

High Precision Roughness Tester DR160



Measuring Range

Parameter	Indicating Range
Ra, Rq	0.005 μ m~16 μ m
Rz, R3z, Ry, Rt, Rp, Rm	0.02 μ m~160 μ m
Sk	0~100 μ m
S, Sm	1mm
tp	0~100%

Standard Configuration

- ◎Roughness Tester Host DR160
- ◎Standard Sensor
- ◎Multi-groove standard specimen
- ◎Adjustable bracket
- ◎Power Adaptor
- ◎Instructions
- ◎Certificate
- ◎Warranty Card
- ◎Software

Warranty: for 12 months



Product Description

Precision roughness tester DR160 is a high precision instrument testing the surface degree of finish, and can measure surface roughness of the machined parts, including plane, bevel, outer cylindrical, surface, holes, trenches and axles and so on.

Features

- ◎Mechatronics design, with small volume, light weight and convenient use.
- ◎Use DSP chip to control and process data, with high speed and low power consumption
- ◎Compatible with ISO, DIN, ANSI, JIS multiple national standards
- ◎Continuous working time more than 20 hours
- ◎Large-capacity data storage, can store 100 groups of raw data and waveform.
- ◎Real-time clock setting and display for easy data recording and storage.
- ◎With automatic sleep, automatic shutdown and other power-saving features
- ◎Reliable circuit and software design to prevent the motor stuck.
- ◎Instrument can display a variety of information tips and instructions. For example Measurement result display, the menu prompts, error messages, and switches.
- ◎Chinese / English language selection.
- ◎Can connect to the computers and printers.
- ◎Print all the parameters or any parameter set by the user.
- ◎Optional Bluetooth
- ◎Optional curved surface sensor, holes sensors, measuring platform, sheath of sensor, extension rod and other accessories.

Supplied by :

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Technical Parameters

Name		Content
Measuring Range	Z-axis (vertical)	160μm
	X-axis (horizontal)	17.5mm
Resolution	Z-axis (vertical)	0.01μm/±20μm 0.02μm/±40μm 0.04μm/±80μm
Measuring Items	Parameters	Ra Rz==Ry(JIS) Rq Rt==Rmax Rp Rv R3z R3y Rz(JIS) Rs Rsk Rku Rsm Rmr Rpc, Rk, Rpk, Rvk, Mr1, Mr2
	Standard	ISO, ANSI, DIN, JIS
	Graph	Supporting curve, roughness profile, direct contour
Filter		RC, PC-RC, Gauss, D-P
Sampling length (lr)		0.25, 0.8, 2.5mm
Evaluation length (ln)		Ln=lr×n n=1~5
Sensor	Measuring Principle	displacement differential inductor
	Stylus	Natural diamond, 90 cone angle, 5μm tip radius
	Dynamometer	<4mN
	Guide head	Carbide, the sliding direction radius 40mm
	Sliding Speed	lr=0.25, Vt=0.135mm/s
		lr=0.8, Vt=0.5mm/s
		lr=2.5, Vt=1mm/s
		Return, Vt=1mm/s
Indicator Error		no more than ±10%
Indication Fluctuation		no more than 6%
Power		Built-in lithium-ion rechargeable battery, charged by DC5V, 800mA charger
Dimension		158×63.5×46mm
Weight		About 300g
Operation Environment		Temperature: -20°C~40°C Humidity: <90%RH
Storage and transportation environment		Temperature: -40°C~60°C Humidity: <90%RH

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