

ROUGHNESS TESTER (COMPACT TYPE) CODE ISR-C200

INSIZE PLUS
MADE IN EUROPE

BLUETOOTH

DATA
OUTPUT

PROBE CAN BE CHANGED



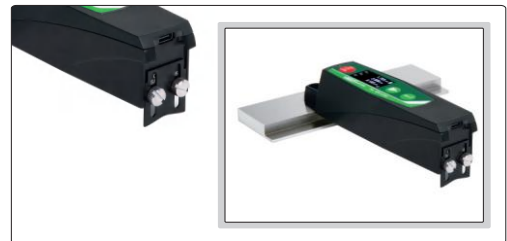
- The product is light, reliable and durable
- 13 roughness parameters
- Can be operated by mobile phones (only Android system) or computers
- Measurement results can be exported in Excel and PDF format
- Memory of 18000 measurements with only parameters or 30 measurements with graph
- Automatic power off



probe can be set at 90°, for transverse measurement



probe cover (included)



adjustable stand (included)

The software interface displays measurement settings for ISO 4287 with a standard deviation of 0 s, a cutoff length of 0.8 mm, and an automatic return of 5. The results screen shows a table of 13 parameters:

Parameter	Value	Tol.
Ra	3.423 µm	
Rq	3.932 µm	
Rt	13.277 µm	
Rz	13.090 µm	
Rc	12.463 µm	
Rmax	13.277 µm	
RSm	95.4 µm	
RPC max	105 /cm	

Below the table are three graphs: a roughness profile, a filter curve, and a density plot.

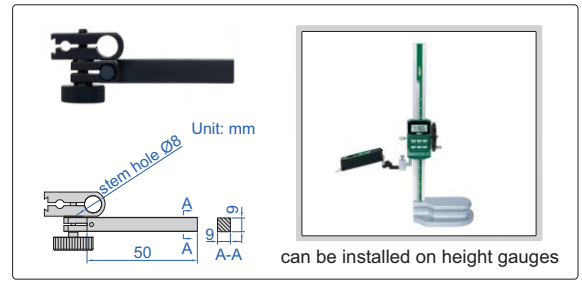
measuring software (included), connect to mobile phones via bluetooth (only Android system) to control roughness tester, or connect to computers via USB cable or bluetooth to control roughness tester, display roughness values and curve, results can be exported in Excel and PDF format

Continued from previous page

magnetic stand adapter (included)



dial test indicator holder (optional)



SPECIFICATION

Parameters		Ra, Rq, Rt, Rz, Rc, Rmax, RSm, Rpc, Pt, R, AR, Rx, Ppc
Range	X axis	17.5mm
	Z axis	250µm
Accuracy		±(5%+0.025)µm
Resolution (Ra)		0.001µm
Probe	type	inductive
	stylus radius/angle	2µm/90°
	stylus material	diamond
Measuring unit		µm/µin
Cut off		0.25/0.8/2.5mm
Number of cut-off		1~5
Moving speed		0.5mm/s, 1mm/s
Memory		18000 measurements with only parameters, 30 measurements with graph
Power supply		built-in rechargeable battery
Dimension (L×W×H)		160×34×33.5mm
Weight		200g

STANDARD DELIVERY

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

OPTIONAL ACCESSORY

Dial test indicator holder	6293-6
Groove probe	ISR-C200-SB21
Small hole probe	ISR-C200-SB31
Deep groove probe	ISR-C200-SB121
Extension rod	ISR-C200-ER50
Extension rod	ISR-C200-ER100

SPECIFICATION OF PROBES

Unit: mm

<p>standard probe (included)</p> <p>measurement for plane surfaces, also transverse measurement for plane surfaces, cylinders and grooves</p>	<p>groove probe (optional), code ISR-C200-SB21</p> <p>measure plane surfaces and grooves</p>
<p>small hole probe (optional), code ISR-C200-SB31</p> <p>measure holes with diameter > Ø4mm and depth < 20mm</p>	<p>deep groove probe (optional), code ISR-C200-SB121</p> <p>measure grooves with depth < 20mm</p>
<p>extension rod (optional), code ISR-C200-ER50</p> <p>for long holes</p>	<p>extension rod (optional), code ISR-C200-ER100</p> <p>for long holes</p>

ROUGHNESS TESTER CODE ISR-C002

BLUETOOTH

DATA
OUTPUT

CAN BE OPERATED BY
MOBILE PHONES OR COMPUTERS

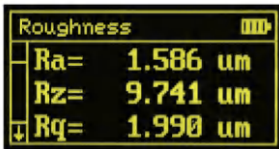


- Roughness tester can be operated by mobile phones (only Android system) or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Support bluetooth printer
- 21 roughness parameters
- Display roughness value, profile and curve
- Memory of maximum 100 results
- Automatic power off

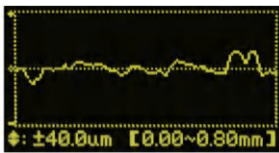


software flash disk (included)

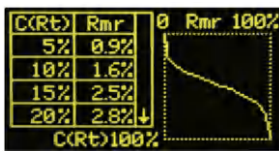
screen display



measurement result



roughness profile



Rmr analysis

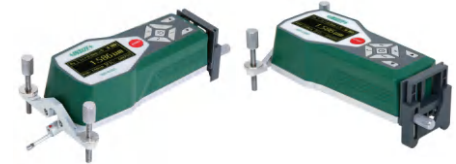
probe cover (included)



put the small workpieces directly under the probe for measurement



adjustable stand (included)



operate roughness tester by mobile phones



connect to mobile phones via bluetooth (only Android system), display roughness values, profile and curve

operate roughness tester by computers



connect to computers via USB cable (software is included), display roughness values, profile and curve

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

via bluetooth

receiver (optional)



via SPC cable

SPC cable (optional)



receiver (optional)



bluetooth printer (optional)



To be continued

Continued from previous page

Unit: mm

light duty test stand (optional)



heavy duty test stand (optional)



<p>extension rod (optional), code ISR-C002-ER</p>	<p>transverse rod (optional), code ISR-C002-TR</p>
<p>tiny hole probe (optional), code ISR-C002-SBP</p>	<p>deep groove probe (optional), code ISR-C002-DGP</p>
<p>deep groove probe (optional), code ISR-C002-DGP1</p>	

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	320µm (-160µm~160µm)						
Accuracy	±10%						
Resolution (Ra)	0.001µm						
Probe	<table border="1"> <tr> <td>type</td> <td>inductive</td> </tr> <tr> <td>stylus radius/angle</td> <td>5µm/90°</td> </tr> <tr> <td>stylus material</td> <td>diamond</td> </tr> </table>	type	inductive	stylus radius/angle	5µm/90°	stylus material	diamond
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						
Moving speed	0.5mm/s, 1mm/s						
Memory	100 measurement results						
Output	bluetooth and USB						
Power supply	built-in rechargeable battery						
Dimension (L×W×H)	141×55×40mm						
Weight	400g						

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 and USB cable	1 pc
AC/DC adapter	1 pc

OPTIONAL ACCESSORY

Extension rod	ISR-C002-ER
Transverse rod	ISR-C002-TR
Tiny hole probe	ISR-C002-SBP
Deep groove probe	ISR-C002-DGP
Deep groove probe	ISR-C002-DGP1*
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND
Bluetooth printer	ISR-C002-PRINTER
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC

*Need to be delivered with roughness tester ISR-C002

ROUGHNESS TESTER (SEPARABLE TYPE)

BLUETOOTH

TOUCH SCREEN

CAN BE OPERATED BY COMPUTERS OR MOBILE PHONES

DATA OUTPUT

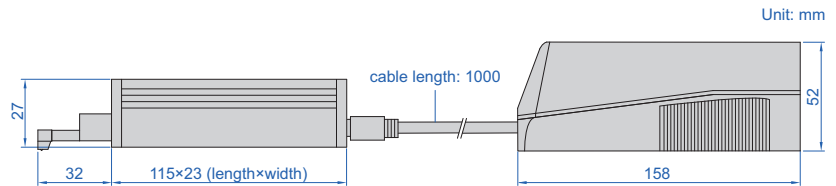


POPULAR MODEL

- Roughness tester can be operated by mobile phones or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC 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



ISR-C300



roughness tester screen display

Ra 23-05-24 12:26:27 2.50mm x 5 D-P

Ra= 4.203µm	Rz= 59.308µm
Rq= 5.989µm	Rt= 230.72µm
Rp= 45.824µm	Rv= 13.484µm
R3z= 5.83µm	R3y= 22.47µm

Icons: Home, Ra, Left Arrow, Right Arrow, Back

measurement result

Lt=1.50mm(0.25*5) 00:00:00

R [LC ISO 16610-21] PC-RC

Pickup:001µ

Ra= 0.000µm	Rz= 0.000µm
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Icons: Home, Ra, Print, Settings

roughness profile

Ra 23-05-24 12:26:27 2.50mm x 5 D-P

C (Rt)	Rmr
5%	0.0%
10%	0.0%
15%	0.0%
20%	0.0%

Icons: Home, Ra, Left Arrow, Right Arrow, Back

Rmr analysis



probe and main unit can be combined together

operate roughness tester by mobile phones

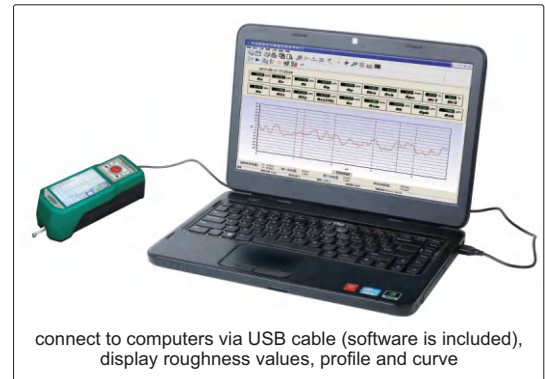


connect to mobile phones via bluetooth display roughness values, profile and curve



software flash disk (included)

operate roughness tester by computers



connect to computers via USB cable (software is included), display roughness values, profile and curve

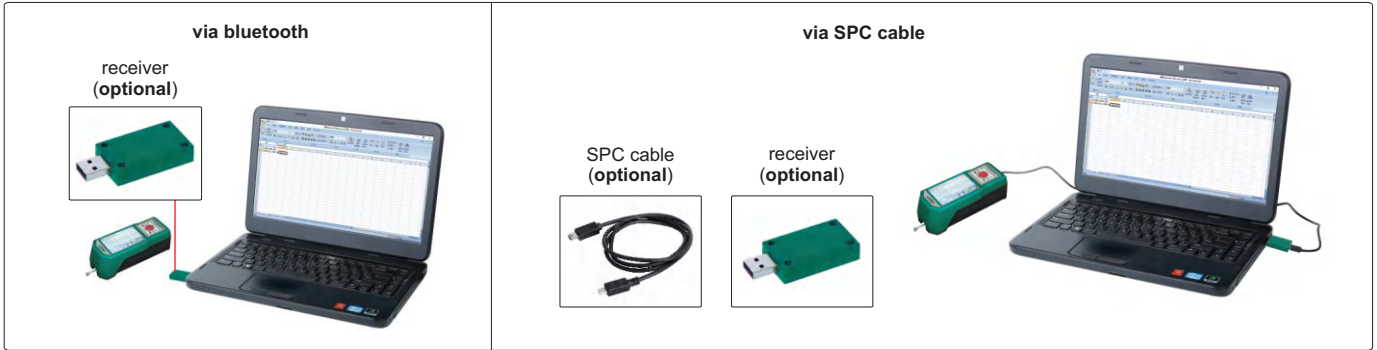


bluetooth printer (optional)

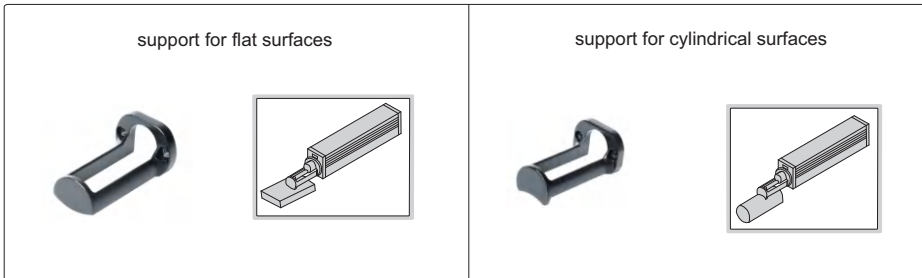
To be continued

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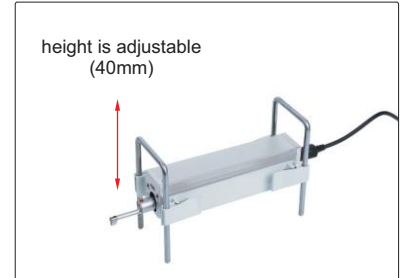
data can be sent to Excel by connecting to computer via bluetooth or SPC cable



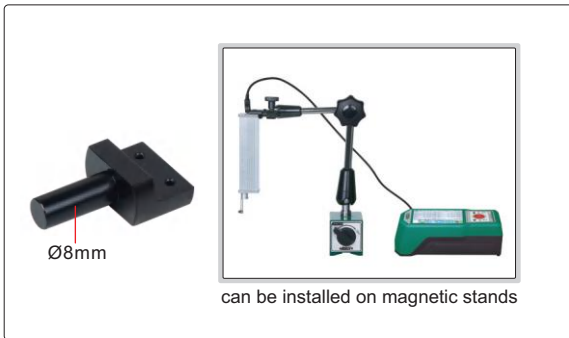
probe support (optional)



adjustable stand (included)



magnetic stand adapter (included)

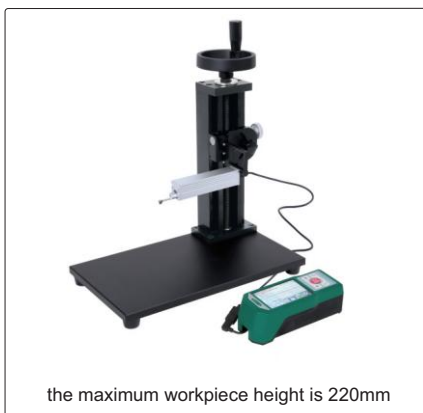


height gauge adapter (optional)

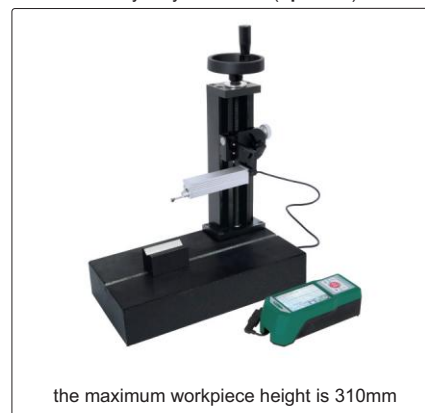


NOTE: Please check whether the adapter can fit your height gauges. When using **INSIZE** height gauges, please use the dial indicator holder of height gauges

light duty test stand (optional)



heavy duty test stand (optional)

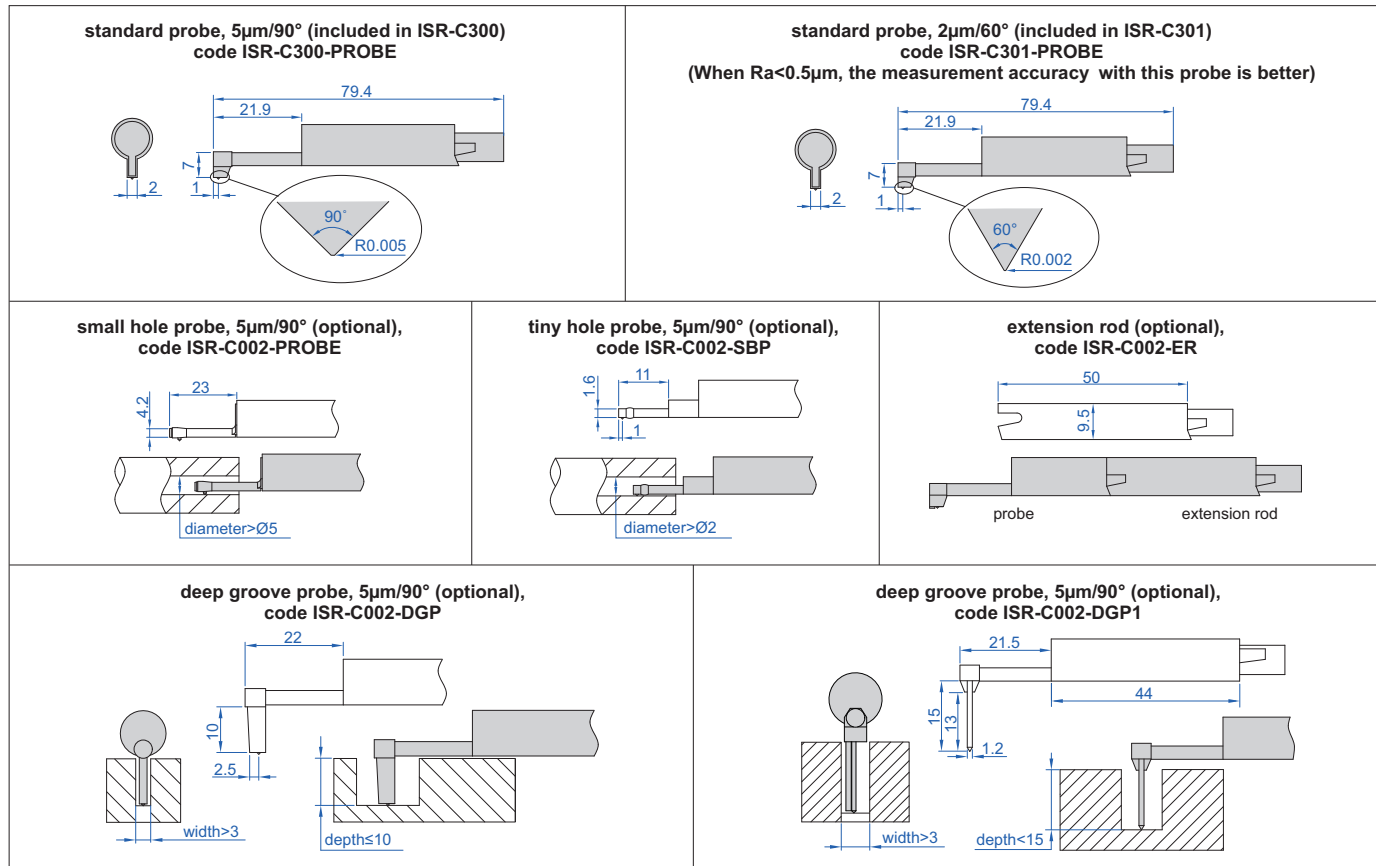


To be continued

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optional probes

Unit: mm



SPECIFICATION

Code	ISR-C300	ISR-C301
Measuring force	4mN	0.75mN
Stylus radius/angle	5µm/90°	2µm/60°
Parameters	Ra, Rz, Rq, Rv, Rp, Rs, R3z, R3y, Rt, Rc, Rz (JIS), Rk, Rku, Rsm, Rpc, Rpk, Rvk, Rsk, Mr1, Mr2, Ry, Rmax	
Probe type	inductive	
Stylus material	diamond	
Range	X axis	17.5mm
	Z axis	320µm (-160µm~160µm)
Accuracy	±10%	
Resolution (Ra)	0.001µm	
Measuring unit	µm/µin	
Cut off	0.25/0.8/2.5mm	
Number of cut-offs	1~5	
Moving speed	0.135mm/s, 0.5mm/s, 1mm/s	
Memory	100 measurement results	
Output	USB and bluetooth	
Power supply	built-in rechargeable battery	
Dimension (L×W×H)	158×64×52mm	
Weight	400g	

STANDARD DELIVERY

Main unit	1 pc
Standard probe (included in ISR-C300)	1 pc
Standard probe (included in ISR-C301)	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
Software and USB cable	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
Deep groove probe	ISR-C002-DGP1*
Standard probe	ISR-C301-PROBE
Standard probe	ISR-C300-PROBE
Bluetooth printer	ISR-C002-PRINTER
Height gauge adapter	ISR-C300-LB1
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC
Support for flat surface	ISR-C300-COVER1
Support for cylindrical surface	ISR-C300-COVER2
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND

*Need to be delivered with roughness tester ISR-C300

DATA OUTPUT

BLUETOOTH

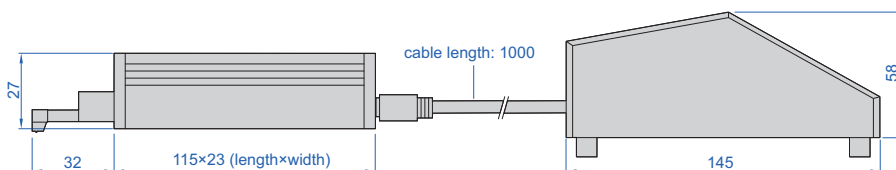
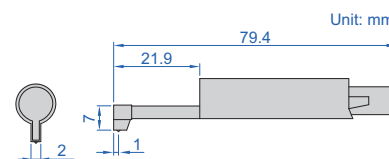
TOUCH SCREEN

CAN BE OPERATED BY MOBILE PHONES OR COMPUTERS

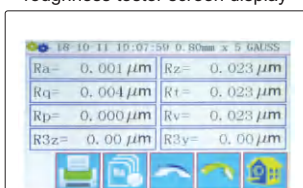
ROUGHNESS TESTER CODE ISR-T120



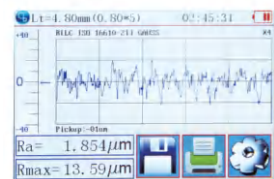
- Roughness tester can be operated by mobile phones (only Android system) or computers
- Data can be sent to Excel by connecting to computers via bluetooth or SPC cable
- Built-in printer can print measurement results and graphics
- 22 roughness parameters
- Meet ISO, DIN, ANSI, JIS standards
- Display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



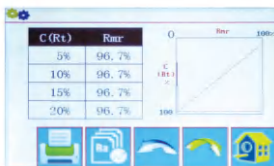
roughness tester screen display



measurement result



roughness profile



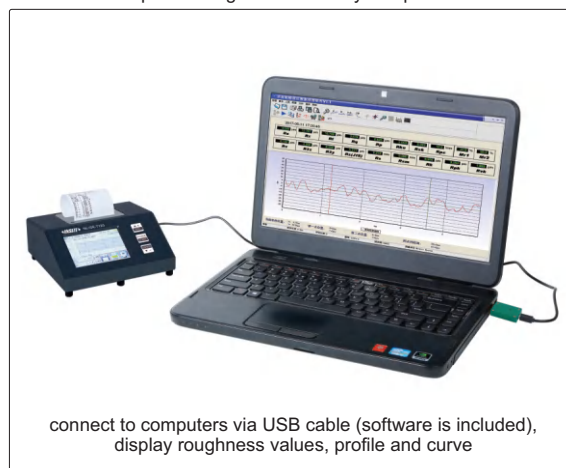
Rmr analysis

operate roughness tester by mobile phones



connect to mobile phones via bluetooth (only Android system), display roughness values, profile and curve

operate roughness tester by computers






connect to computers via USB cable (software is included), display roughness values, profile and curve

To be continued

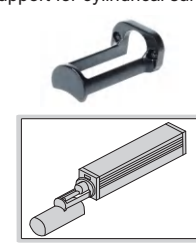
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data can be sent to Excel by connecting to computer via bluetooth or SPC cable

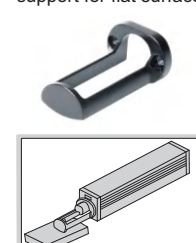
<p>via bluetooth</p> <p>receiver (optional)</p> 	<p>via SPC cable</p> <p>SPC cable (optional)</p>  <p>receiver (optional)</p> 
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probe support (optional)


support for cylindrical surface




support for flat surface



height gauge adapter (optional)




9x9mm




can be installed on height gauges

magnetic stand adapter (included)



Ø8mm

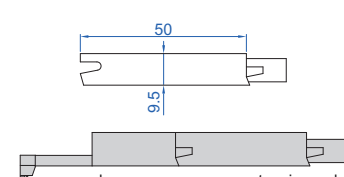
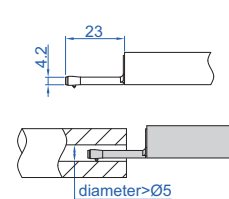
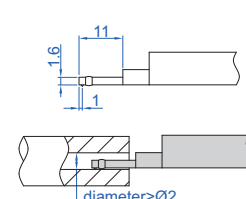
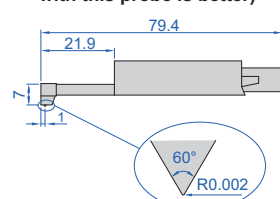
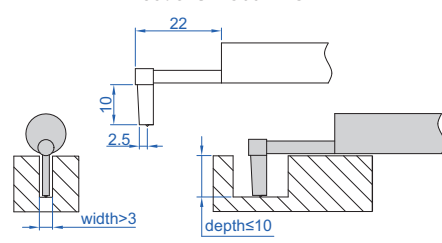
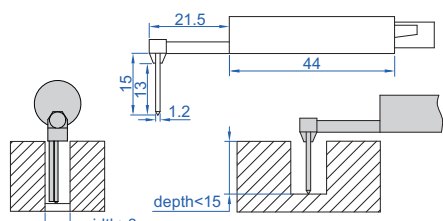


can be installed on magnetic stands

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

optional probes

Unit: mm

<p>extension rod (optional), code ISR-C002-ER</p>  <p>probe extension rod</p>	<p>small hole probe (optional), code ISR-C002-PROBE</p>  <p>diameter > Ø5</p>	<p>tiny hole probe (optional), code ISR-C002-SBP</p>  <p>diameter > Ø2</p>
<p>2µm/60° probe (optional), code ISR-C300-P2UM (When Ra < 0.5µm, the accuracy with this probe is better)</p> 	<p>deep groove probe (optional), code ISR-C002-DGP</p>  <p>width > 3 depth ≤ 10</p>	<p>deep groove probe (optional), code ISR-C002-DGP1</p>  <p>width > 3 depth < 15</p>

To be continued

Continued from previous page

light duty test stand (optional)



heavy duty test stand (optional)



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	640µm (-320µm~320µm)
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		bluetooth and USB
Power supply		built-in rechargeable battery
Dimension (L×W×H)		155×145×58mm
Weight		1000g

STANDARD DELIVERY

Main unit	1 pc
Standard probe	1 pc
Calibration block and support	1 pc of each
Magnetic stand adapter	1 pc
Adjustable stand	1 pc
Touch pen	1 pc
Software and USB cable	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
2µm/60° probe	ISR-C300-P2UM
Deep groove probe	ISR-C002-DGP
Deep groove probe	ISR-C002-DGP1 *
Height gauge adapter	ISR-C300-LB1
Receiver	ISR-C300-RECEIVER
SPC cable	ISR-C300-SPC
Support for flat surface	ISR-C300-COVER1
Support for cylindrical surface	ISR-C300-COVER2
Light duty test stand	ISR-C002-STAND1
Heavy duty test stand	ISR-C002-STAND

*Need to be delivered with roughness tester ISR-T120

ROUGHNESS TESTER (BASIC TYPE) CODE ISR-C003

- Unit: μm , μin
- Automatic power off

SPECIFICATION

Parameters*		Ra, Rz, Rq, Rt
Range		Ra, Rq: 0.05~15 μm Rz, Rt: 0.1~50 μm
Accuracy		$\pm 10\%$
Resolution (Ra)		0.01 μm
Probe	type	piezoelectric
	stylus radius/angle	10 $\mu\text{m}/90^\circ$
	stylus material	diamond
Measuring force		5mN
Measuring unit		$\mu\text{m}/\mu\text{in}$
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
Moving speed		0.75mm/s
Power supply		built-in rechargeable battery
Dimension (L×W×H)		106×70×24mm
Weight		200g

* Rmax parameter can be customized

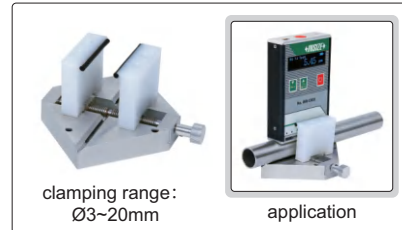
STANDARD DELIVERY

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

ATTENTION: THIS ROUGHNESS TESTER IS NOT SUITABLE FOR ROUGH TURNING, MILLING AND PLANING WORKPIECES



fixture for small shafts (optional)



clamping range:
 $\varnothing 3\sim 20\text{mm}$

application



calibration block (included)

OPTIONAL ACCESSORY

Fixture for small shafts

ISR-C003-FIXTURE

SURFACE ROUGHNESS SPECIMEN SET CODE ISR-CS130-W

INSIZE PLUS
MADE IN EUROPE

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



Machining method	Roughness (Ra) *	Roughness (Rz) *	Quantity
Flat lapping	0.05, 0.1, 0.2 μm	0.55, 1, 1.6 μm	3 pcs
	2, 4, 8 μin		
Reaming	0.4, 0.8, 1.6 μm	3, 6, 10 μm	3 pcs
	16, 32, 63 μin		
Plain grinding	0.05, 0.1, 0.2, 0.4, 0.8, 1.6 μm	0.55, 1, 1.6, 3, 6, 10 μm	6 pcs
	2, 4, 8, 16, 32, 63 μin		
Horizontal milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm	2.5, 4, 8, 16, 32, 50 μm	6 pcs
	16, 32, 63, 125, 250, 500 μin		
Vertical milling	0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm	2.5, 4, 8, 16, 32, 50 μm	6 pcs
	16, 32, 63, 125, 250, 500 μin		
Turning	0.4, 0.8, 1.6, 3.2, 6.3, 12.5 μm	2.5, 4, 8, 16, 32, 50 μm	6 pcs
	16, 32, 63, 125, 250, 500 μin		

* The actual value is the value to be calibrated