# TIME® TR3220 Portable Roughness Tester



The New TIME® TR3220 is an advanced stylus surface roughness measuring instrument with an integrated drive unit. It supports 45 kinds of roughness parameter measurements with high accuracy and a wide testing range to 400µm.

## Features

- Integrated design, easy and convenient to use
- V-shaped bottom can be used on flat or curved surfaces
- Touch screen with TFT LCD - showing all important data and graphs
- High accuracy inductive sensor probe
- Filtering methods of 2RC, GAUSS
- Compatible with standards ISO1997, ANSI and JIS2001
- Connectivity to TIME TA230 printer to print all data and graphs
- RS232 interface and USB interface meeting more needs
- Auto switch off

## Technical Specifications

| Test principle | Inductance type |
|---|---|
| Measurement range | 400µm |
| Measurement parameters | Ra、Rp、Rv、Rt、Rz、Rq、Rsk、Rku、Rc、RPc、RSm, Rmr(c)、tp、Rmr、Rpm、Rz1max、RzJIS、Rmax、Htp、Rδc,R△q、R△a、Pa、Pp Pv、Pt、Pz Pq、Psk、Pku Pc、PSm、Pmr(c)、Pmr、Pz1max、PzJIS Pδc、P△q Rk、Rpk、Rvk、Mr1、Mr2、A1、A2 |
| Stylus tip radius | 5µm /2µm |
| Stylus tip material | Diamond |
| Measuring force | 4mN / 0.75 mN |
| Stylus tip angle | 90º / 60º |
| 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 range and resolution | **Measuring Range Resolution** |
| | Automatic 0.001µm,0.008µm |
| | ±50µm 0.001µm |
| | ±200µm 0.008µm |
| Power Built-in Li battery | Li battery |
| Power adapter | Input: 100 V~240VAC, 50/60Hz |
| | Output: 9V,3A |
| Working environment | Temperature: 0°C – 40°C |
| | Humidity: < 90% RH |
| Dimensions (mm) | 155.4mm x 75mm x 53mm |
| Weight (g) | 580g |

## Packing List

| TIME® TR3220 Portable Roughness Tester |
|---|
| Standard Pickup |
| Standard Sample |
| Power Adapter |
| Communication Cable |
| Protection Cleeve |
| TIME Calibration Certificate |
| Warranty Card |
| Instruction Manual |