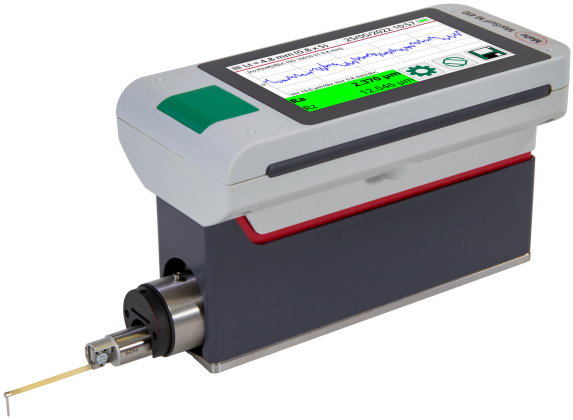
# Product information

## Mobile surface measuring instrument MarSurf M 410

**Product features**

**Simple, innovative, flexible – modern surface metrology for handheld use**

- Handy roughness tester for mobile use
- Simple and intuitive operation: As easy as operating a smartphone
- Large, backlit 4.3" TFT touch display
- Rotatable display
- Magnetic probe holder: Fast probe arm change without tools
- Thanks to skidless probe: measurements of roughness as well as waviness – no extra measuring station required, determination of R, W and P parameters
- Simple alignment of the probe system: The inclination can be easily corrected using the menu-guided graphic instructions./li>
- Process and material safety thanks to automatic zeroing
- Micro USB interface for remote control via ASCII commands, e.g. via software for statistical process control
- USB-A interface for connecting 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 profile section lebel C in µm or in % of Rz for the characteristic values Rmr and tp/li>
- Data backup as TXT, X3P, CSV and PDF file
- Transmission of measurement protocols and data optionally via Bluetooth or cable
- IATF 16949 compliant - secure traceability with MarConnect.
- Print directly to the mobile printer (as an option or directly in the set with printer)
- Creation of finished PDF protocols directly in the measuring device



Item no.: **6910290**

### Technical data

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|---|---|
| **IP protection category** | IP 40 |
| **Measuring speed** | 0.1 mm/s; 0.5 mm/s; 1.0 mm/s |
| **Positioning speed** | 3 mm/s |
| **Measuring principle** | Tactile stylus method |
| **Probe** | inductive skidless probe system |
| **Parameters** | Ra, Rq, Rz, Rz (JIS), Rz (Ry (JIS) is equivalent to Rz), Rmax, Rp, Rp (ASME), Rpm (ASME), Rv, R3z, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPc, Rmr (tp (JIS, ASME) is equivalent to Rmr), RSm, RS, Rdq, RSk, Rku, Rdc, RHtp, Pdc, Pa, Pt, PMr, Wa, Wq, WSm, WSk, Wt, CR, CF, CL, R, Ar, Rx, W, AW (MOTIF), Wx (MOTIF), Wte (MOTIF), NW (MOTIF), NR (MOTIF), NCRX (MOTIF), CPM (MOTIF) |
| **Measuring units** | metric/inch |
| **Measuring range mm** | 500 µm (±250 µm) for probe arm length 45 mm to 1500 µm (±750 µm) for probe arm length 135 mm |
| **Filter according to ISO/JIS** | Gaussian filter according to DIN EN ISO 16610-21, robust Gaussian filter according to DIN EN ISO 16610-31, special filter according to DIN EN ISO 13565-1, ls filter according to DIN EN ISO 3274 (can be switched off) |
| **Cutoff lc according to ISO/JIS** | 0,08 mm, 0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection, variable |
| **Short stroke under ISO/JIS** | selectable |
| **Number n of sampling length according to ISO/JIS** | selectable: 1 to 16 |
| **Stylus** | 2 µm; 5 µm |
| **Measuring force (N)** | 0.00075 |
| **Storage capacity** | min. 3900 profiles, min. 500,000 results, min. 1500 PDF logs, expandable with microSD card up to 32 GB (increases storage capacity by a factor of 320) |
| **Languages** | German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian |
| **Other** | Lock/code word protection, date/time |
| **Data interface** | USB A, MarConnect (RS-232), Micro SD slot for SD / SDHC cards up to 32 GB |
| **Relative humidity** | 30 % to 85 %, non-condensing! |
| **System of protection** | IP 40 |
| **Rechargeable batteries** | Li-Ion battery, 3.7 V, nominal capacity 11.6 Wh, min. 500 measurements |
| **Wide range power supply** | 100 to 264 V |
| **Dimensions in mm** | 198 mm x 77 mm x 97 mm |
| **Dimensions (L x W x H) for drive unit in mm.** | 194 mm x 38 mm x 72 mm |
| **Weight drive unit** | 1120 g |
| **Dimensions (L x W x H) for measuring instrument in mm.** | 162 mm x 77 mm x 35 mm |
| **Weight measuring instrument** | 300 g |

# Product information

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|---|---|
| **Weight (gross)** | 1.42 KG |

### Accessories

| Order no. | Designation | Product type |
|---|---|---|
| 4102603 | Data cable USB bidirectional | DK-U1 |
| 6852403 | Probe arm | BFW |
| 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 |
| 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 |