

Adds value to **mobile roughness measurement**

Are you used to using your smartphone to access your data anytime, wherever you are? That is exactly what Mahr's new MarSurf M 310 provides you with: A flexible all-rounder for the mobile recording and evaluation of measuring data. Simple operation and a robust design

make the new Mahr product perfectly suited for use in production, where dirt and dust can clog the instrument and it is often users with little prior knowledge performing the quality control.

For all those who need more

The **MarSurf M 310** has the same functions as the PS 10 but has even more significant added benefits for you:

- 1 Print directly, document easily**
Measuring results on paper? Sometimes still the fastest way! The mobile printer allows you to save data on thermal paper, which can then be added directly to the workpiece.
- 2 Preprogrammed measuring functions for immediate measuring success**
A variety of measuring parameters can be defined, saved and then called up on the workpiece in the device settings. If you like, it even works using a barcode scanner, which simply connects to the MarSurf M 310. This allows even workers without expert knowledge or training to determine reliable roughness parameters.
- 3 Robot ready: Integrate instrument directly in the production line**
The MarSurf M 310 and its interfaces can be directly integrated into your production lines, such as for measuring tasks on the robot arm. They control the measuring instrument remotely – conveniently from your computer, for example.

Status at a glance

Instrument status at a glance thanks to two easily visible status LEDs. Depending on the signal color, a measurement is underway, data are being transferred or an error has been detected. Standby mode shows the charging status.

Robust in every respect

Equipped for virtually any environment: The robust skidded probe system means that the measuring instrument is less sensitive to vibrations. The PHT probe is easy to clean thanks to its open skid.

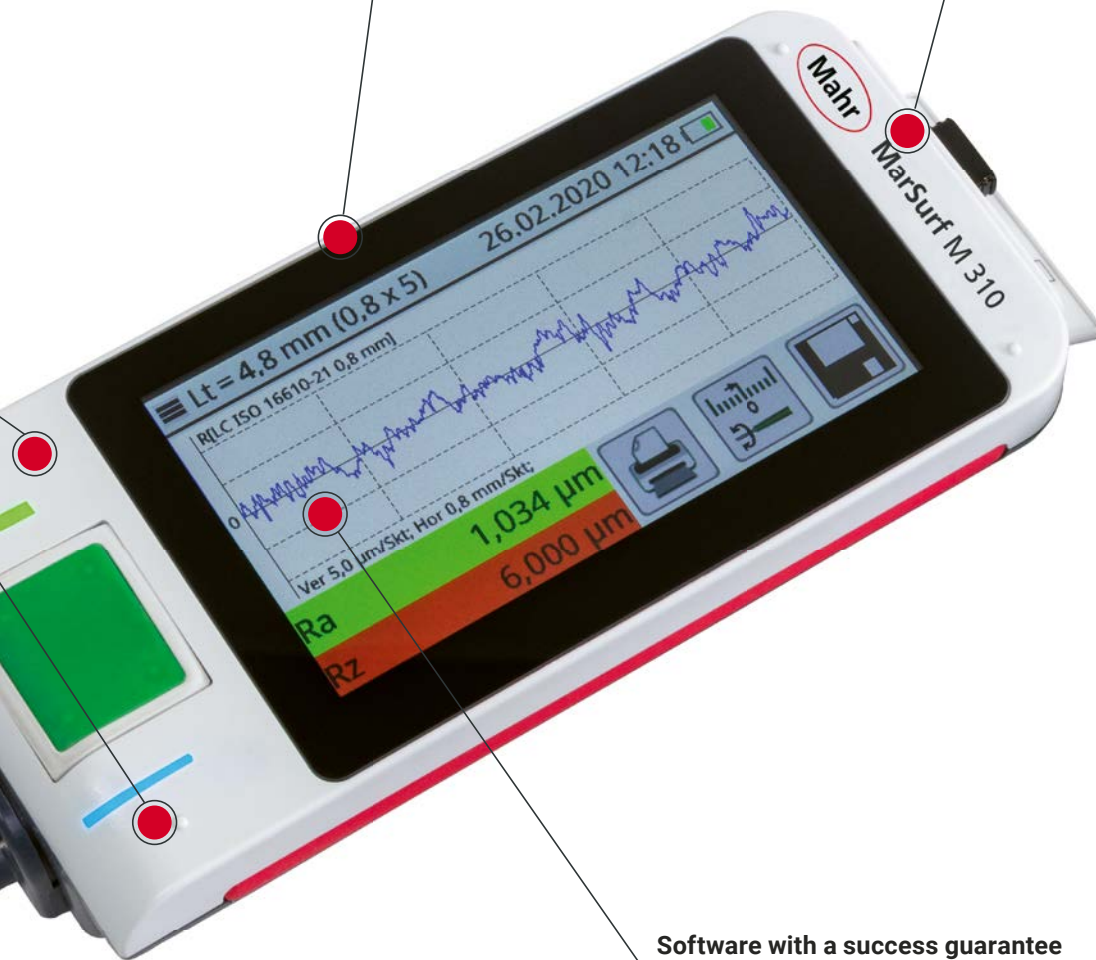


Modern optics, perfect display

A high resolution, backlit 4.3" TFT display ensures precise display of your measuring results. It is operated directly via the touchscreen – just as you are used to with your smartphone.

IATF compliant

The tried and true MarConnect duplex interface enables the transmission of a measuring equipment ID with each measurement. This makes measuring results traceable at any time.

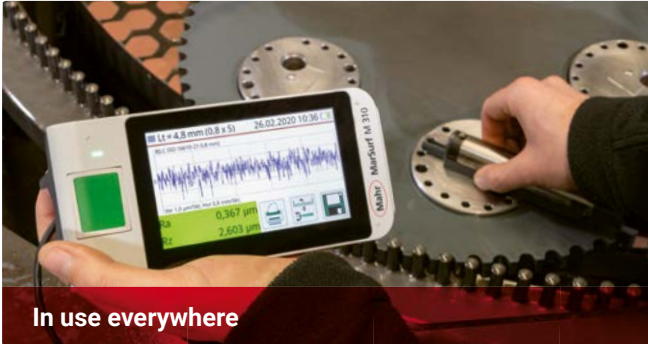


Software with a success guarantee

With this measuring instrument, you can reliably determine roughness parameters even without expert knowledge or training – thanks to intuitive software, clear menu structures and preprogrammed measuring functions.



Flexible all-rounder for your quality assurance



In use everywhere

Thanks to its compact design, the MarSurf M 310 is the perfect companion for mobile measuring tasks. Whether horizontal, vertical or overhead, you benefit from the simple, network-independent handling. The removable drive unit allows you to take flexible measurements with the MarSurf M 310 and the M 410, even in the tightest of spaces. Its large, bright, 4.33" display offers easy operation and a maximum overview while its operating concept enables intuitive handling without training. Despite its compact size, the M 310 boasts 41 parameters, offering the same range of functions as a laboratory instrument.



QR/barcode scanner

A standard hand scanner can be easily connected by USB or wirelessly to control the measuring instrument. This allows you to simply scan data or codes instead of entering them manually.

Options:

- Scan a QR/barcode on the workpiece to start the assigned program
- Scan a QR/barcode on the workpiece to input workpiece information (drawing no. etc.) into profile information

Precious helpers

The handheld support provides real added value for your work: The proven accessory considerably expands the field of application. The hand-held support makes it possible to flexibly position the probe without a costly measuring tripod.



Simple overhead measurement of small parts



Measurements of end faces of workpieces

Device information

MarSurf M 310

Item no. 6910260 (2 µm stylus tip) | Item no. 6910265 (5 µm stylus tip) | Item no. 6910264 (C2 for transverse tracing)

Measuring principle	Stylus method
Probe	Inductive skidded probe
Parameters	Ra, Rq, Rz, Ry (JIS), Rz (JIS), Rmax, Rp, Rp (ASME), Rpm (ASME), Rv, R3z, Rk, Rpk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, RPc, Rmr, tp (JIS, ASME) equivalent to Rmr, RSm, Rsk, S, CR, CF, CL, R, AR, Rx, Rzx, Rvt, Rpt, Rvt, Rmrk1, Rmrk2, Rak1, Rak2, Rs
Unit of measurement	metric/inches
Measuring range	0.350 mm
Profile resolution	8 nm
Filter as per ISO/JIS	Gaussian filter as per ISO 16610-21 (formerly ISO 11562), special filter as per DIN EN ISO 13565-1, Ls filter as per DIN EN ISO 3274 (can be switched off), DIN EN ISO 21920
Cutoff lc as per ISO/JIS	0.25 mm, 0.8 mm, 2.5 mm, automatic filter detection, variable
Shorter cutoff as per ISO/JIS	selectable
Traversing length Lt as per ISO/JIS	1.5 mm, 4.8 mm, 15 mm, N x Lc, variable, automatic
Traversing length as per ISO 12085 (MOTIF)	1 mm, 2 mm, 4 mm, 8 mm, 12 mm, 16 mm
Total length ln as per ISO/JIS	1.25 mm, 4.0 mm, 12.5 mm
Number n of sampling lengths as per ISO/JIS	selectable: 1 to 16
Stylus tip	2 µm (Item no: 6910260), 2 µm with printer (Item no: 6910267) 5 µm (Item no: 6910265), 5 µm with printer (Item no: 6910268)
Measuring force (N)	0.00075
Calibration function	dynamic; Ra, Rz, Rsm
Memory	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, Portuguese, Dutch, Swedish, Russian, Polish, Czech, Japanese, Chinese, Korean, Hungarian, Turkish, Romanian
Miscellaneous	Lock/password protected, date/time
Data interface	USB A, USB B, MarConnect (bidirectional), microSD slot for SD/SDHC cards up to 32 GB
Protection rating	IP 40
Battery	Lithium-ion battery, 3.7 V, at least 1200 measurements
Long-range AC adapter	100 to 264 V
Dimensions	160 x 77 x 50 mm