

# Product information

## Mobile roughness measuring instrument MarSurf PS 10

### Product features

#### "SMAHRT Surf" – simple, smart and mobile

- Compact roughness measuring instrument for mobile use
- Simple and intuitive to use: as easy as using a smart phone
- Large, illuminated 4.3" TFT touch display
- Adjustable display
- Data backup as TXT, X3P, CSV or PDF file
- Create complete PDF measuring records directly in the measuring instrument
- Customized comments for the PDF measuring record can be entered directly into the MarSurf PS 10
- 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
- 31 surface parameters: offer the same range of functions as a laboratory instrument
- Roughness standard stored within housing aids in reducing errors
- Quick access to your frequently used functions via the Favorites list in the display
- Automatic cutoff selection, so even non-specialists can be sure of getting the correct measuring results
- NEW: Additional version with transverse drive unit available as MarSurf PS 10 C2 (item number 6910235)

### Application

- For shafts and housing components
- For large machines
- For large workpieces
- For milled and turned parts
- For ground and honed workpieces
- On the production line or directly on the machine; ideal for rapid testing of the surface roughness of a workpiece

### Introduction

sMAHRTsurf - Simple, smart and



Item no.: **6910230**

### Technical data

<b>Positioning speed</b>	0.5; 1.0
<b>Measuring principle</b>	Stylus method
<b>Probe</b>	Inductive skidded probe
<b>Parameters</b>	Ra, Rq, Rz (Ry (JIS) is equivalent to Rz), Rz (JIS), Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPC, Rmr (tp (JIS, ASME) is equivalent to Rmr), RSm, RSk, RS, CR, CF, CL, R, Ar, Rx, R3z
<b>Measuring units</b>	metric/inches
<b>Measuring range mm</b>	0,350
<b>Profile resolution</b>	8 nm
<b>Filter according to ISO/JIS</b>	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)
<b>Cutoff lc according to ISO/JIS</b>	0,25 mm, 0,8 mm, 2,5 mm, automatic filter detection
<b>Short stroke under ISO/JIS</b>	Selectable
<b>Traversing length Lt according to ISO/JIS</b>	1.5 mm, 4.8 mm, 15 mm, N x Lc, variable, automatic
<b>Traversing length according to ISO 12085 (MOTIF)</b>	1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm
<b>Evaluation length ln according to ISO/JIS</b>	1.25 mm, 4.0 mm, 12.5 mm
<b>Number n of sampling length according to ISO/JIS</b>	Selectable: 1 to 16
<b>Stylus</b>	2 µm
<b>Measuring force (N)</b>	0,00075
<b>Calibration function</b>	Dynamic; Ra, Rz, Rsm
<b>Storage capacity</b>	Min. 3900 profiles, min. 500,000 results, min. 1500 PDF records, expandable to 32 GB with Micro SD card
<b>Languages</b>	German, English, French, Italian, Spanish, Portugese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian
<b>Other</b>	Lock/password protected, date/time
<b>Data interface</b>	USB, MarConnect (RS-232), Micro SD slot for SD / SDHC cards up to 32 GB
<b>System of protection</b>	IP 40
<b>Rechargeable batteries</b>	Lithium-ion battery, min. 1200 measurements
<b>Wide range power supply</b>	100 to 264 V
<b>Dimensions in mm</b>	160 mm x 77 mm x 50 mm
<b>Weight</b>	1.92 KG

# Product information

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### Accessories

Designation	Product type	Order no.
PHT pick-up extension 80 mm	PHT (80 mm)	6850540
Standard probe 2 $\mu\text{m}$	PHT 6-350	6111520
Standard probe 5 $\mu\text{m}$	PHT 6-350/ 5 $\mu\text{m}$	6111526
Standard probe 10 $\mu\text{m}$	PHT 6-350/ 10 $\mu\text{m}$	6111527
Probe for bores with a dia. larger than 3 mm	PHT 3-350	6111521
Probe for grooves	PHT 11-100	6111524
Probe for concave and convex surfaces	PHTR-100	6111525
Probe for gear tooth flanks	PHTF 0.5-100	6111522
Probe for metal sheets	PT 150	6111523
Measuring stand 300 mm with cast iron base	ST-D	6710803
Measuring stand 300 mm with granite plate	ST-F	6710806
Measuring stand 300 mm with granite plate and T-slot	ST-G	6710807
Adjustable mounting bracket to connect to 814 SR	814 Sh	2247086
Height measuring and scribing instrument	814 SR	4426100
Height measuring and scribing instrument	814 SR	4426101
Data connection cable RS232C	16 EXr	4102410
Data connection cable USB	16 EXu	4102357
Transmitter	16 EWe	4102231
Receiver	e-Stick	4102230
V-block	PP	6710401
Parallel vice	PPS	6710604
XY Table	CT 120	6710529
Set of miniature precision vises	109 PS	4246819
Roughness standard with Mahr calibration certificate, profile depth 10 $\mu\text{m}$	PRN 10	6820420
Geometric standard with sinusoidal groove profile, profile depth 3 $\mu\text{m}$	PGN 3	6820601
Geometric standard with sinusoidal groove profile, profile depth 1,5 $\mu\text{m}$	PGN 1	6820602
Geometric standard with sinusoidal groove profile, profile depth 10 $\mu\text{m}$	PGN 10	6820605
Mahr calibration certificate for PGN Standard	PGN	9027715
DKD (German Calibration Service) calibration certificate for PGN Standard	PGN	6980102
Measuring tripod with triangular pedestal	815 GN	4413000
Measuring tripod with triangular pedestal	815 GN	4413001
Measuring tripod with triangular pedestal	815 GN	4413005
Measuring tripod with magnetic base	815 MA	4416000