

DATA  
OUTPUTCAN BE CONTROLLED  
BY COMPUTER

- 21 roughness parameters
- Display roughness value, profile and curve
- Memory of maximum 100 results
- Automatic power off

printer (optional)



data transmission cable (optional)



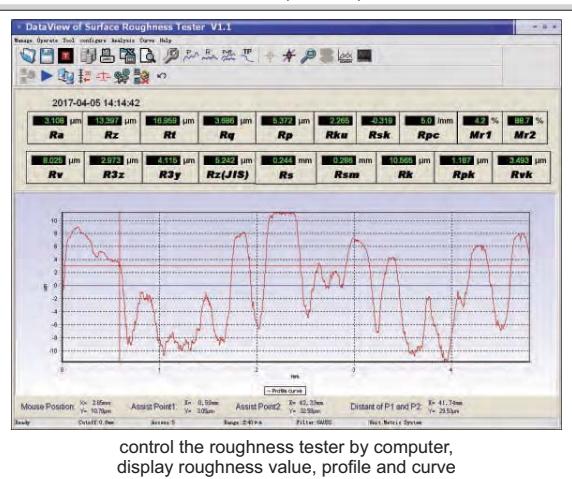
probe cover (included)



put the small workpieces directly under the probe for measurement



software (included)

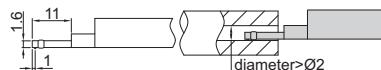
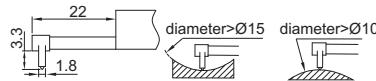
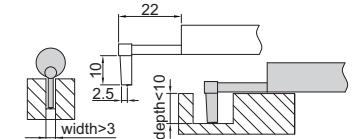


adjustable stand (included)

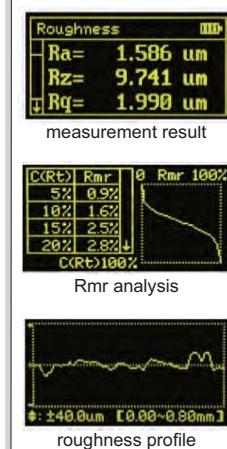


## ROUGHNESS TESTER CODE ISR-C002

Unit: mm

extension rod (optional),  
code ISR-C002-ERtransverse rod (optional),  
code ISR-C002-TRsmall hole probe (optional),  
code ISR-C002-SBPcurved surface probe(optional),  
code ISR-C002-SURdeep groove probe (optional),  
code ISR-C002-DGPsoftware CD  
(included)light duty test stand  
(optional)

screen display



### STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Adjustable stand	1 pc
Probe cover	1 pc
Software	1 pc
AC/DC adapter	1 pc

### OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Transverse rod	ISR-C002-TR
Deep groove probe	ISR-C002-DGP
Small hole probe	ISR-C002-SBP
Curved surface probe	ISR-C002-SUR
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND
Printer	ISR-C002-PRINTER
Data transmission cable	ISR-C002-SPC

### SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, RS, R3z, R3y, Rt, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry (JIS), Rmax
Range		160μm
Accuracy		±10%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-off		1 to 5
Traverse speed		0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB
Power		built-in rechargeable battery
Dimension (L×W×H)		141×55×40mm
Weight		400g

20

### OPTIONAL ACCESSORY

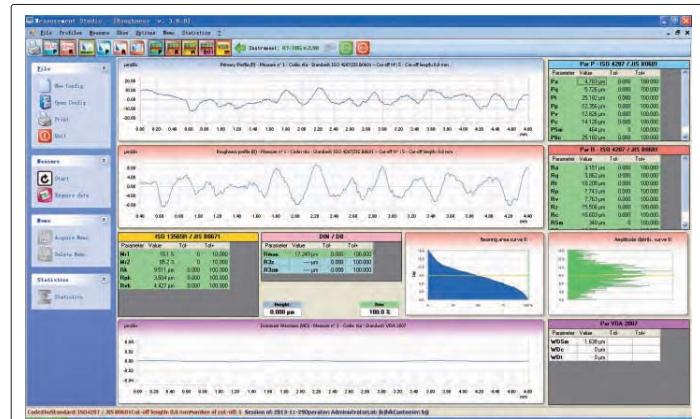


## ROUGHNESS TESTER CODE ISR-S400

**INSIZE PLUS**  
MADE IN ITALY



- Automatic probe leveling
- Language: English, French, German, Italian, Spanish, Portuguese
- 12 roughness parameters
- Can set tolerance
- Measuring range up to 400μm, can measure grit and shot blasting
- Traverse length up to 16mm
- The probe can be set at 90° or 270°, for transverse measurement
- Memory of maximum 100 results



measuring software (optional), can control the roughness tester, display roughness values, profile and curve, data statistics

### SPECIFICATION

20

Parameters		Ra, Rq, Rt, Rz, Rc, Rmax, Rsm, Rpc, Rmr, R, AR, Rx
Range		Ra: 0~100μm, Rt: 0.05~400μm
Accuracy		±3%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		0.75mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1 to 5
Traverse speed		1mm/s
Memory		100 measurement results
Output		USB
Power		built-in rechargeable battery
Dimension (L×W×H)		122×52×68mm
Weight		650g

PROBE CAN  
BE REPLACED

DATA  
OUTPUT

CUSTOM-MADE  
PROBES ARE AVAILABLE



software CD (included)



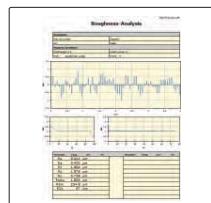
adjustable stand (included)



transverse measurement



probe cover (included), can put the small workpieces directly on the probe for measurement



output software (included), output data and graphic to Excel, make report, print



heavy duty test stand  
(optional)



light duty test stand  
(optional)

### STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block	1 pc
Adjustable stand	1 pc
AC/DC adapter	1 pc
Probe cover	1 pc
USB cable and output software	1 pc

### OPTIONAL ACCESSORY

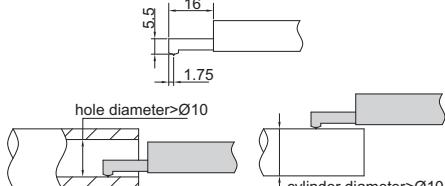
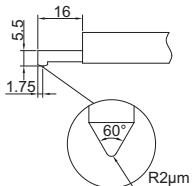
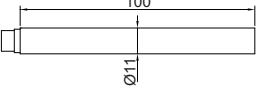
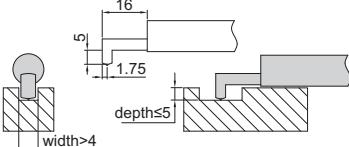
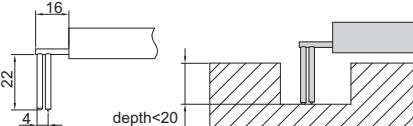
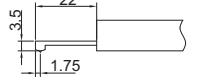
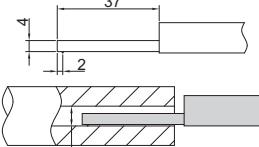
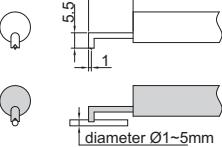
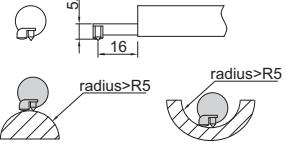
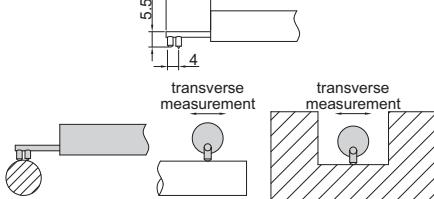
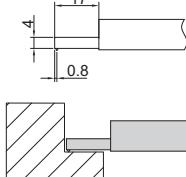
Extension rod	ISR-S400-ER100
Probe	see details
Measuring software	ISR-S-SOFTWARE
Heavy duty test stand	ISR-S400-DK
Light duty test stand	ISR-S400-STAND

To be continued

Continued from previous page

### SPECIFICATION OF PROBES

Unit: mm

<p><b>standard probe (included)</b></p>  <p>measure plane surfaces, holes and cylinders with diameter <math>&gt;\varnothing 10\text{mm}</math></p>	<p><b>small roughness probe (optional) code ISR-S400-SB10R2</b></p>  <p>measure surfaces with small roughness</p>
<p><b>extension rod (optional) code ISR-S400-ER100</b></p>  <p>for long holes</p>	
<p><b>groove probe (optional) code ISR-S400-SB20</b></p>  <p>measure plane surfaces and grooves</p>	<p><b>deep groove probe (optional) code ISR-S400-SB120</b></p>  <p>measure grooves with depth <math>&lt;20\text{mm}</math></p>
<p><b>small hole probe (optional) code ISR-S400-SB30</b></p>  <p>measure plane surfaces and holes with diameter <math>&gt;\varnothing 4\text{mm}</math> and depth <math>&lt;20\text{mm}</math></p>	<p><b>deep hole probe (optional) code ISR-S400-SB80</b></p>  <p>measure holes with diameter <math>&gt;\varnothing 4.5\text{mm}</math> and depth <math>&lt;35\text{mm}</math></p>
<p><b>small rod probe (optional) code ISR-S400-SB40</b></p>  <p>measure small rods with diameter <math>\varnothing 1\text{--}5\text{mm}</math></p>	<p><b>cylinder/hole probe (optional) code ISR-S400-SB110</b></p>  <p>measure cylinders and holes with radius <math>&gt;R5\text{mm}</math></p>
<p><b>transverse probe (optional) code ISR-S400-SB50</b></p>  <p>transverse measurement for plane surfaces, cylinders and grooves</p>	<p><b>internal angle probe (optional) code ISR-S400-SB140</b></p>  <p>measure internal angles</p>

## ROUGHNESS TESTER (SEPARABLE TYPE) CODE ISR-C300

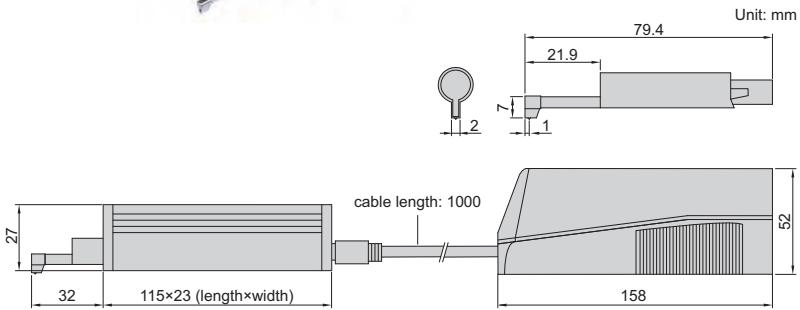
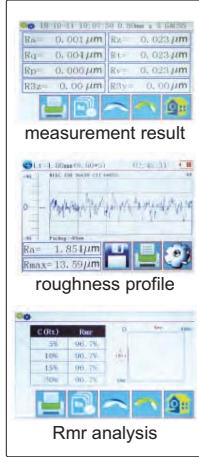
BLUETOOTH

TOUCH SCREEN

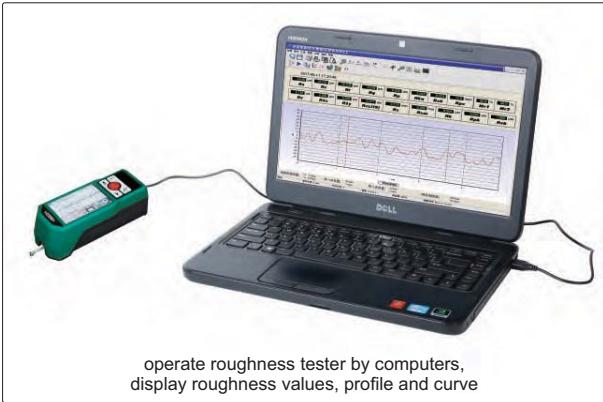
CAN BE OPERATED BY  
COMPUTERS OR MOBILE PHONES

- Roughness tester can be operated by mobile phones (only android system) or computers
- Data can be sent to Excel by connecting with computers via bluetooth or USB cable
- Support bluetooth printer
- 22 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display roughness values, profile and curve
- Memory of maximum 100 data and waveform
- Built-in lithium battery, working time more than 50 hours
- Touch screen
- Automatic power off

probe and main unit can be combined together

DATA  
OUTPUTsoftware CD  
(included)roughness tester  
screen displayconnect mobile phone via bluetooth  
(only android system)

connect computer via USB cable (software is included)

data can be sent to Excel by  
connecting with computer via bluetooth or USB cable

adjustable stand (included)



bluetooth printer (optional)



To be continued

Continued from previous page

magnetic stand adapter (included)



can be installed on magnetic stands

height gage adapter (optional)

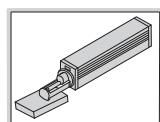


can be installed on height gages

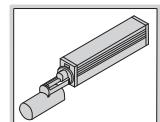
**NOTE:** Please check whether the adapter can fit your height gages.  
When using INSIZE height gages, please use the dial test indicator holder of height gages

probe support (optional)

support for flat surface

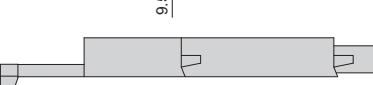
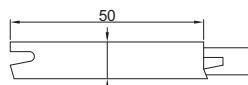


support for cylindrical surface

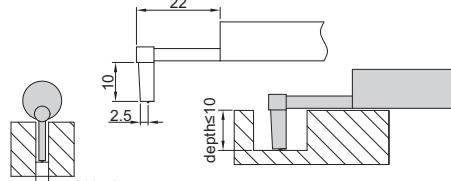


optional probes

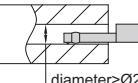
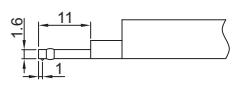
extension rod (optional), code ISR-C002-ER



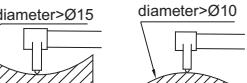
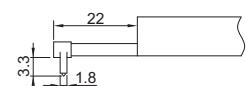
deep groove probe (optional), code ISR-C002-DGP



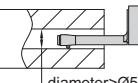
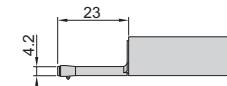
tiny hole probe (optional),  
code ISR-C002-SBP



curved surface probe(optional),  
code ISR-C002-SUR



small hole probe (optional),  
code ISR-C002-PROBE



Unit: mm

## SPECIFICATION

Parameters		Ra, Rz, Rq, Rv, Rp, Rs, R3z, R3y, Rt, Rc, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry, Rmax
Range	X axis	17.5mm
	Z axis	320μm (-160μm~160μm)
Accuracy		±10%
Resolution (Ra)		0.001μm
Probe	type	inductive
	stylus radius/angle	5μm/90°
	stylus material	diamond
Measuring force		4mN
Measuring unit		μm/μin
Cut off		0.25/0.8/2.5mm
Number of cut-offs		1~5
Traverse speed		0.135mm/s, 0.5mm/s, 1mm/s
Memory		100 measurement results
Output		USB and bluetooth
Power		built-in rechargeable battery
Dimension (L×W×H)		158×64×52mm
Weight		400g

## STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Connecting cable (long and short)	1 pc of each
Magnetic stand adapter	1 pc
Adjustable stand	1 pc
Touch pen	1 pc
USB cable and software	1 pc
AC/DC adapter	1 pc

## OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Small hole probe	ISR-C002-PROBE
Tiny hole probe	ISR-C002-SBP
Deep groove probe	ISR-C002-DGP
Curved surface probe	ISR-C002-SUR
Bluetooth printer	ISR-C002-PRINTER
Height gage adapter	ISR-C300-LB1
Bluetooth receiver	ISR-C300-RECEIVER
Support for flat surface	ISR-C300-COVER1
Support for cylindrical surface	ISR-C300-COVER2

## ROUGHNESS TESTER CODE ISR-C003



**VIDEO**



calibration block  
(included)



### STANDARD DELIVERY

Main unit	1 pc
Calibration block	1 pc
AC/DC adapter	1 pc

- Unit:  $\mu\text{m}$ ,  $\text{mic}$
- Automatic power off

### SPECIFICATION

Parameters		Ra, Rz, Rq, Rt
Range		Ra, Rq: 0.05~15 $\mu\text{m}$ Rz, Rt: 0.1~50 $\mu\text{m}$
Accuracy		$\pm 10\%$
Resolution (Ra)		0.01 $\mu\text{m}$
Probe	type	piezoelectric
	stylus radius/angle	10 $\mu\text{m}/90^\circ$
	stylus material	diamond
Measuring force		5mN
Measuring unit		$\mu\text{m}/\text{mic}$
Cut off		0.25/0.8/2.5mm
Evaluation length		1.25mm for cut off 0.25mm 4mm for cut off 0.8mm 5mm for cut off 2.5mm
Traverse speed		0.75mm/s
Power		built-in rechargeable battery
Dimension (L×W×H)		106×70×24mm
Weight		200g

## SURFACE ROUGHNESS SPECIMENS

**INSIZE PLUS**  
MADE IN UK

- For checking, identifying and specifying the roughness by symbol
- Rust-proof, made of pure Nickel



ISR-CS315

Code	Machining method	Roughness (Ra)	Roughness (Rz)	Quantity
ISR-CS315	Surface grinding	0.025, 0.05, 0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.29, 0.55, 0.91, 1.74, 2.6, 4.65, 7.87, 15.6 $\mu\text{m}$	8 pcs
ISR-CS316	Cylindrical grinding	0.025, 0.05, 0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.3, 0.53, 0.88, 1.56, 2.64, 4.4, 7.71, 15.3 $\mu\text{m}$	8 pcs
ISR-CS317	Flat lapping	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.4, 0.6, 0.74, 1.26 $\mu\text{m}$	4 pcs
	Criss-cross Parallel	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.34, 0.56, 1.12, 1.5 $\mu\text{m}$	4 pcs
ISR-CS318	Cylindrical lapping	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.46, 0.54, 0.63, 1.23 $\mu\text{m}$	4 pcs
	Superfinishing	0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.36, 0.7, 1, 1.4 $\mu\text{m}$	4 pcs
ISR-CS319	Face turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.92, 3.2, 6.15, 12.5, 23.7, 48.7, 102, 185 $\mu\text{m}$	8 pcs
ISR-CS320	Cylindrical turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.7, 3.2, 6.1, 12.2, 23.7, 47.5, 95, 190 $\mu\text{m}$	8 pcs
ISR-CS321	End milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.92, 3.82, 6.45, 12.2, 25.2, 49.8, 92.6, 191 $\mu\text{m}$	8 pcs
ISR-CS322	Reaming	0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	1.7, 3.2, 6.4, 12.8 $\mu\text{m}$	4 pcs
	Drilling	1.6, 3.2, 6.3, 12.5 $\mu\text{m}$	7.5, 15.5, 31, 60 $\mu\text{m}$	4 pcs
ISR-CS323	Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	1.8, 3.68, 6.63, 12.8, 25.6, 53, 97.5, 197 $\mu\text{m}$	8 pcs
ISR-CS325	Shaping (planing)	0.8, 1.6, 3.2, 6.3, 12.5, 25, 50, 100 $\mu\text{m}$	3.84, 6.7, 12.2, 25.2, 48.7, 99.9, 190, 361 $\mu\text{m}$	8 pcs
ISR-CS326	Linishing (belt sanding)	0.1, 0.2, 0.4, 0.8, 1.6, 3.2 $\mu\text{m}$	0.9, 1.55, 3.37, 7.42, 18.5, 31 $\mu\text{m}$	6 pcs
ISR-CS328	Vertical grinding	0.2, 0.4, 0.8, 1.6, 3.2, 6.3 $\mu\text{m}$	1.1, 3.5, 6.15, 8.78, 22.19, 40.8 $\mu\text{m}$	6 pcs
ISR-CS329	Grit blasting	3.2, 10.5, 18, 25 $\mu\text{m}$	19.2, 63, 108, 150 $\mu\text{m}$	4 pcs
	Shot blasting	3.2, 8, 13, 18 $\mu\text{m}$	19.2, 48, 78, 108 $\mu\text{m}$	4 pcs
ISR-CS331	Spark erosion (EDM)	0.4, 0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	2.5, 4.5, 7.2, 14.2, 24.7, 51.2, 105, 196 $\mu\text{m}$	8 pcs
ISR-CS333	Hand filing	0.4, 0.8, 1.6, 3.2, 6.3 $\mu\text{m}$	3, 5.6, 12.4, 22.5, 61 $\mu\text{m}$	5 pcs
ISR-CS334	Castings	0.8, 1.6, 3.2, 6.3, 12.5, 25, 50 $\mu\text{m}$	3.2, 8, 16, 32, 56, 112, 225 $\mu\text{m}$	7 pcs
ISR-CS335	Honing	0.05, 0.1, 0.2, 0.4, 0.8, 1.6 $\mu\text{m}$	0.31, 0.56, 1, 2, 4.2, 9 $\mu\text{m}$	6 pcs
ISR-CS336	Polishing	0.0125, 0.025, 0.05, 0.1, 0.2 $\mu\text{m}$	0.29, 0.35, 0.67, 0.72, 1.52 $\mu\text{m}$	5 pcs