TIME3221 Portable Surface Roughness Tester



Brief introduction:

- Conform to roughness standards: ISO1997, ANSI, DIN and JIS2001
- Roughness parameters: Ra, Rp, Rv, Rt, Rz, Rq, Rsk, Rku, Rc, RPc, RSm, Rmr(c), tp, Rmr, Rpm, Rz1max, RzJIS, Rmax, Htp, Rδc, RΔq, Rδa, Pa, Pp, Pv, Pt, Pz, Pq, Psk, Pku, Pc, PSm, Pmr(c), Pmr, Pz1max, PzJIS, Pδc, PΔq, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2
- External pickup/stylus: high accuracy inductance pickup
- Small pickup connected with main unit by 43" long flexible cable can go into narrow or low spaces for measurement
- Large measuring range: Ry 400 μm (15748 μinch)
- Larger selection of cutoff length for extra smooth and rough surface.
- High-resolution TFT LCD displays parameters and profiles
- Touch screen for easy operation
- Flexible magnetic base can hold driver/pick up for measuring odd shaped parts
- Optional mini printer to print out parameter readings and profiles
- Built-in RS232 interface and USB interface
- Shut off automatically or manually

Specifications:

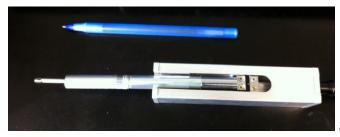
Sensor, stylus	Inductance type
Measurement range	Ry 400 μm
Stylus tip radius	5 μm
Stylus tip material	Diamond
Driver / pickup length	Driver body 118mm stylus extends 30mm without extension
Measuring force	4 mN
Stylus tip angle	90°
Radius of skid curvature	45 mm
Maximum drive range	19 mm/0.748"
Traversing speed	Cut off length = 0.08 mm Vt=0.25 mm/s Cut off length = 0.25 mm Vt=0.25 mm/s Cut off length = 0.8 mm Vt=0.5 mm/s Cut off length=2.5 mm Vt=1 mm/s Returning V=1 mm/s
Accuracy	<±10%
Repeatability	≤6%
Cut-off length	0.08 mm, 0.25 mm, 0.8 mm, 2.5 mm selectable
Evaluation length	(1 – 5) L selectable
Measuring range and resolution	Automatic (range), 0.001 μm, 0.008 μm (resolution)
	±50 μm (range), 0.001 μm (resolution)
	±200 μm (range), 0.008 μm (resolution)
Cable to connect driver	1 m (3.3 ft)
Power	Built-in Li battery
Power adapter	Input: 100 V-240 VAC, 50/60 Hz, output: 9 V, 3 A
Working environment	Temperature: 32 °F-104 °F (0 °C-40 °C), humidity: < 90% RH
Dimensions	155.4×75×53 mm (main unit), 120.5×25.5×28.5 mm (driver)
Weight	App. 580 g (main unit), 165 g (driver)
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Main parameter with profile display



Magnetic base with driver/pickup



Standard accessories:

- Main unit
- TIMES201 pickup
- Driver for pickup
- Cable connecting driver & unit (43")
- Test plate Ra with support frame
- Magnetic base and accessories
- Charger
- Screwdriver
- Instruction manual
- NIST calibration certificate
- Carrying case

Optional accessories:

- Micro printer & communication cable
- Extension rod (extending pickup by 45mm, or 90mm with two) to reach into tiny spaces, tubes
- 90 degree extension rod to change traveling direction for testing edges or parts with limited access

Stylus with one straight extension

