High-precision, non-contact.

Surface Roughness Measuring Station
*RMP*

Technical Data

### Surface Roughness Values

- Surface roughness parameters according to DIN EN ISO 4287
- Others
- Application of filters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ra, Rk, Rt, Rq, Rs, Rpk, Rku, RSm, Rs, Rpc</td>
<td>in compliance with DIN EN ISO 11562, 13565, 16610</td>
</tr>
<tr>
<td>Rmax, Rmq, Rdq, Rdu, Rmmax</td>
<td></td>
</tr>
<tr>
<td>Rpk, Rpv, Rpkv, Rpvk, A1/2, M1/2, R1/2</td>
<td></td>
</tr>
</tbody>
</table>

### Measuring System

- **Measurement principle**: Low-coherence interferometry
- **Diameter of the measuring probe**: ≥ 80 μm
- **Working distance from the probe**: from 0.02 mm (depending on the probe)
- **Inner diameter of the tested object**: ≥ 0.15 mm
- **Direction of measurement**: Angular (90°), axial (0°)
- **Measuring frequency**: up to 8 kHz (depending on the surface)
- **Maximum travel**: 100 mm
- **Suitable materials and surfaces**: Glass, metal, ceramics, plastic etc. – transparent, glossy, matt
- **Software**: RMPControl / DataViewer
- **Integrated interfaces**: API / DLL
- **Power supply**: 230 V (AC)

### Custom designs for individual measurement requirements available.

### Optional Extras

The standard version features a manual three-axis positioning unit and a manual three-jaw chuck. The following optional extras are also available: Pneumatic three-jaw chuck, assembly panel for three-jaw chuck, engine-driven two-axis positioning unit (x, y), equipment table with a passive or active vibration insulation system.

### DataViewer Pro

DataViewer is the perfect software for a straightforward 2D-display and the easy processing of large data series. The program can perform many mathematical operations – for example, calculating moving averages and standard deviations, applying adjustable filters, establishing polynomial regressions or corrections and conducting FFT operations.

DataViewer benefits from an intuitive operational system and many configuration options. DataViewer is automatically included in the scope of deliveries for the RMP surface roughness measuring station. System-independent single-user licenses are available on fionec.com/software.
10 years of sophisticated fiber optic technology.

fionec has been developing, manufacturing and marketing innovative fiber optic measuring systems and components since 2007. Our sophisticated miniature measuring probes are unrivaled in the high-tech industry, allowing us to maintain the technological leadership in high-precision measurements of tiny or hard-to-access spaces and of surface structures in the nanometer range. Flexible and modular systems architecture, freely adaptable configurations and integrated interfaces enable us to provide customized measuring systems that meet the elevated demands of high-precision and ultra-precision manufacturing environments.

We provide a complete and integrated range of services, from the development of customized measuring concepts, simulations and contract measurement projects to the construction, adaptation and distribution of fiber optic measuring probes and optical wave guides.