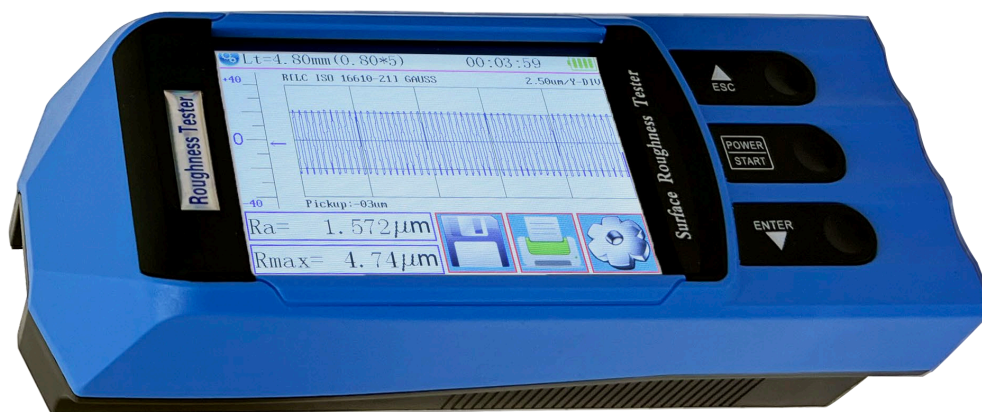
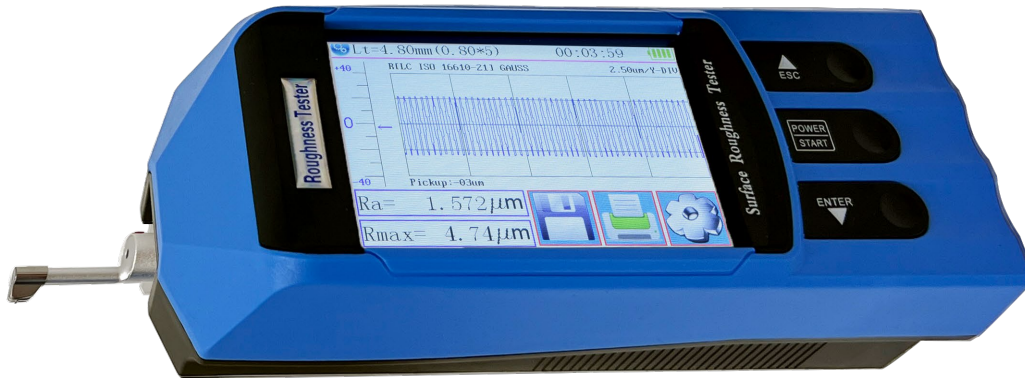


Surface Roughness Tester SRTPro Plus



TECHNICAL DATA

Name		Content	
Measurement Range	The Z axis (vertical)	320μm (-160μm~160μm) / 12600 μ in (-6300 μ in~+6300 μ in)	
	The X axis (horizontal)	17.5mm/ 0.69"	
Resolution	The Z axis (vertical)	0.002μm/±20μm	0.004μm/±40μm
		0.008μm/±80μm	0.02μm/±160μm
Measurement item	Evaluation Parameter	Ra Rz Rq Rt Rc Rp Rv R3z R3y Rz(JIS) Ry Rs Rsk Rku Rmax Rsm Rmr Rpc Rk Rpk Rvk Mr1 Mr2	
	Standard	ISO4287, ANSI b46.1, DIN4768, JISb601	
	Graphic	Primary profile, Roughness profile, load curves	
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	Principle	The Differential Inductance	
	Stylus tip	Natural Diamond, cone angle 90° , tip radius 5μm	
	Force	Measuring force: 4mN, Skid force: less than 400mN	
	Skid	hard alloy, skid radius 40mm	
	Measuring speed	lr=0.25, Vt=0.135mm/s lr=0.8, Vt=0.5 mm/s lr=2.5, Vt=1mm/s Return Vt=1mm/s	
Tolerance		± (5nm+0.1A) A: Ra of calibration test block	
Repeatability		No more than 3%	
Residual profile		No more than 0.010μm	
Power supply		Built-in 3.7V 3000mAh Lithium ion; Charger: DC5V,800mA/ 3 hour	
SIZE	Display unit	158×55×52mm	
L×W×H	Drive unit	115×23×27mm	
Weight		About 500g(Display Unit + Drive Unit + Sensor)	
Working Environment		Temperature: - 20℃ ~40℃, Humidity: < 90% RH	
Store and Transportation		Temperature: - 40℃~ 60℃, Humidity: < 90% RH	

MEASURING RANGE

Parameter	Range
Ra Rq	0.005µm ~ 32µm
Rz R3z Ry Rt Rp Rv	0.02µm ~ 320µm
Rsk	0 ~ 100%
RS, RSm	0.02-1000µm
Rmr (tp)	0 ~ 100%

APPLICATION

This Surface Roughness Tester is a high-accuracy instrument for measuring roughness on hard surfaces including metal and non-metal, suitable for various shapes: flat, outer cone, outer cylinder, curved, pinholes, grooves, deep grooves etc.

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 drive unit can be separated and reattached in one simple step.

It is suitable for measurement on large and heavy workpieces, assembly line, on-site, and for small workpieces. Applicable to the field of machining and manufacturing, quality control, and inspection departments.

MAIN FEATURE

- ❖ Touchscreen, 3.5-inch (480×320) large TFT display with backlight, wide viewing angles.
- ❖ Practical information on the display: measurement parameters & roughness curve, Rmr curve, error indicator, battery indicator, stylus position, device states
- ❖ It can be operated using buttons and the touch screen.
- ❖ Large range: X-axis: 17.5 mm, Y-axis: 320 µm
- ❖ Large internal memory: 100 items of raw data and curves can be stored
- ❖ Bluetooth capability for wireless connection to printer, mobile phones (Android)
- ❖ Over 50 hours of working time while fully charged.
- ❖ DSP chip control and data processing, high-speed, low power consumption
- ❖ Real-time clock setting and display for easy data recording and storage
- ❖ Auto sleep and auto power-off can be set freely.
- ❖ Reliable circuit and software design to prevent the motor from getting stuck
- ❖ All required parameters can be printed when selected.

NOTE

1. Except for flat surfaces, we recommend this tester in combination with an optional height gauge or magnetic stand. (if the flat surface is too small for placing the complete device, a suitable height adaptor is still required)

2. All sensors measure flat workpieces, measure cylindrical and conical workpieces along the axial direction; we recommend using a suitable stand if necessary.

STANDARD DELIVERY

ITEM	QTY
Main Unit	1 PC
Axial-type Sensor (non-warranty parts)	1 PC
Adjustable height support feet	1 Set
Calibration test block	1 PC
Test block bracket	1 PC
1m Extension cable	1 PC
Touch pen	1 PC
Charging plug & USB Cable	1 PC
User manual	1 PC
Instrument case	1 PC
Warranty	2 Years

RELATED OPTIONAL ITEMS

Image	Description
	KS55 - Extension Rod, extends the sensor by 50 mm, can add max 3 pieces.
	KS90 - Right Angle Rod, changes the sensor direction to enable transverse movement, mainly for the surface of specific grooves, such as crankshaft journals, etc.
	KS100 - Small Hole Sensor, for flat, inclined, and conical workpieces, and measures in holes with a diameter >5 mm and a depth <15 mm.
	KS110 - Curved Surface Sensor, for convex or concave surfaces with a curvature radius of 3 mm or more.
	KS120 -very small hole Sensor, in holes with a diameter >2 mm and a depth <9 mm.
	KS130 - Groove sensor, measuring in grooves with a width greater than 3 mm and a depth less than 3.2mm, the distance from the stylus tip to the front edge is 3mm.
	KS160 - Axe type Sensor, measuring in grooves with a width greater than 3 mm and a depth less than 3.2mm, the distance from the stylus tip to the front edge is 1.6mm. Measuring for flat surface when used for split type roughness tester.



KS131 - Deep Groove Sensor, in grooves with a width greater than 3 mm and a depth less than 10 mm. and measures steps less than 10mm in height.



KS131P - 7mm Groove & Curved Sensor, in grooves with a width > 1.5 mm and a depth < 7 mm. and measures steps less than 10mm in height.



KS132 - 13mm Groove & Curved Sensor, in grooves with a width > 2 mm and a depth < 13 mm, and measures steps less than 15mm



KS133 - 13mm narrow Groove Sensor, in grooves with a width > 1.2 mm and a depth < 13 mm, and measures steps less than 15 mm



KS135 - 23mm Groove Sensor, in grooves with a width > 2 mm and a depth < 23 mm. and measures steps less than 25 mm



KA520 -Metal Substrate Working platform, elevating, convenient and stable for test process.

1. Height Adjustable: 200 ± 1 mm
 2. Return error: $\leq 1/6$ round of lifting wheel
 3. Base Size: 330mm $\times$ 295mm $\times$ 12mm
 4. Rotation angle: 80degrees
- Packing Size & weight: 42*21*15cm 5KG
-



KA620 -Marble Substrate Working Platform, including V block

- 1.Height Adjustable: 300 ± 1 mm
- 2.Return error: $\leq 1/6$ round of lifting wheel
3. Marble Size: 400mm $\times$ 250mm $\times$ 70mm
- 4.Rotation angle: 80 degrees

Packing Size & weight:

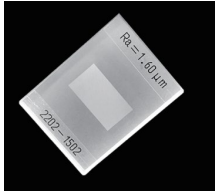
column 54*24*15cm, 4.5kg; marble base 43.5*28.5*10cm ,23kg



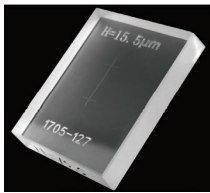
Height Gauge, adjust height and direction of a tester. Especially suit for split type surface roughness tester, Adjustable maximum height: 300mm.



Magnetic Stand, arm length: about 200mm including joint. The column: about 200mm in height including base. Adjustable maximum height: 150mm
Rod of the magnetic adaptor (the part attached to the tester) $\phi 8\text{mm}$



Standard Roughness Calibration Block Multi-reticle specimen (Square Wave)
Made by optical glass, with high hardness, high accuracy standard roughness value, anti-scratch, has longer life than metal roughness block.
Meet standard GB/T19067.1-2003 and ISO5436-1:2000
Approximation: $R_a=0.1\mu\text{m}, 0.2\mu\text{m}, 0.4\mu\text{m}, 0.8\mu\text{m}, 1.6\mu\text{m}, 3.2\mu\text{m}, 6.4\mu\text{m}$
Customized Value and Sine Wave available, welcome to inquire.



Roughness Calibration Block Single engraved lines
Meet standard GB/T19067.1-2003 and ISO5436-1:2000
Approximation: $H10-20\mu\text{m}$ (roughness tester use filter D-P, test RT value)
Customized Value available, welcome to inquire.



Mini thermal printer
Size: $108*76*46.6\text{mm}$
External printer, interface: USB, Blue Tooth, the Baud rate will be set accordingly for connecting tester before delivery. suitable for our surface roughness tester, hardness tester, thickness gauge. Paper size: width is $(57.5\pm 0.5)\text{mm}$, diameter is 30mm