

SRT420 Model



SURFACE ROUGHNESS TESTER

PRODUCT CHARACTERISTICS

1. ARM chip, with fast data control speed and low power consumption.
2. Colour Screen, Display all parameters and Graphics and waveforms.
3. Large range, can test 23+ parameters: Ra,Rz,Rq,Rt,Rp,Rv,Rmax,R3z,RSK,RS,RSm,Rmr,Rku,Rpc,etc
4. With automatic calibration function, to achieve high accuracy.
- 5.4 Colours can be optional,Red/Blue/White/Black
- 6.Compatitable with ISO,DIN,ANSI,JIS international standards.
- 7.With PC and Mobile phone(Only Android) Control.
- 8.Compatible with a variety of sensors: **Standard sensor,Small hole sensor, Groove sensor,Deep groove sensor,Curved sensor.**

APPLICATION AREA

Widely used in machining, aerospace, auto parts, communications, electricity, electronics and other industries, but also suitable for universities, scientific research institutes, technical supervision bureau, special inspection and so on.

TECHNICAL PARAMETER

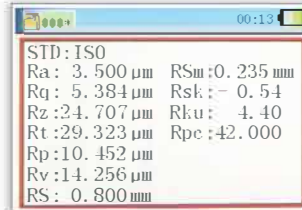
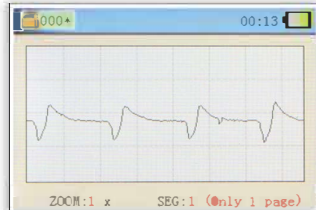
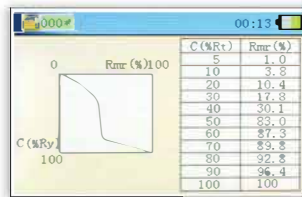
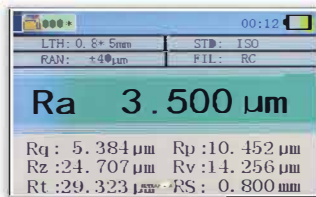
Measurement parameters	Ra,Rq,Rz,Rv,Ry,Rk,Rpk,Rvk,R3y,R3z,Rt,Rp,Rmax,RS,RSm,Rku,Rsk,Rpc,Mr1,Mr2
Measurement range (um)	Ra:0.025-12.5
Display range (um)	Ra,Rq:0.005-16um. Rz,Ry,Rt,Rp,Rv,Rmax,R3z: 0.02-160um. RS,RSm: 1mm. Rmr:0-100%(%Rt). Rsk:0-100%
Range (Z-axis)	±20/±40/±80 um
Maximum resolution	0.001um
Filter	RC、PC-RC、GAUSS、D-P
Sampling length	0.25mm,0.8mm,2.5mm
Evaluation length	(1-5)l,optional,l is sampling length
Maximum drive length	17.5mm/0.7inch
Minimum drive length	1.3mm/0.052inch
Indication error	≤±10%
Indicating value variability	≤6%
Display mode	128*64 OLED
Overall dimension	140mm×52mm×48mm

STANDARD CONFIGURATION

Name	QTY	Name	QTY
Host	1	Standard templet	1
Adaptor	1	USB cable	1
Specification	1	warranty card	1
Certification	1	Packing list	1



1



320 * 240 primary color LCD display screen

1. All Visual display
2. Measurement process display measure parameters and waveform contours
3. One measurement can display 7 results
4. Can check Rmr and 23+ roughness

2



FLASH Disk (random)
(default configuration)

Code: FD-0820

Contain PC and Android App

3

Using PC measurement software with
strong scalability

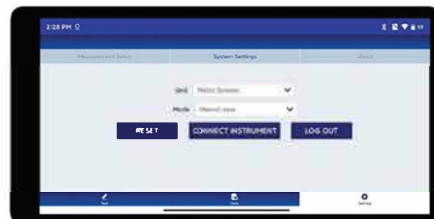
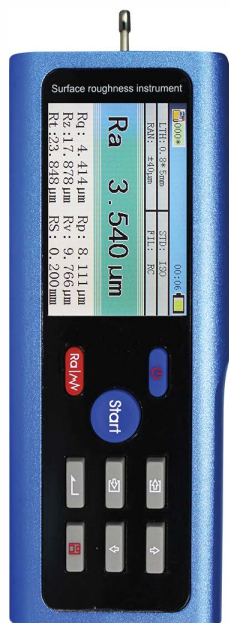


Code: PreSurf V2.0

4

The latest developed measurement synchronization software. For Android APP
With Original contour display, export report, and more functions

Code: Roughness.apk V2.0



STANDARD ACCESSORIES

Protective cover-For all sensors used to different kinds of surfaces

Code:SR420-T2



OPTIONAL ACCESSORIES

Support Micro SD (32G MAX)

Code:SD-422

SanDisk
32 GB 

OPTIONAL ACCESSORIES (SUITABLE FOR MORE MODELS OF ROUGHNESS TESTER)



Material: cast iron

Model: TA320

Name: light weight test platform

maximum workpiece height is 300 mm



Material: Marble

Model: TA620

Name: Heavy weight test platform

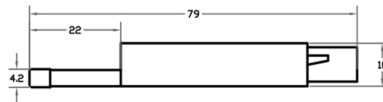
maximum workpiece height is 500 mm



Probes



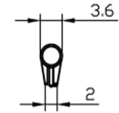
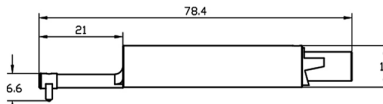
TS100
Standard sensor (standard)



It can measure the roughness of plane and cylindrical surfaces, and can measure the minimum diameter of inner holes of 5mm and the maximum depth of 22mm.



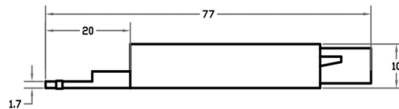
TS110
Curved surface sensor (optional)



It can measure the roughness of concave and convex workpiece surfaces with a curvature radius greater than 6mm, and can also measure suitable planes and cylinders.



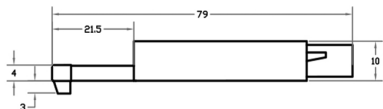
TS120
Small hole sensor (optional)



It can measure the surface roughness of holes with a diameter greater than 2mm, with a maximum depth of 9mm. It can also measure planes and cylinders.



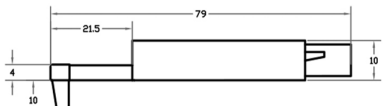
TS130
Groove sensor (optional)



It can measure the surface roughness of grooves with a width greater than 2mm and a depth less than 3mm, or steps with a height less than 3mm. It can also measure the surface roughness of planes and cylinders.



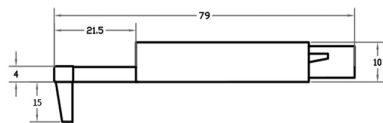
TS131
Deep groove sensor (optional)



It can measure the surface roughness of grooves with a width greater than 3mm and a depth less than 10mm, or steps with a height less than 10mm. It can also measure planes and cylinders.



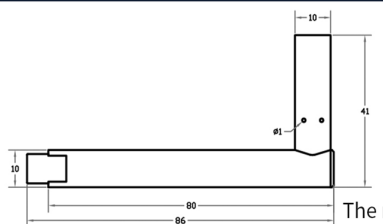
TS132 (optional)
Extended deep groove sensor



It can measure the surface roughness of grooves with a width greater than 3mm and a depth less than 15mm, or steps with a height less than 15mm. It can also measure planes and cylinders.



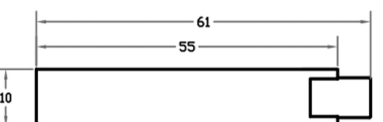
RS002
Adapter rod (optional)



The machine can be moved laterally for measurement



RS001
Extension rod (optional)



The length of various sensors can be extended, which is beneficial for measuring deep holes

SPECIFICATION

Model	SRT420	
Parameters	Ra、Rq、Rz、Rv、Ry、Rk、Rpk、Rvk、R3y、R3z、Rt、Rp、Rmax、RS、RSm、Rku、Rsk、Rpc、Mr1、Mr2	
Measurement range	Ra:0.005-12.5μm	
	Z-axis (vertical) 160 μm	
	X-axis (level) 17.5mm(0.69 inch)	
Display range	Ra、Rq: 0.005 -16μm;	
	Rz、Ry、Rt、Rp、Rv、Rmax、R3z: 0.02-160μm;	
	RS、RSm: 1mm; Rmr: 0-100% (%Rt) ; Rsk: 0-100%	
Z-axis range(optional)	±20μm、±40μm、±80μm	
Accuracy	0.001μm	
Filters	RC、PC-RC、GAUSS、D-P	
Smpling length lr	0.25mm,0.8mm,2.5mm	
Evaluation length Ln	Ln= lr *n (n=1~5)	
Maximum drive stroke	17.5mm/0.7inch	
Minimum drive stroke	1.3mm/0.052inch	
Indication error	≤ ±10%	
Indication variability	≤3%	
Display mode	128×64 OLED Screen	
Overall dimension	140mm×52mm×48mm	
Weight	412g	
Work environment	-20℃- 40℃ , humidity< 90%RH	
Sensor	Principle	Inductive type
	The Needle	Diamond, 5 μm Needle tip radius
	Measurement force	4mN(0.4gf)
	Angle	90°
	Guide radius	45mm

STANDARD DELIVERY

Name	QTY
Host machine	1
Calibration block and support	1
Sensor jacket	1
USB cable	1
Standard sensor	1
AC/DC Power adaptor	1
Packing list	1
Warranty card	1
Certification	1
U disk	1

OPTIONAL ACCESSORY

Curved sensor	TS110
Groove sensor	TS130
Extened Deep groove sensor	TS131
Small hole sensor	TS120
Extension Rod	RS001
Transfer structure	RS002
Measurement support frame	SR200-T1
Protective Cover	SR220-T2
Micro SD card	SD-422
Light test platform (iron)	TA320
Heavy test platform (Marble)	TA620