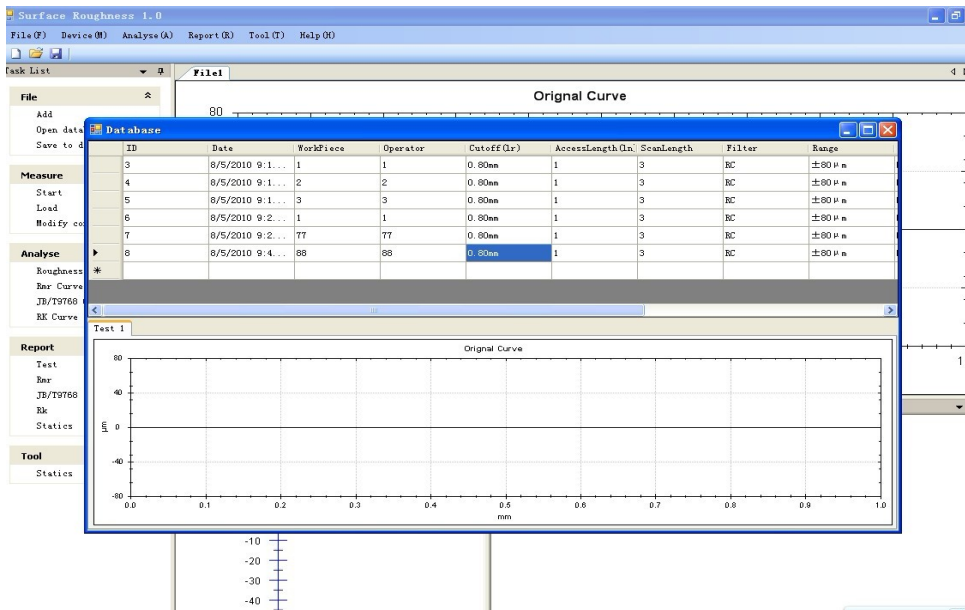
Application:

SRT-310 Surface Roughness Tester is a high accuracy instrument for measuring surface roughness. It can be used on variety of machining parts and operates on various surfaces, not only flat but also outer cone, outer cylinder, curved, pinholes, grooves, recesses grooves and axle etc. The SRT-310 allows surface roughness measurement both on metal and non-metal work-pieces. It is suitable for machining and manufacturing, quality control, inspection departments, especially for measurement on large and heavy work-piece, assembly line, on site. The SRT-310 is a Non Destructive Testing instrument, damage won't caused to testing piece.



Feature:

- ◆ Mechatronics and ergonomics design, small size, light weight, easy to operation
- ◆ The stylus drive unit can be stored within the main unit for standard measurement, or separated from the display unit by using the supplied cable which allows more flexible measurement in any orientation. The driver can be separated and reattached in one simple step
- ◆ 3.5 inches color graphic LCD touch screen, it includes a backlight for visibility in dark environments
- ◆ It displays all parameter and graphic
- ◆ The SRT-310 can be operated using the buttons or the touch screen
- ◆ Measurement range up to 320 μ m(-160 μ m~160 μ m)
- ◆ Large internal memory: 100 item of raw data and curves can be stored
- ◆ The SRT-310 provides Bluetooth Capability , support wireless connection with mobile and mini printer
- ◆ Built-in lithium-ion rechargeable battery and controlling circuit, high capacity, no memory effect
- ◆ There is remaining charge indicator, charging hint
- ◆ It works over 50 hours while fully charged.
- ◆ Language: Chinese and English
- ◆ DSP chip control and data processing, high speed, low power consumption
- ◆ Real-time clock setting and display for easy data recording and storage
- ◆ With auto sleep, auto power off, power-saving features
- ◆ Reliable circuit and software design to preventing the motor stuck
- ◆ All parameters or any of the parameters which set by users can be printed



Specification:

Measuring rang	The Z axis (vertical)	320 μ m (-160 μ m~160 μ m) , 12600 μ in (-6300 μ in~+6300 μ in)
	The X axis move	17.5mm (0.69 inch)
	Parameter range	Ra Rq:0.005 μ m-32 μ m Rz R3z Ry Rt Rp Rm:0.02 μ m-320 μ m Rsk: 0-100% RS RSm: 1mm Tp: 0-100%
Resolution	the Z axis (vertical)	0.002 μ m/ \pm 20 μ m, 0.004 μ m/ \pm 40 μ m 0.008 μ m/ \pm 80 μ m, 0.02 μ m/ \pm 160 μ m
Parameter		Ra Rz Rq Rt Rc Rp Rv R3z R3y Rz(JIS) Ry Rs Rsk Rku Rmax RsmRmr RPc Rk Rpk Rvk Mr1 Mr2
Graphic		load curve, Roughness profile, Primary Profile
Filter		RC,PC-RC,Gauss,D-P
The sampling length(lr)		0.25, 0.8, 2.5mm
Assessment length (ln)		Ln= lr*n n=1~5
Sensor	Measuring principle	Inductance
	Stylus tip	Diamond, 90 cone angle, 5 μ mR
	Force	Measuring force<4mN, Skid force<400mN
	Probe head	hard alloy, skid radius of curvature: 40mm
	Traversing 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
Precision		0.001 μ m
Tolerance		not more than \pm 10%
Repeatability		not more than 6%
Power supply		Built-in Lithium ion battery 3200mAh, Charger :DC5V
Outline dimension		Main unit: 158 \times 55 \times 52mm drive unit: 23 \times 27 \times 115mm
Weight (main unit)		Around 380g
Zoom of height adapter		40mm
working Environment		Temperature: - 20 $^{\circ}$ C ~ 40 $^{\circ}$ C Humidity: < 90% RH
standards		ISO4287, ANSI B46.1, DIN4768, JIS B601

Standard packing:

Item	Qty
Host	1 PC
Sensor	1 PC non warranty parts
Height adapter	1 Set
Calibration block and bracket	1 PC
Bracket for Calibration Block	1 PC
Extension cable	1 PC length: 1m
Touch pen	1 PC
Power Charger & USB Cable	1 PC
User manual	1 PC
Instrument case	1 PC
Warranty	2 Years

Optional accessories:

Image	Description
	Extending Rod, extending rod increases the depth for pickup to enter the part. Length of extending rod is 50mm.
	Right Angle Rod, change the position of the sensor, mostly use for measure surface of particular groove.
	Small Hole Sensor, to measure most of the plane, inclined plane, cone surface, inner hole, groove and other surface roughness, in addition to the standard sensor, other special sensors are needed to measure the measuring platform.
	Curved Surface Sensor, to measure smooth cylindrical surface which radius is larger than 3mm, for the large radius smooth spherical surface and other surface also can obtain good approximation, need to work with platform.
	pinhole Sensor, to measure the inner surfaces of holes with radius more than 2mm, better to work with platform
	Groove sensor, measure surface in groove with width $\geq 2.5\text{mm}$, depth $\leq 3\text{mm}$, and on steps with height $\leq 3\text{mm}$
	Deep Groove Sensor, measure groove with width wider than 3mm and depth deeper than 10mm, or the surface roughness of step with height less than 10mm, also can used to measure the planar, cylindrical used with platform, better to work with platform
	Metal Substrate Working platform, adjustable height 200mm. With flexible and stable operation and wider application range.
	Marble Substrate Working Platform, adjustable height 300mm. With flexible and stable operation and wider application range.
	Height Gauge Adaptor, If the the measuring height is arbitrarily set or the drive cannot be firmly and stably hold, please use height gauge adapter as assistance
	Standard Roughness Calibration Block Multi-engraved lines (Square Wave) Made by optical glass, with high hardness, high accuracy standard roughness value, anti-scratch, has longer life than metal roughness block. Approximation: Ra=0.1um, 0.2um, 0.4um, 0.8um, 1.6um, 3.2um, 6.4um
	Standard Roughness Calibration Block Single engraved lines Made by optical glass, with high hardness, high accuracy standard roughness value, anti-scratch, has longer life than metal roughness block. Approximation: Ra=0.1um, 0.2um, 0.4um, 0.8um, 1.6um, 3.2um, 6.4um)
	Roughness Comparator (30 pcs/set)
	Charge and Cable for Surface Roughness Tester Charger: US and EU standard optional Cable: USB interface
	Mini thermal printer External printer, connect by bluetooth printer.
	Thermal printing paper Packing: 10pcs/bag

