

# MIDLAND METROLOGY LIMITED

## SURFACE ROUGHNESS TESTER CODE:iSurfa-220



Multi parameter measurement  
 High precision inductive sensor;  
 RC、PC-RC、GAUSS、D-P Four filtering methods  
 ISO、DIN、ANSI、JIS four standards  
 LCD Displays all parameters and graphic  
 ARM processors greatly improve measuring speed;  
 Built in lithium-ion rechargeable battery and charging control circuit,  
 high capacity, no memory effect, continuous working time more than  
 20 hours  
 Built in Bluetooth communication module, in print mode, it can  
 connect to a Bluetooth printer to print and save data;  
 Built in Blue Tooth communication module can switch to data  
 transmission mode and wirelessly connect with Android data  
 terminals such as mobile phones;  
 Automatic shutdown, memory, and various prompt instructions  
 Built in intelligent reset circuit



### STANDARD DELIVERY

Main Unit	1 pc
Sensor	1 pc
Standard Block	1 pc
Sensor Protection Cover	1 pc
Instrument Case	1 pc
Standard Charger (5V2A)	1 pc
Data Cable	1 pc

### OPTIONAL DELIVERY

Surface Sensor	SRT-SS
Ostiole Sensor	SRT-OS
Measurement Stage	SRT-MS
Groove Sensor	SRT-GS
Deep Groove Sensor	SRT-DGS
Extension Pole	SRT-EP
Bluetooth Printer	SRT-BP



Sensor



Standard Block

# SURFACE ROUGHNESS TESTER

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## TECHNICAL SPECIFICATION

Model	iSurfa-220	
<b>Sensor</b>	Measuring Principle	Inductive
	Measuring Range	320 $\mu$ m
	Probe Radius	5 $\mu$ m
	Probe Material	Diamond
	Probe Touch Force	4mN(0.4gf)
	Probe Angle	90°
	Longitudinal Radius Of Guide Head	45mm
<b>Drive Parameters</b>	Max Travel	17.5mm/0.7inch
	Drive Speed	Sample Length= 0.25mm Vt=0.5mm
		Sample Length= 0.8mm Vt=0.75mm/s
		Sample Length= 2.5mm Vt=1mm/s Returning Speed Vt=1.5mm/s
<b>Indication Error</b>	Less than 10%	
<b>Indication Variability</b>	Less than 4%	
<b>Display Content</b>	Menu	Measurement Settings, System Settings, Storage Management, Calibration Settings, Bluetooth Settings, And Product Information
	Parameters	ISO、DIN、ANSI、JIS Four Standards Roughness Parameters
	Graph	Filter Contour Graph And TP Curve
	Reminder Information	Measurement , Menu Reminder, Error , Battery Level, And Shutdown
<b>Contour and Filter</b>	Contour	Filter
	Filter Contour	RC
		PC-RC
		Gauss
Unfiltered Contour	D-P	
<b>Cut Length/Sampling Length</b>	0.25mm, 0.8mm, 2.5mm Optional	
<b>Evaluation Length</b>	(1~5)L Optional	
<b>Roughness Parameters and Display Range</b>	Parameters	Display Range
	Ra、Rq	0.005 $\mu$ m~32 $\mu$ m
	Rz、R3z、Ry、Rt、Rp、Rm、Rk、Rpk、Rvk	0.02 $\mu$ m~320 $\mu$ m
	Mr1、Mr2	0~100%
	S、Sm	1mm
	tp	0~100%
<b>Measuring Range and Resolution</b>	Measuring Range	Resolution
	$\pm$ 40 $\mu$ m	0.02 $\mu$ m
	$\pm$ 80 $\mu$ m	0.04 $\mu$ m
	$\pm$ 160 $\mu$ m	0.04 $\mu$ m
<b>Power Supply</b>	1 Lithium-ion Rechargeable Battery	
<b>Work Environment</b>	Temperature	0~40°C
	Humidity	<90%RH
<b>Transportation And Storage Environment</b>	Temperature	-40°C~60°C
	Humidity	<90%RH
<b>Dimensions and Net Weight</b>	156x55x46.5xmm, About 400g	
<b>Connecting to PC</b>	Type-C USB Cable	
<b>Connecting to Printer</b>	Bluetooth Connecting To The Printer, As Long As The Pairing Code Of The Roughness Tester Is Set To Match The Printer Pairing Code.	

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CODE:iSurfa-220



## Screen Display

Test Set	
Parameter	Ra
Standard	ISO
Cutoff	0.80mm
Evaluation	5L
Range	$\pm 160 \mu\text{m}$
Filter	RC

Test Set

System Set	
Brightness	2
Language	English
Unit	Metric
Auto Save	ON
Auto-off	OFF
Factory Reset	

System Set

NO	STSTEM	DATA	UNIT
20.	Ra	1.656	$\mu\text{m}$
19.	Ra	1.771	$\mu\text{m}$
18.	Ra	1.776	$\mu\text{m}$
17.	Ra	1.762	$\mu\text{m}$
16.	Ra	1.768	$\mu\text{m}$

Saving Management

Calibration Set	
Value Calibration	

Calibration Set

Value Calibration	
Ra	2.330
	$\mu\text{m}$

Value Calibration

BlueTooth	
Mode Selection	
Pairing Code	
Device Selection	

Bluetooth Set

Mode Selection	
Print Mode	

Print Mode

Mode Selection	
Data mode	

Data Mode