



### Features

- Multi-parameter measuring: Ra, Rp, Rt, Rz, Rq, Rsk, Rku, Rc, R<sub>Pc</sub>, R<sub>Sm</sub>, R<sub>mr(c)</sub>, tp, R<sub>mr</sub>, R<sub>pm</sub>, Rz1max, RzJIS, Rmax, Htp, R<sub>dc</sub>, R<sub>Δq</sub>, R<sub>Δa</sub>, Pa, Pp, Pv, Pt, Pz, Pq, Psk, Pku, Pc, P<sub>Sm</sub>, P<sub>mr(c)</sub>, P<sub>mr</sub>, Pz1max, PzJIS, P<sub>dc</sub>, P<sub>Δq</sub>, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2
- Touch screen
- High accuracy inductance pickup
- Filtering methods of 2RC, GAUSS
- Compatible with four standards of ISO1997, ANSI and JIS2001
- TFT LCD displays all parameters and graphs
- Can be connected to TIME TA230 printer to print all parameters and graphs
- Built-in standard RS232 interface and USB interface
- Language: Traditional Chinese/ Simplified Chinese/ English
- Automatic switch off
- Integrated design, simple to use

# TIME<sup>®</sup>3221

PORTABLE SURFACE ROUGHNESS  
TESTER

### Standard Delivery

• Standard Pickup	1
• Main Unit	1
• Standard Sample	1
• Power Adapter	1
• Communication Cable	1
• Protection Sleeve	1

### Technical Specification

Pickup		
Test Principle	Inductance type	
Measurement Range	400μm	
Stylus tip Radius	5μm/2μm	
Stylus tip Material	Diamond	
Measuring force	4mN/0.75 mN	
Stylus tip Angle	90°/60°	
Radius of Skid curvature	45mm	
Maximum drive range	19mm/0.748inch	
Traversing speed	Measuring: Cut off length = 0.08 mm Vt=0.25 mm/s Cut off length = 0.25 mm Vt=0.25mm/s Cut off length = 0.8 mm Vt=0.5 mm/s Cut off length = 2.5mm Vt=1mm/s Returning V=1mm/s	
Accuracy	Less than or equal to ±10%	
Repeatability	≤6%	
Cut-Off Length	0.08mm,0.25mm,0.8mm,2.5mm, selectable	
Evaluation Length	(1~5 )L selectable	
Measuring rang and resolution	Measuring Range	Resolution
	Automatic	0.001μm,0.008μm
	±50μm	0.001μm
	±200μm	0.008μm
Power	Built-in Li battery	
Power adapter	Input: 100 V~240VAC,50/60Hz Output: 9V,3A	
Working environment	Temperature: 0℃~40℃ Humidity: < 90% RH	
Storage and transport environment	Temperature: - 40℃~60℃ Humidity: < 90% RH	
Dimensions	155.4×75×56mm	
Weight	Approximately 760g	