# Product information

## Mobile roughness measuring instrument  MarSurf  M 310

**Product features**
**Mobile roughness measurement – guaranteed success!**

- Compact roughness measuring instrument for mobile use
- Simple and intuitive to use: as easy as using a smartphone
- Large, illuminated 4.3" TFT touch display
- Adjustable display
- Micro USB interface for remote control using ASCII commands, e.g. using software for statistical process control
- USB-A interface - for connection of e.g. a USB Bluetooth adapter or the USB/Bluetooth printer
- Wireless transmission of measurement results via Bluetooth stick to the free MarCom software
- Remote start of measurement via cable or Bluetooth
- Connection of a scanner for automatic start of the measuring programs or reading of protocol texts via barcode or QR code
- Specification of the intersection line C in µm or in % of Rz for the parameters Rmr and tp
- Data backup as TXT, X3P, CSV or PDF file
- Transfer of measuring records and data optionally via Bluetooth or cable
- IATF 16949 compliant – safe traceability with MarConnect
- Print directly on mobile printer (as option or directly in set with printer)
- Create complete PDF measuring records directly in the measuring instrument
- Customer-specific comments for the PDF measuring record can be entered directly into MarSurf M 310
- Display and printout of the MRC and ADC diagram
- Storage of measuring programs (quick & easy)
- Mains-independent operation: Over 1200 measurements without having to recharge the instrument
- An all-in-one solution. Small and lightweight (approx. 500 g)
- Instrument flexibility: removable drive unit



Item no.: **6910260**

## Technical data

| | |
|---|---|
| **IP protection category** | IP 40 |
| **Positioning speed** | 0.5; 1.0 |
| **Measuring principle** | Stylus method |
| **Probe** | Inductive skidded probe |
| **Parameters** | A1, A2, Ar, CF, CL, CR, Mr1, Mr2, R, R3z, RPc, RS, RSk, RSm, Ra, Rk, Rmax, Rmr (tp (JIS, ASME) is equivalent to Rmr), Rp, RpA (ASME), Rpk, Rpm, Rpm (ASME), Rq, Rt, Rvk, Rx, Rz, Rz (JIS), Rz (Ry (JIS) is equivalent to Rz), Vo |
| **Measuring units** | metric/inches |
| **Measuring range mm** | 0.350 |
| **Profile resolution** | 8 nm |
| **Filter according to ISO/JIS** | Gaussian filter as per ISO 16610-21 (formerly ISO 11562), special filter as per DIN EN ISO 13565-1, Lambda s filter as per DIN EN ISO 3274 (can be switched off) |
| **Cutoff lc according to ISO/JIS** | 0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection, variable |
| **Short stroke under ISO/JIS** | Selectable |
| **Traversing length Lt according ISO/JIS** | 1.5 mm, 4.8 mm, 15 mm, N x Lc, variable, automatic |
| **Traversing length according ISO 12085 (MOTIF)** | 1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm |
| **Evaluation lenth ln according to ISO/JIS** | 1.25 mm, 4.0 mm, 12.5 mm |
| **Number n of sampling length according to ISO/JIS** | Selectable: 1 to 16 |
| **Stylus** | 2 µm |
| **Measuring force (N)** | .00075 |
| **Calibration function** | Dynamic; Ra, Rz, Rsm |
| **Storage capacity** | Min. 3900 profiles, min. 500,000 results, min. 1500 PDF measuring records, expandable to 32 GB with microSD card (320x memory capacity) |
| **Languages** | German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian |
| **Other** | Lock/password protected, date/time |
| **Data interface** | USB A, USB B, MarConnect (bidirectional), Micro SD slot for SD / SDHC cards up to 32 GB |
| **System of protection** | IP 40 |
| **Rechargeable batteries** | Lithium-ion battery, 3.7 V, nominal capacity 11.6 Wh, min. 1200 measurements |
| **Wide range power supply** | 100 to 264 V |
| **Dimensions in mm** | 160 mm x 77 mm x 50 mm |
| **Weight (gross)** | 4.2 KG |

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### Accessories

| Order no. | Designation | Product type |
|---|---|---|
| 4102603 | Data cable USB bidirectional | DK-U1 |
| 6850540 | PHT pick-up extension 80 mm | PHT (80 mm) |
| 6111520 | Standard probe 2 µm | PHT 6-350 |
| 6111526 | Standard probe 5 µm | PHT 6-350/ 5µm |
| 6111527 | Standard probe 10 µm | PHT 6-350/ 10µm |
| 6111521 | Probe for bores with a dia. larger than 3 mm | PHT 3-350 |
| 6111524 | Probe for grooves | PHT 11-100 |
| 6111525 | Probe for concave and convex surfaces | PHTR-100 |
| 6111522 | Probe for gear tooth flanks | PHTF 0.5-100 |
| 6111523 | Probe for metal sheets | PT 150 |
| 6710803 | Measuring stand 300 mm with cast iron base | ST-D |
| 6710806 | Measuring stand 300 mm with granite plate | ST-F |
| 6710807 | Measuring stand 300 mm with granite plate and T-slot | ST-G |
| 2247086 | Adjustable mounting bracket to connect to 814 SR | 814 Sh |
| 4426100 | Digital height gage | 814 SR |
| 4426101 | Digital height gage | 814 SR |
| 6710401 | V-block | PP |
| 6710604 | Parallel vice | PPS |
| 6710529 | XY table | CT 120 |
| 4246819 | Set of miniature precision vises | 109 PS |
| 6820420 | Roughness standard with Mahr calibration certificate, profile depth 10 µm | PRN 10 |
| 4413000 | Measuring tripod with triangular pedestal | 815 GN |