KOSEMITSU

PRECISION MEASURING INSTRUMENTS

DURABLE
VERSATILE
TRUSTED

MEASURE **BETTER** FOR A PRECISE TOMORROW

Reliable Solutions for
Surface, Form and Dimensional
Measurement

MANUFACTURING | AUTOMOTIVE | AEROSPACE | QUALITY CONTROL

MARKETED BY

PRECISION IS OUR PROFESSION
BHAGWATI
SINCE 1976

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SURFACE ROUGHNESS TESTER

SRT-420

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. Colours can be optional,Red/Blue/White/Black
6. Compatitable with ISO,DIN,ANSl,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.

TECHNICAL SPECIFICATIONS

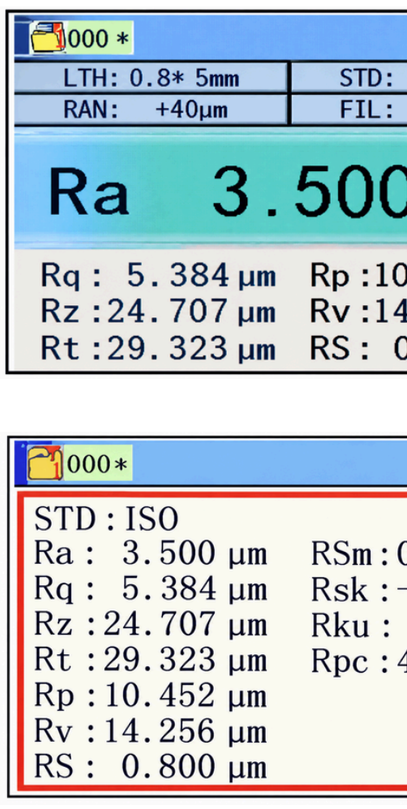
Measurement parameters	Ra,Rq,Rz,Rv,Ry,Rk,Rpk,Rvk,R3y,R3z,Rt,Rp, Rmax,RS,RSm,Rku,Rsk,Rpc,Mr1 ,Mr2
Measurement range (μm)	Ra:0.02 5-12.5
Display range (μm)	Ra,Rq:0.005-16μm. Rz,Ry,Rt,Rp,Rv,Rmax,R3z: 0.02-160μm. RS,RSm: 1mm. Rmr:0-100%(0/oRt). Rsk:0-100%
Range (Z-axis)	±20/±40/±80 um
Maximum resolution	0.001um
Filter	RC PC-RC GAUSS, D-P
Sampling length	0.25mm,0.8mm,2. 5mm
Evaluation length	(1-5)1,optional,1 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	140mmX52mmX48mm

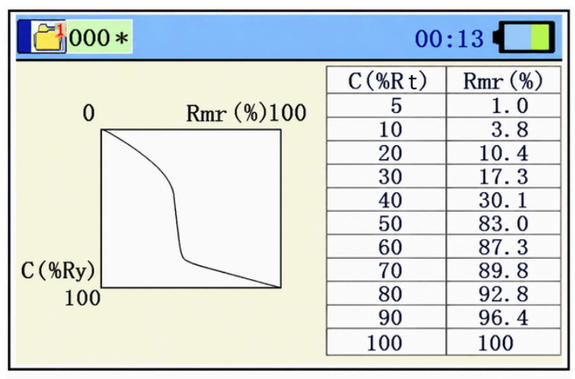
STANDARD CONFIGURATION

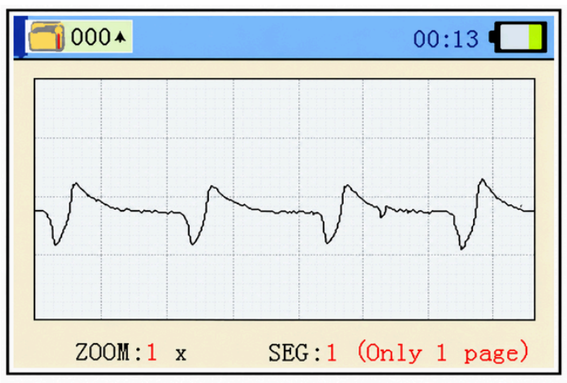
Name	QTY
Host	1
Adaptor	1
Specification	1
Certification	1
Standard Template	1
USB Cable	1
Warranty Card	1
Packing List	1

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.







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

FLASH Disk
(default configuration)

Contain PC and Android App

Using PC measurement software with strong scalability

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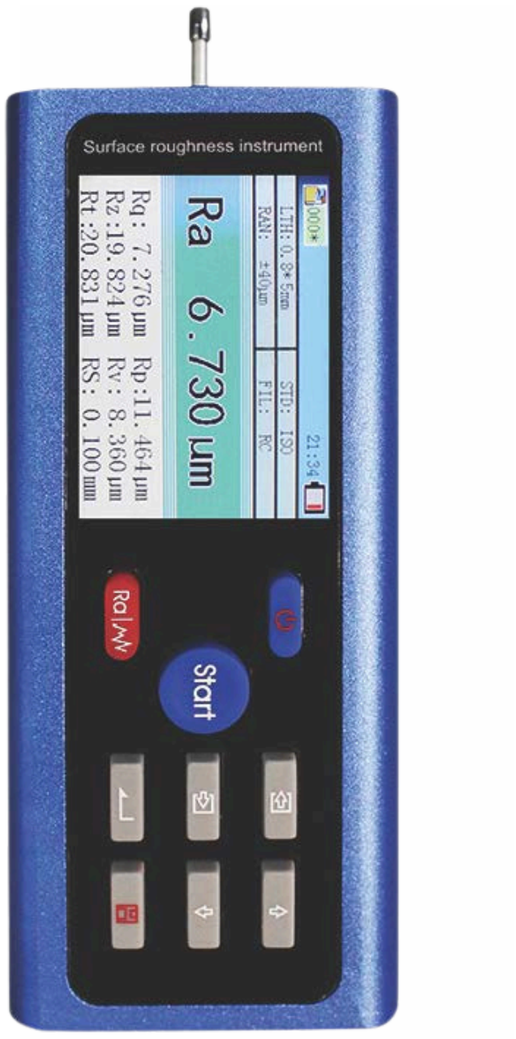
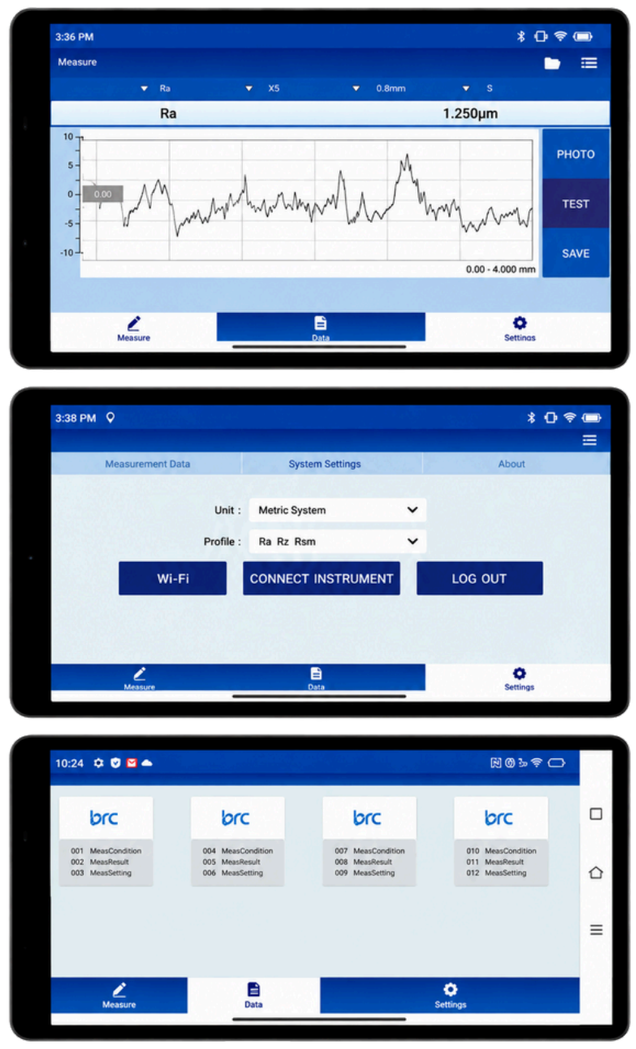


The latest developed measurement synchronization software. For Android APP With Original contour display, export report, and more functions



STANDARD ACCESSORIES

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

OPTIONAL ACCESSORIES

Support Micro SD (32G MAX)

SanDisk
32 GB

OPTIONAL ACCESSORIES (SUITABLE FOR MORE MODELS OF ROUGHNESS TESTER)

Material: Cast iron

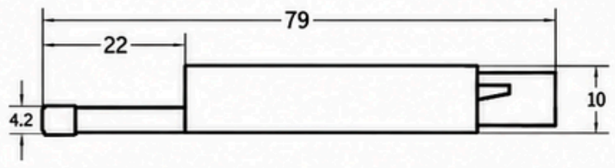
Name: Light weight test platform maximum workpiece height is **300 mm**

Material: Marble

Name: Heavy weight test platform maximum workpiece height is **500 mm**

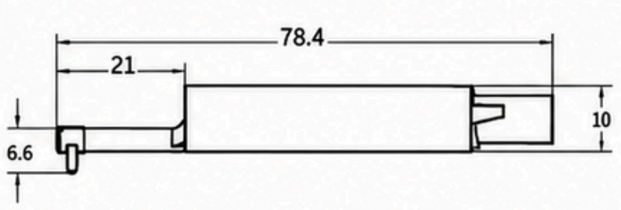
SURFACE ROUGHNESS TESTER PROBES

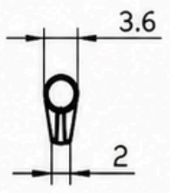
Standard sensor (standard)



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.

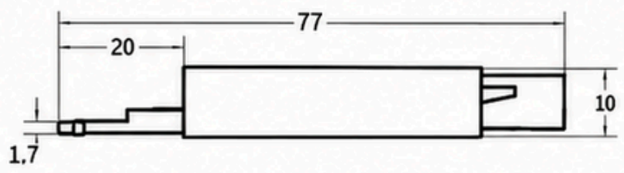
Curved surface sensor (optional)





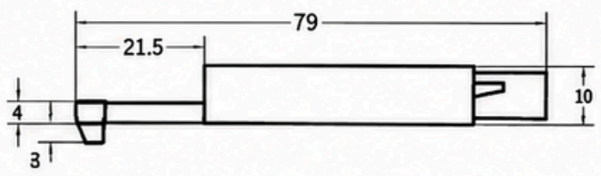
It can measure the roughness of concave and convex workpiece surfaces with a curvature radius greater than 6mm, and can also measure suitable planes and cylinders.

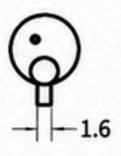
Small hole sensor (optional)



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.

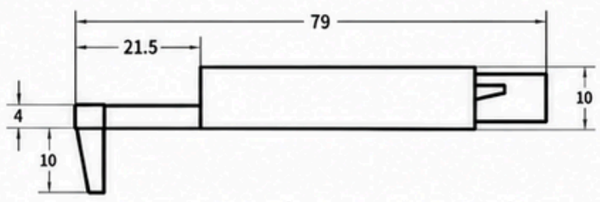
Groove sensor (optional)





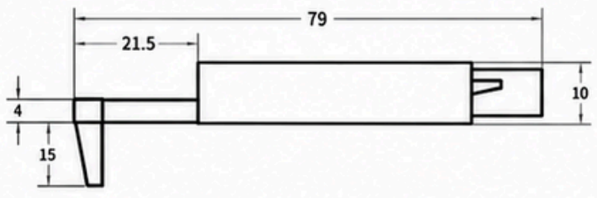
It can measure the surface roughness of grooves with a width greater than 2mm and a depth less than 3mm, or steps with a height less than 3mm. It can also measure the surface roughness of planes and cylinders.

Deep groove sensor (optional)



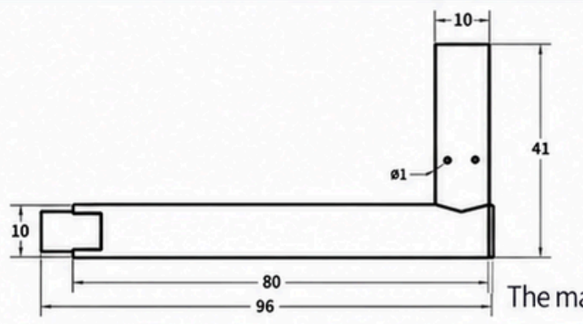
It can measure the surface roughness of grooves with a width greater than 3mm and a depth less than 10mm, or steps with a height less than 10mm. It can also measure planes and cylinders.

Extended deep groove sensor



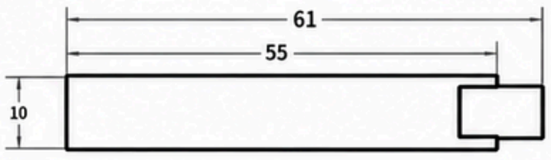
It can measure the surface roughness of grooves with a width greater than 3mm and a depth less than 15mm, or steps with a height less than 15mm. It can also measure planes and cylinders.

Adapter rod (optional)



The machine can be moved laterally for measurement

Extension rod (optional)



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

TECHNICAL SPECIFICATIONS

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:0.005-12.5
Display range (µm)	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%
Range (Z-axis)	±20µm,±40µm,±80 µm
Accuracy	0.001µm
Filter	RC, PC-RC, GAUSS, D-P
Sampling length	0.25mm,0.8mm,2.5mm
Evaluation length	Ln= Ir *n (n=1-5)
Maximum drive stroke	17.5mm/0.7inch
Minimum drive stroke	1.3mm/0.052inch
Indication error	</=±10%
Indicating value variability	</=3%
Display mode	128*64 OLED
Overall dimension	140mmX52mmX48mm
Weight	412g
Work environment	-2o·c- 4o•c, Humidity< 90%RH
Principle	Inductive type
The needle	Diamond, 5 µm Needle tip radius
Measurement force	4mN(0.4gf)
Angle	90 degree
Guide radius	45mm

STANDARD CONFIGURATION

Name	QTY
Host	1
Calibration Block and Support	1
Sensor Jacket	1
USB Cable	1
Standard Sensor	1
AC/DC Power adaptor	1
Warranty Card	1
Packing List	1
Certification	1
U disk	1

OPTIONAL ACCESSORIES

Curved sensor	TS 110
Groove sensor	TS 130
Extened Deep groove sensor	TS 131
Small hole sensor	TS 120
Extension Rod	RS 001
Transfer structure	RS 002
Measurement support frame	SR200-T1
Protective Cover	SR220-T2
Micro SD card	SD-422
Light test platform	TA320
Heavy test platform	TA620

SURFACE
FORM
DIMENSION
QUALITY

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FOR MORE INFORMATION PLEASE CONTACT:

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