MAHRLIGHTS

A PASSION FOR DETAIL

1|2018

MEASURING SOLUTIONS AT DISCOUNTED PRICES

- **Micromar.** Large operating range thanks to Integrated Wireless
- **MarConnect.** Wireless technology for handheld gauges
- **MarSurf.** Simple and intuitive to use

This is what EXACTLY means to us.

- 0 +

Mahr

EXACTLY

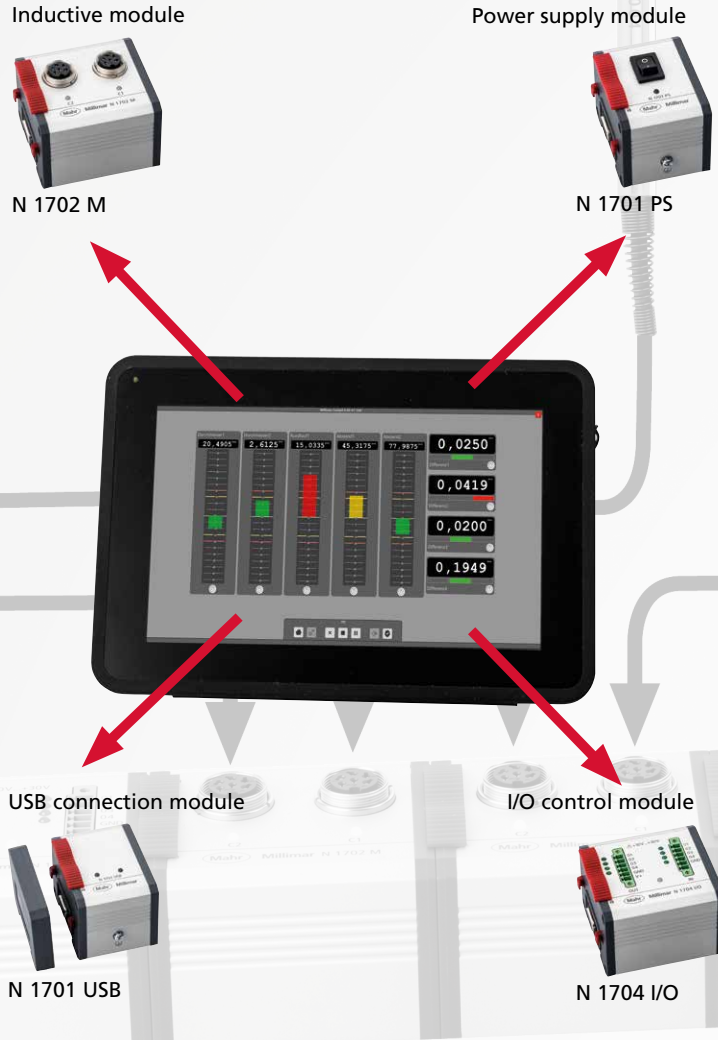
MILLIMAR. FLEXIBLE LOW COST MEASURING SOLUTION

Millimar C 1700 PC Measuring Computer

- Simple and intuitive to use
- Easy to use graphical operating objects
- Simultaneous display of 128 digital or analog measurement values
- The Millimar N 1700 modules support a wide range of inductive probes as well as the Mahr instruments with a USB interface
- Connection of Mahr measuring technologies via Integrated Wireless
- Supports up to 3 levels of password protected operation
- Real time visualization of measured data
- Data export to MS Excel or in qs-Stat format (dfq or dfx/dfd format)
- Online help (operating instructions) can be accessed directly from the software

Millimar N 1700 Modules

- Flexibly configure RS485 bus modules
- Powerful interface modules to evaluate measuring sensors
- High speed data retrieval from the connected devices
- Connect N 1700 modules via USB interface to the smart, universal evaluation and configuration software Millimar Cockpit
- Connects all compatible probe types using one module
- Flexible and modular product combinations to tackle customer-specific measuring tasks
- Max. theoretical bus data rate of 4189 values/s (depending on the number of connected channels)



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Prices are net EUR, excluding VAT and are valid from 9 April 2018 until 31 May 2018

MILLIMAR. SMART AND UNIVERSAL

Carefully matched hardware and software and the connection to Mahr measuring instruments via USB interface or Integrated Wireless reliably solve any measuring task. The intelligent Millimar Cockpit software, supported by graphical operating objects, ensures simple and intuitive operation.

Millimar C 1700 PC Measuring Computer

The convenient measuring computer for complex measuring tasks in the manufacturing sector

Product		C 1700 PC	Cockpit Software
Package contents		Millimar Cockpit software including 10.1" Touch PC, preinstalled Windows 10 IoT Enterprise, Mahr license key, installation disk, 16 GB recovery stick, operating instructions (online help), AC adapter, VESA 100 standard bracket	Mahr license key, installation disk, operating instructions (online help)
Display		Vertical bar graph, horizontal bar graph, analog display or circular scale, digital display, any combination of display types can be chosen for each feature	
Resolution	µm	0.01	
Tolerance display		Upper and lower tolerance limit (per feature) Upper and lower warning limit (per feature)	
Compatibility		USB, Integrated Wireless, Millimar N 1700	
Measuring combinations		Predefined formula templates for standard features Links entered via comprehensive formula editor	
Feature types		Length, angle, dimensionless	
Dynamic functions		MAX, MIN, MAX-MIN, MAX+MIN	
Classification		Max. 20 classes	
Number of connectable N 1700 measuring channels		32	
Number of connectable wireless receivers for i-stick		1	
Number of connectable measuring instruments with integrated wireless		8	
Number of connectable measuring instruments with USB interface		64	
Data export		qs-STAT, Excel	
Hardware interfaces		1x USB 3.0, 3x USB 2.0, 2x COM port Full-PIN (RS232/485; 5V/12V), 2x COM 2x COM "Port": 3-PIN (RX, TX, GND; RS232/485 switchable), 2× 10/100/1000Mbit RJ45 Ports; 2x W-LAN connector, VGA, Display-port	–
Power supply		100–240 V ACDC; 12 V DC Out	–
IP protection class		IP 65 (front panel)	–
Languages		German, English, Chinese, French, Russian, Czech	
System requirement		2 free USB 2.0 ports	–
Order no.		**5312801**	**5312800**
List price	**EUR**	~~2,850.00~~	~~999.00~~
Offer price	**EUR**	**2,589.00**	**899.00**

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MILLIMAR. MODULES FOR YOUR TASKS IN THE MANUFACTURING SECTOR

Smart, flexible combinations of measuring modules and software to tackle customer-specific measuring tasks.

Millimar N 1700 Modules

Modules for your application

Offer price
343.00 EUR
Order no. 5331120

- Flexibly configure RS485 bus modules
- Powerful interface modules to evaluate measuring sensors
- High speed data retrieval from the connected devices
- Connect N 1700 modules via USB interface to the smart, universal evaluation and configuration software Millimar Cockpit
- Connects all compatible probe types using one module
- Flexible and modular product combinations to tackle customer-specific measuring tasks
- Max. theoretical bus data rate of 4189 values/s (depending on the number of connected channels)
- Package contents: Operating instructions

N 1702 M

N 1701 USB

N 1701 PS

N 1704 I/O

Product		N 1702 M	N 1701 USB	N 1701 PS	N 1704 I/O
Resolution	µm	0.1	–	–	–
Measuring range, inductive probe	µm	± 2000, ± 5000	–	–	–
Probe inputs		Mahr 1340, Mahr half bridge, Mahr LVDT, Mahr VLDT	–	–	–
Data transmission rate	Values/sec.	4189	–	–	–
Error limit		0.3% (min. 0.2 µm)	–	–	–
Data interface		RS485	RS485	RS485	RS485
Power supply		–	–	230 V/115 V; 50/60 Hz	–
Power supply	mA	–	430	2000	–
Power consumption	mA	110	–	–	70
Control inputs		–	–	–	4 inputs, 10-30 V
Control outputs		–	–	–	4 outputs, 10-30 V VESD protected, short-circuit proof
Order no.		**5331120**	**5331130**	**5331133**	**5331134**
List price	**EUR**	~~360.00~~	~~150.00~~	~~205.00~~	~~260.00~~
Offer price	**EUR**	**343.00**	**138.00**	**187.00**	**238.00**

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MILLIMAR. MADE FOR PRECISION

Mahr provides a whole world of dimensional metrology excellence. The Millimar range of products comprises perfectly matched probes and evaluation units, as well as highly precise mechanical components and customer solutions. For every measuring task in length metrology we have the solution: Millimar by Mahr.

Millimar C 1200 Compact Length Measuring Instrument

With one probe input

Offer price
825.00 EUR
Order no. 5312010

Functions: ON/OFF, mm/inch, reversal of counting direction, measuring range switching, TOL (enter tolerance limit values), PRESET (enter a numerical value), factor (adjustable), DATA (data transmission), MAX/MIN memory for reversing point search, TIR (MAX-MIN) for testing radial runout and flatness

- High resolution, high contrast TFT colour display
- Fully adjustable display for ideal viewing angle
- Extremely easy to operate
- Suitable for mains or battery operation
- Suitable for mobile use when operating with batteries.
- Compact housing
- Dynamic measuring functions (max, min, max-min)
- Menu lock
- Asymmetric tolerance display

Product	Indication range Digital display	Indication range Analog display	Resolution	Reading	Order no.	List price	Offer price
	µm	µm	µm	µm		EUR	EUR
C1200	±5000	±5000 , ±2000 , ±1000 , ±300 , ±100 , ±30 , ±10 , ±3	0.1	500, 200, 100, 20, 10, 2, 1, 0.2	**5312010**	~~924.00~~	825.00

Millimar P2004 Inductive measuring probe

The Standard Probe

Offer price
229.00 EUR
Order no. 5323010

- Measuring pin mounted in ball-bearing guide
- High linearity across the entire measuring range
- Excellent electromagnetic shielding (EMC)
- All probes can be easily converted from axial to radial cable entry by use of a slip-on cap (included in package)
- Further standard probes are also available upon request, for example: probes with a compressed air (pneumatic) lifter or with vacuum retraction as well as larger measuring ranges

Product	Measuring range	Measuring force	Repeatability f_w	Measuring value hysteresis f_u	Order no.	List price	Offer price
	mm	N	µm	µm		EUR	EUR
P2004 M	± 2	0.75	0.1	0.5	**5323010**	~~261.00~~	229.00

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MARCAL. THE REFERENCE CALIPER

Mahr's **Reference System** has made the caliper much **easier and more convenient** to handle as the zero position only has to be set once and the setting is stored for all further measurements. Due to the high **degree of protection IP67** the MarCal 16 EWR is protected against dust, coolants and lubricants and is therefore **ideal for use in the harshest conditions.**

MarCal 16 ER Digital Caliper

With large digital display

REFERENCE | DIN 862

Offer price
82.00 EUR
Order no. 4103010

Functions:ON/OFF, AUTO-ON/OFF, RESET (set display to zero), mm/inch, Reference System, LOCK function (key lock)

- Ready to measure immediately thanks to the **reference system**
- Power supply: Battery life approx. 3 years
- Lapped guideways
- Slide and beam made of hardened stainless steel

Product	Measuring range		Resolution	Depth rod		Height of digits	Order no.	List price	Offer price
	mm	(inch)	mm/inch			mm		EUR	EUR
16 ER	0 –150	(6")	0.01/.0005	•		11	**4103010**	~~112.00~~	82.00
16 ER	0 –150	(6")	0.01/.0005		•	11	**4103012**	~~112.00~~	82.00
16 ER	0 –200	(8")	0.01/.0005		•	11	**4103205**	~~176.00~~	142.50
16 ER	0 –300	(12")	0.01/.0005			11	**4103207**	~~220.00~~	180.00

MarCal 16 EWR Digital Caliper

Excellent protection against dust, coolants and lubricants

REFERENCE | IP67 | DIN 862

Offer price
119.00 EUR
Order no. 4103300

Functions: ON/OFF, AUTO-ON/OFF, RESET (set display to zero), mm/inch, Reference System, LOCK function (key lock)

- Ready to measure immediately thanks to the **reference system**
- Excellent resistance to dust, coolants and lubricants: **Protection rating IP67**
- Power supply: Battery life approx. 3 years
- Lapped guideways
- Slide and beam made of hardened stainless steel

Product	Measuring range		Resolution	Depth rod		Height of digits	Order no.	List price	Offer price
	mm	(inch)	mm/inch			mm		EUR	EUR
16 EWR	0 –150	(6")	0.01/.0005	•		11	**4103300**	~~167.00~~	119.00
16 EWR	0 –150	(6")	0.01/.0005		•	11	**4103302**	~~167.00~~	119.00
16 EWR	0 –200	(8")	0.01/.0005		•	11	**4103304**	~~230.00~~	189.50
16 EWR	0 –300	(12")	0.01/.0005			11	**4103306**	~~312.00~~	245.00

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MarCal 30 EWR Digital Depth Gauge

For measuring deep down

Offer price
277.00 EUR
Order no. 4126700

REFERENCE IP67 MarConnect USB RS232C Digimatic

Functions: ON/OFF, AUTO-ON/OFF, RESET (set display to zero), PRESET (enter a numerical value), mm/inch, Reference System, LOCK function (key lock), DATA (in conjunction with data cable)

- Ready to measure immediately thanks to the **reference system**
- Excellent resistance to dust, coolants and lubricants: **Protection rating IP67**
- Power supply: Battery life approx. 3 years
- Lapped guideways
- Slide and beam made of hardened stainless steel

MarCal 30 EWR-D Digital Depth Gauge

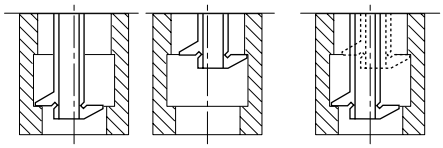
For your special applications

Offer price
418.00 EUR
Order no. 4126523

REFERENCE IP67 MarConnect USB RS232C Digimatic

Features
same as MarCal 30 EWR

Measuring groove widths and distances between grooves



Product	Measuring range		Resolution	Data output	Order no.	List price	Offer price
	mm	(inch)	mm/inch			EUR	EUR
30 EWR	0 –150	(6")	0.01/.0005	•	**4126700**	~~347.00~~	**277.00**
30 EWR	0 –300	(12")	0.01/.0005	•	**4126701**	~~455.00~~	**358.00**
30 EWR-D	0 –200	(8")	0.01/.0005	•	**4126523**	~~528.00~~	**418.00**
30 EWR-D	0 –300	(12")	0.01/.0005	•	**4126524**	~~672.00~~	**531.00**

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MARCAL. THE WIRELESS CALIPER

With the **MarConnect system** you will always have **the optimal connection to all evaluation systems** – either via integrated wireless or data cable. Mahr's **Reference System makes the caliper easier** to handle. Thanks to the high **degree of protection IP67**, the MarCal 16 EWRi **is perfect for use in the harshest conditions.**

MarCal 16 EWRi STARTER PACK

Digital caliper with integrated wireless

Functions: ON/OFF, AUTO-ON/OFF, HOLD (storage of measured values), RESET (set display to zero), PRESET (enter a numerical value), mm/inch, Reference System, LOCK function (key lock), DATA (data transmission)

- **Integrated wireless transmitter**
- Ready to measure immediately thanks to the **reference system**
- Excellent resistance to dust, coolants and lubricants: **Protection rating IP67**
- Power supply: Battery life approx. 3 years (approx. 0.5 years in wireless mode)
- Lapped guideways
- Slide and beam made of hardened stainless steel
- **Software:** MarCom Professional is free to download: **www.mahr.com/marcom**

Product	Measuring range		Resolution	Depth rod		Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch					EUR	EUR
16 EWRi	0 –150	(6")	0.01/.0005	•		**Starter Pack:** incl. i-stick wireless receiver and MarCom Professional	**9105795**	~~314.50~~	232.00
16 EWRi	0 –150	(6")	0.01/.0005		•		**9105796**	~~314.50~~	232.00

MarCal 16 EWRi

Digital caliper with integrated wireless

16 EWRi excluding i-Stick wireless receiver. Features as above.

Product	Measuring range		Resolution	Depth rod		Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch					EUR	EUR
16 EWRi	0 –150	(6")	0.01/.0005	•		**Data interface:** Integrated wireless	**4103400**	~~221.50~~	191.50
16 EWRi	0 –150	(6")	0.01/.0005		•		**4103402**	~~221.50~~	191.50

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MARCONNECT. THE CUTTING EDGE IN DATA TRANSMISSION

In modern production it is imperative that measuring results are recorded and evaluated accurately. These results are not only valuable benchmarks for assessing products, but they can also be used to evaluate and optimise production processes within Six Sigma and SPC. Mahr sets high standards with its **up-to-date wireless data transmission solutions**. **Simple, reliable and professional.**

MarConnect e-stick and i-stick Wireless Receivers

Wireless receiver for measuring instruments with integrated wireless and handheld measuring instruments with data interface

e-stick

Offer price
89.00 EUR
Order no. 4102230

i-stick

Offer price
86.00 EUR
Order no. 4102220

Product		e-stick	i-stick
Radio frequency	MHz	2400	
Number of channels		–	3
Wireless distance		up to 6 m	
Number of connectable wireless receivers to PC		1	4
Number of connectable measuring instruments with integrated wireless		–	8 per stick
Number of connectable transmission modules per wireless receiver		8	–
For measuring instruments		Transmission modules 16 EWe, 2000 e, RS232 e	with integrated wireless
Order no.		**4102230**	**4102220**
List price	**EUR**	~~94.00~~	~~93.00~~
Offer price	**EUR**	89.00	86.00

MarConnect 16 EWe Transmission Module

The transmission module for all Mahr handheld measuring instruments with wired data interfaces

Offer price
279.00 EUR
Order no. 4102231

Product		16 EWe
Transmission module for e-stick		MarCal 16 ER, 16 EWR, 16 EWV, 30 EWR, 30 EWN Digimar 814 SR Micromar 40 EWR, 40 EWS, 40 EWV, 44 EWR, 46 EWR MarCator 1075 R, 1086 R, 1087 R, 1087 BR MarSurf PS1, PS10
Order no.		**4102231**
List price	**EUR**	~~313.00~~
Offer price	**EUR**	279.00

MICROMAR. THE DIGITAL MICROMETER CALIPER

The **Micromar** 40 EWRi digital micrometer caliper with integrated wireless gives you much more mobility. Waterproof precision for reliable measuring results under the harshest factory conditions.

Micromar 40 EWRi

Digital micrometers with integrated wireless

MarConnect integrated wireless · IP65 · ABS · TOL · REFERENCE

Offer price
249.00 EUR
Order no. 4157100

Functions: RESET (set display to zero), ABS (set display to zero without the reference to the ORIGIN being lost), mm/inch, ORIGIN (enter a numerical value), LOCK function (key lock), TOL (input of tolerance and warning limits), DATA (data transmission), HOLD (storage of measured values)

- High contrast display
- Spindle is made from stainless steel, hardened and ground
- Spindle and anvil are carbide tipped
- Rapid drive
- Ratchet operation
- Hard lacquered steel frame, heat insulated
- **Digit height:** 10 mm
- **Data interface:** Integrated Wireless
- **Software:** MarCom Professional is free to download: www.mahr.com/marcom

i-stick wireless receiver, see page 9

Offer price
1,325.00 EUR
Order no. 4157115

i-stick wireless receiver, see page 9

Product	Measuring range		Resolution	Spindle thread pitch	Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch	mm			EUR	EUR
40 EWRi	0 –25	(0 –1″)	0.001 / .00005	0.5	**Data interface:** Integrated Wireless	**4157100**	~~267.00~~	249.00
40 EWRi	25 –50	(1 –2″)	0.001 / .00005	0.5		**4157101**	~~315.00~~	294.00
40 EWRi Set	0 –100	(0 –4″)	0.001 / .00005	0.5	**Data interface:** Integrated wireless	**4157115**	~~1,420.00~~	1,325.00

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MICROMAR. EVERYTHING REVOLVES AROUND PRECISION

Besides calipers, micrometers are the most frequently used hand measuring instruments. With precision ground spindles, carbide tipped measuring faces and a robust frame construction; the modern micrometer from the **Mahr Micromar series ensures maximum precision** and a **long working life**.

Micromar 40 ER / 40 EWR Digital Micrometer

REFERENCE

With simple one handed operation

- Ready to measure immediately thanks to **reference system**
- High contrast display, height of digits 10 mm
- Spindle is made from stainless steel, hardened and ground
- Rapid drive
- Ratchet operation
- Hard lacquered steel frame, heat insulated
- Power supply: Battery life approx. 2 years
- Package contents: Operating instructions, battery, setting standard (from measuring range 25–50 mm), case

Functions 40 ER: AUTO-ON/OFF, RESET (set display to zero), mm/inch, HOLD, (storage of measured values), LOCK function (key lock)
Functions 40 EWR: same as 40 ER, however, in addition ABS (set the display to zero without the reference to the origin being lost), Origin (enter a numerical value), Reference System, DATA (data transmission via connection cable)

Product	Measuring range		Resolution	Spindle thread pitch	Protection class		Order no.	List price	Offer price
	mm	(inch)	mm/inch	mm	IP40	IP65		EUR	EUR
40 ER	0 –25	(0 –1″)	0.001/.00005	0.635	•		**4157010**	~~156.50~~	142.00
40 EWR	0 –25	(0 –1″)	0.001/.00005	0.635		•	**4157011**	~~205.00~~	178.00
40 EWR	25 –50	(1 –2″)	0.001/.00005	0.635		•	**4157012**	~~278.00~~	238.00

Micromar 40 A Micrometer Screw

DIN 863-1

The classic micrometer

- Operating and display units have a glare free, satin chrome finish
- Spindle and anvil are made of hardened steel, carbide tipped
- Heat insulators
- Rapid drive with integrated ratchet
- Locking device

Product	Measuring range	Reading	Spindle thread pitch	Order no.	List price	Offer price
	mm	mm	mm		EUR	EUR
40 A	0 –25	0.01	0.5	**4134000**	~~50.50~~	41.00

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MICROMAR INNER MICROMETERS

Micromar 3-point inner micrometers - for rapid bore hole measurement in any production plant. Three laterally positioned measuring heads, together with the mechanically reproducible measuring force for self-centering the measuring instrument in the bore hole, ensures **reliable and accurate measuring results**.

Micromar 44 EWR Self-centering Digital Inner Micrometer Sets

Immediate measurement thanks to the reference system

Offer price starting at 1,199.00 EUR

Functions: RESET (set display to zero), ABS (set display to zero without the reference to the preset being lost), mm/inch, PRESET (enter a numerical value), Reference System, LOCK function (key lock), DATA (data transmission via connection cable)

- Threaded connection for changing the measuring heads
- Self-centering measuring head consists of three laterally positioned probes, each is offset at intervals of 120°
- Probes from 12 mm are carbide tipped
- From 12 mm the probes can be used to measure to the bottom of a bore
- From 40 mm all measuring heads are made from aluminum to reduce weight

Product	Measuring range	Reading	Error limit	Quantity Micrometers	Setting rings	Order no.	List price	Offer price
	mm	mm/inch	µm		mm		EUR	EUR
44 EWR	6 –12	0.001/.00005	4	3	8, 10	**4191160**	~~1,710.00~~	1,415.00
44 EWR	12 –20	0.001/.00005	4	2	16	**4191161**	~~1,490.00~~	1,199.00
44 EWR	20 –50	0.001/.00005	4	4	25, 40	**4191162**	~~2,315.00~~	1,935.00
44 EWR	50 –100	0.001/.00005	5	4	60, 85	**4191163**	~~2,785.00~~	2,285.00

Micromar 844 AS Self-centering Measuring Pistol Set, incl. MarCator 1086 R

For rapid measurements

Offer price starting at 1,345.00 EUR

- Threaded connection for changing the measuring heads
- Self-centering measuring head consists of three laterally positioned probes, each is offset at intervals of 120°
- Probes from 12 mm are carbide tipped
- From 12 mm the probes can be used to measure to the bottom of a bore
- From 40 mm all measuring heads are made from aluminium to reduce weight
- Digital indicator can be rotated to any desired measuring position

Product	Measuring range	Quantity Measuring heads 44 Ak	Setting rings	Display unit included in package contents	Resolution	Order no.	List price	Offer price
	mm		mm		mm/inch		EUR	EUR
844 AS	6 –12	3	8, 10	MarCator 1086 R	0.0005 / .00002	**4487760**	~~1,815.00~~	1,499.00
844 AS	12 –20	2	16		0.0005 / .00002	**4487761**	~~1,620.00~~	1,345.00
844 AS	20 –50	4	25, 40		0.0005 / .00002	**4487762**	~~2,385.00~~	1,985.00
844 AS	50 –100	4	60, 85		0.0005 / .00002	**4487763**	~~2,895.00~~	2,395.00

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Micromar 44 AS Set of Self-Centering Inside Micrometers

DIN 863-4

For measurements to the bottom of the bore hole

Offer price starting at 665.00 EUR

- Operating and display units have a satin chrome finish
- Spindle is made from stainless steel, hardened and ground
- Rapid drive with integrated ratchet
- Self-centering measuring head consists of three laterally positioned probes, each is offset at intervals of 120°
- Probes from 12 mm are carbide tipped
- From 12 mm the probes can be used to measure to the bottom of a bore
- From 40 mm all measuring heads are made from aluminum to reduce weight

Product	Measuring range	Reading	Error limit	Quantity Micrometers	Setting rings	Order no.	List price	Offer price
	mm	mm	µm		mm		EUR	EUR
44 AS	6 –12	0.001	4	3	8, 10	**4190350**	~~1,030.00~~	849.00
44 AS	12 –20	0.001	4	2	16	**4190351**	~~798.00~~	665.00
44 AS	20 –50	0.005	4	4	25, 40	**4190352**	~~1,810.00~~	1,515.00
44 AS	50 –100	0.005	5	4	60, 85	**4190353**	~~2,150.00~~	1,825.00

MarCal 16 FN Caliper with Scale Reading

The classic precision vernier caliper

Offer price 25.00 EUR Order no. 4100400

- All reading parts have a glare free, satin chrome finish
- Slide and beam made of hardened stainless steel
- Measuring surfaces are made of hardened stainless steel
- Measuring blades for inside measurement
- Step measuring function
- Raised guideways to protect the scale

Product	Measuring range	Vernier value	Vernier value	Error limit	Order no.	List price	Offer price
	mm	mm	inch	mm		EUR	EUR
16 FN	0 – 150	0.05	1/28	0.05	**4100400**	~~30.00~~	25.00
16 FN	0 – 200	0.05	1/28	0.05	**4100401**	~~79.50~~	62.50
16 FN	0 – 300	0.05	1/28	0.05	**4100402**	~~191.50~~	145.00

DIGITAL MEASUREMENT WITH MARCATOR

Our **innovative range of digital dial gauges contain high precision electronic measuring systems,** enabling a whole range of additional practical measuring functions. Simple to operate with a large, easy to read display, our digital dial gauges meet all the requirements of a modern measuring instrument. **Quick and simple data processing** ensures results are available when you need them.

MarCator 1075 R Digital Dial Gauge

With large display

Offer price
116.00 EUR
Order no. 4336010

Functions: ON/OFF, RESET (set display to zero), mm/inch, reversal of counting direction, PRESET (enter a numerical value), DATA (data transmission via connection cable), LOCK function (key lock), AUTO-ON/OFF

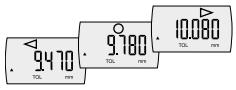
- High contrast LCD
- Protection cap on end of measuring pin
- Power supply: Battery life approx. 3 years

Product	Measuring range		Resolution	Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch			EUR	EUR
1075 R	12.5	(.5")	0.01 / .0005"		4336010	~~151.00~~	116.00
1075 R	12.5	(.5")	0.005 / .0001"	**Digit height:** 12 mm	4336020	~~205.00~~	154.00
1075 R	12.5	(.5")	0.001 / .00005"		4336030	~~305.00~~	238.00

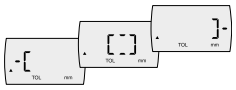
MarCator 1086 R Digital Dial Gauge

Resolution from 0.5 µm and tolerance display

Tolerance display with measurement value display.



Tolerance display without measurement value display.



Offer price
297.00 EUR
Order no. 4337620

Functions: ON/OFF, RESET (set display to zero), mm/inch, reversal of counting direction, PRESET (enter a numerical value), TOL (enter tolerance limit values), ABS (display can be set to zero, without losing the reference to the preset value), <0> (tolerance GO / NO GO display mode), DATA (data transmission via connection cable), factor (adjustable), LOCK (lock individual keys)

- High contrast LCD
- Operating and display unit (bezel) can be rotated 280°
- Lifter protection cap on end of measuring pin
- Ready to measure immediately thanks to **reference system**
- Power supply: Battery life approx. 3 years

Product	Measuring range		Resolution, switchable	Details	Order no.	List price	Offer price
	mm	(inch)	mm (inch)			EUR	EUR
1086 R	12.5	(.5")	0.01 / .0005"		4337130	~~285.00~~	234.00
1086 R	12.5	(.5")	0.0005 / 0.001 / 0.002 / 0.005 / 0.01 mm (.00002" / .00005" / .0001" / .0002" / .0005")		4337620	~~352.00~~	297.00
1086 R	25	(1")			4337621	~~420.00~~	349.00

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Prices are net EUR, excluding VAT and are valid from 9 April 2018 until 31 May 2018

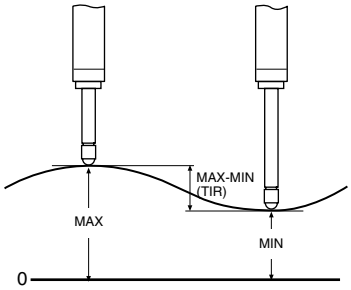
MarCator 1087 R Digital Dial Gauges

Resolution from 0.5 µm and dynamic max/min functions

Offer price
376.00 EUR
Order no. 4337660

Functions: ON/OFF, RESET (set display to zero), mm/inch, reversal of counting direction, PRESET (enter a numerical value), TOL (enter tolerance limit values), MAX/MIN (store the search for the reversal point), TIR (MAX-MIN) for testing radial runout and flatness, ABS (display can be set to zero, without losing the reference to the preset value), DATA (data transmission via connection cable), factor (adjustable), LOCK (lock individual keys)

- High contrast LCD
- Operating and display unit (bezel) can be rotated 280°
- Lifter protection cap on end of measuring pin
- Ready to measure immediately thanks to **reference system**
- Power supply: Battery life approx. 3 years



Product	Measuring range		Resolution, switchable	Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch			EUR	EUR
1087 R	12.5	(.5")	0.0005 / 0.001 / 0.002 / 0.005 / 0.01 mm (.00002" / .00005" / .0001" / .0002" / .0005")		**4337660**	~~442.00~~	**376.00**
1087 R	25	(1")			**4337661**	~~504.00~~	**418.00**

MARCATOR. THE WIRELESS DIAL GAUGE

With our **highly precise digital dial gauges featuring the MarConnect system** you will always **have the optimal connection to all evaluation systems** – either via integrated wireless or data cable. Mahr's **reference system makes** the digital dial gauge easier to handle.

MarCator 1086 Ri Digital Dial Gauges

Resolution from 0.5 µm and tolerance display

Offer price
342.00 EUR
Order no. 4337624

Functions: ON/OFF, RESET (set display to zero), mm/inch, reversal of counting direction, PRESET (enter a numerical value), TOL (enter tolerance limit values), ABS (display can be set to zero, without losing the reference to the preset value), DATA (data transmission via connection cable), factor (adjustable), LOCK (lock individual keys)

- High contrast LCD
- Operating and display unit (bezel) can be rotated 280°
- Lifter protection cap on end of measuring pin
- Ready to measure immediately thanks to the **reference system**
- Power supply: Battery life approx. 3 years
- **Software:** MarCom Professional is free to download: **www.mahr.com/marcom**

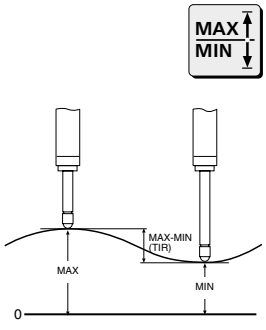
MarCator 1087 Ri Digital Dial Gauges

Resolution from 0.5 µm and dynamic max/min functions

Offer price
406.00 EUR
Order no. 4337663

Additional functions of MarCator 1087 Ri

MAX/MIN memory for reversing point search,
TIR (MAX-MIN) for radial runout and flatness test



Product	Measuring range		Resolution, switchable	Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch			EUR	EUR
1086 Ri	12.5	(.5")	0.0005 / 0.001 / 0.002 / 0.005 / 0.01 mm (.00002" / .00005" / .0001" / .0002" / .0005")	**Data interface:** Integrated Wireless	**4337624**	~~405.00~~	342.00
1086 Ri	25	(1")			**4337625**	~~459.00~~	389.00
1087 Ri	12.5	(.5")		**Data interface:** Integrated Wireless	**4337663**	~~475.00~~	406.00
1087 Ri	25	(1")			**4337665**	~~537.00~~	459.00

i-stick wireless receiver, see page 9

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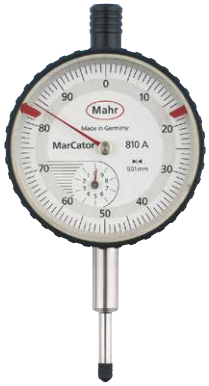
MARCATOR POINTS YOU IN THE RIGHT DIRECTION

Due to their versatility, dial gauges rank as some of the most commonly used transducers. That is certainly the case with our MarCator series. Our mechanical dial gauges have **precision gears and pinions for maximum accuracy.** Also available in shockproof and waterproof versions.

MarCator 810 A Precision Dial Gauge

DIN 878

The classic indicator with a lifter protection cap



Offer price
33.75 EUR
Order no. 4311050

- High contrast dial face
- Adjustable coloured tolerance markers for optimum contrast
- Chrome plated metal housing
- Lifter protection cap with dust protection function
- High precision gears and pinions

Product	Measuring range	Reading	Dial diameter	Details	Order no.	List price	Offer price
	mm	mm	mm			EUR	EUR
810 A	10	0.01	50	**Measuring force:** 0.7 - 1.3 N	**4311050**	~~41.25~~	33.75

MarStand 815 MG Measuring Stand with Magnetic Base

Simple one handle positioning

Offer price starting at
172.50 EUR

- 3D measuring stand, can reach any position within the operating range
- Easy to position, all three joints can been fixed into position with just one handle
- Maintenance-free mechanical clamping system
- Arm components are made of a high quality black anodized aluminum
- Dial gauge holder with 8 mm mount diameter and dovetail for dial test indicator measuring devices
- Equipped with micro adjustment, free of backlash
- Very powerful ON/OFF magnet
- Package contents: Excludes dial gauge

Product	Fine adjustment range	Total height	Projection (max.)	Vee-block for shaft diameter	Magnetic force of vee-block	Order no.	List price	Offer price
	mm	mm	mm	mm	N		EUR	EUR
815 MG		224	130		300	**4420350**	~~188.50~~	172.50
815 MG	5	316	200	6 - 120	800	**4420360**	~~207.50~~	189.00
815 MG		401	280			**4420370**	~~252.00~~	229.00
815 MG*	2	444	330		1000	**4420380***	~~485.00~~	433.00

* Specifically designed for measuring instruments with µm resolution

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MARTEST. HIGHLY SENSITIVE MEASUREMENT

Since 1936 Mahr has been one of the world's leading suppliers of dial test indicator measuring devices. The sensitive computer-optimized mechanism ensures maximum security and precision. MarTest instruments are ideal for use in workshop conditions, with sealed dials ensuring liquid resistance.

MarTest 800 S / SG / SGE

Dial test indicator measuring device - standard version

- High contrast dial face, sealed with an O-Ring
- Satin chrome finished housing with 3 integrated dovetail guideways
- Shockproof mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball-bearing mounted double lever, overload protection thanks to friction clutch
- Measuring anvil with carbide ball ø 2 mm

With hardened mineral glass, resistant to breakage and scratching

Product	Measuring range	Reading	Dial diameter	Measuring anvil length	Order no.	List price	Offer price
	mm	mm	mm	mm		EUR	EUR
800 S	± 0.4	0.01	28	14.5	**4305200**	~~86.50~~	77.50
800 SG	± 0.4	0.01	38	14.5	**4307200**	~~87.50~~	78.50
800 SGE	± 0.7	0.001	38	9.15	**4308220**	~~163.00~~	146.00

MarTest 800 SM / SGM / SL

Dial Test Indicator Measuring Device - for special measurements

- High contrast dial face, sealed with an O-Ring
- Satin chrome finished housing with 3 integrated dovetail guideways
- Shockproof mechanism
- Anti-magnetic model
- Automatic adjustment to the contacting direction ensuring infallible readings
- Ball-bearing mounted double lever, overload protection thanks to friction clutch
- Measuring anvil with carbide ball ø 2 mm

With hardened mineral glass, resistant to breakage and scratching

Product	Measuring range	Reading	Dial diameter	Measuring anvil length	Order no.	List price	Offer price
	mm	mm	mm	mm		EUR	EUR
800 SM	± 0.1	0.002	28	14.5	**4308150**	~~110.00~~	99.00
800 SGM	± 0.1	0.002	38	14.5	**4308200**	~~122.00~~	109.00
800 SL	± 0.25	0.01	28	41.24	**4306200**	~~138.00~~	123.50

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IDEAL FOR THE WORKSHOP

When you need to measure and check workpieces quickly in the workshop, trust Mahr's height measuring and scribing instruments.

Digimar 814 SR Height Measuring and Scribing Instrument

Exact positioning by handwheel

MarConnect USB RS232C Digimatic ABS System REFERENCE

Offer price
528.00 EUR
Order no. 4426100

Functions: RESET (set display to zero), mm/inch, ABS (switch between relative and absolute measurement), reference lock/unlock, PRESET (enter a numerical value), DATA (data transmission via connection cable), AUTO-ON/OFF

- Life of battery up to 3 years
- Travel speed 1.5 m/s (60″/s)
- Ergonomic, sturdy base
- Hardened and lapped contact surface which produces both a smooth and even movement
- Slide and rail are made of hardened stainless steel
- Handwheel for positioning and measuring
- Fine adjustment
- Locking screw
- Interchangeable measuring and scriber tips, carbide tipped

Extra stable and torsionally rigid columns with strong cross-section for precise marking and measuring tasks

Sturdy heavy-duty base, easy to handle

Clamping lever for quickly fixing the slide unit

Handwheel for easy positioning and measuring

Product	Measuring range		Resolution	Details	Order no.	List price	Offer price
	mm	(inch)	mm/inch			EUR	EUR
814 SR	0 –350	(0 –14″)	0.01 / .0005″	**Digit height:** 12 mm	**4426100**	~~615.00~~	528.00
814 SR	0 –600	(0 –24″)	0.01 / .0005″		**4426101**	~~1.080.00~~	944.00

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AIM HIGH

Digimar height measuring instruments guarantee the ultimate in flexibility and quality control. Our motorized Digimar height measuring instruments are **simple to operate**; all the basic functions **can be executed** with a single key, offering **ease of use and accuracy.**

Digimar 816 CL Height Measuring Instrument

Perfect for accurate measurements in the production environment

Offer price starting at 3,650.00 EUR

- Contacting from below and above
- Width between ledge and/or distance between a groove incl. centre of the ledge and/or groove
- Diameter of a bore hole and/or shaft incl. centre of the bore hole and/or shaft
- Reversal point of a bore hole / shaft (above and/or below)
- Calculate distances and/or symmetry
- Dynamic measuring functions
- Measuring program
- Process measured data

Operating and display unit:

- Easy to read backlit graphic LCD
- Clear function keys
- Language-neutral operator guidance with self-explanatory icons / pictograms
- Possible to set additional zero points on a workpiece
- Memory can store up to 99 measured values

Measuring system:

- Excellent accuracy and reliability due to the optical incremental measurement system with the double reader head
- Dynamic probe system enabling high repeatability
- Air bearings system for light and smooth movement
- Precise measuring head guidance on stainless steel guideways
- Motorized measuring slide simplifies measurement runs
- Probe constant remains after the instrument is switched off
- Integrated rechargeable battery with a long operating life for mains-independent measurement
- Temperature compensation via internal temperature sensor

Product		816 CL	
Measuring range	mm	0 –350	0 – 600
Range of application from. . . to	mm	170 . . . 520	170 . . . 770
Resolution	mm	0.01, 0.001	
Error limit		(2.8 + L/300) L in mm	
Repeatability: Bore	µm	3	
Repeatability: Plane	µm	2	
Perpendicularity deviation	µm	15	20
Operating time max.	h	10	
Measuring force	N	1.0 +/–0.2 N	
Rel. humidity, non-condensing	%	65	
Working temperature	°C	20	
Operating temperature	°C	10 – 40	
Order no.		**4429030**	**4429031**
List price	**EUR**	~~4,330.00~~	~~4,905.00~~
Offer price	**EUR**	**3,650.00**	**3,999.00**

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Prices are net EUR, excluding VAT and are valid from 9 April 2018 until 31 May 2018

Digimar 817 CLM Height Measuring Instrument

With Quick Mode. Rapid measurement at the highest accuracy

Offer price starting at 4,950.00 EUR

- Contacting from below and above
- Reversal point of a bore hole / shaft (above and/or below)
- Calculate distances and/or symmetry
- Dynamic measuring functions
- Measure perpendicularity and straightness
- Measure in 2D mode
- Measuring programs
- Statistics
- Process measured data etc.

Operating and display unit:

- Large and clearly defined function keys
- Easy to read backlit graphic LCD
- Operator guidance with self-explanatory icons / pictograms
- Future-proof thanks to software updates
- Selectable auto-off function, without loss of measured values

Measuring system:

- Excellent accuracy and reliability due to the optical incremental measurement system with the double reader head
- Dynamic probe system enabling high repeatability
- Air bearings system for light and smooth movement
- Precise measuring head guidance on stainless steel guideways
- Motorized measuring slide simplifies measurement runs
- Probe constant remains after the instrument is switched off
- Integrated rechargeable battery with a long operating life for mains-independent measurement
- Temperature compensation via internal temperature sensor

Product		817 CLM		
Measuring range	mm	0 –350	0 – 600	0 –1000
Range of application from. . . to	mm	170 . . . 520	170 . . . 770	170 . . . 1170
Resolution	mm	0.01, 0.005, 0.001, 0.0005, 0.0001		
Error limit		(1.8 + L/600) L in mm		
Repeatability: Bore	µm	1		
Repeatability: Plane	µm	0.5		
Perpendicularity deviation	µm	5	6	10
Operating time max.	h	10		
Measuring force	N	1.0 +/–0.2 N		
Rel. humidity, non-condensing	%	65		
Working temperature	°C	20		
Operating temperature	°C	10 – 40		
Order no.		**4429010**	**4429011**	**4429012**
List price	**EUR**	~~5,740.00~~	~~6,325.00~~	~~10,625.00~~
Offer price	**EUR**	**4,950.00**	**5,390.00**	**9,350.00**

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ROUGHNESS WITH PRECISION

Careful testing is paramount wherever surface structures affect the functioning, processing or appearance of components or products. **MarSurf bring Mahr expertise and know how** as the top quality solution for all your surface metrology requirements.

MarSurf M 300 SET Mobile Roughness Measuring Instrument

Perfect for accurate measurements in the production environment

Offer price
3,790.00 EUR
Order no. 6910401

- Automatic profile detection and corresponding selection of filters and traversing length conforming to standards
- Individual sampling lengths and short cutoff can be selected
- Printing of R-profile (ISO/ASME/JIS), P-profile (MOTIF), material ratio curve, measuring record
- Measuring units (µm/µinch) and standards (ISO/JIS/ASME/MOTIF) are selectable

M 300 SET contents:

- M 300 evaluation instrument
- RD 18 drive unit with integrated standard
- PHT 6-350 / 2 µm default probe (conforming to standards)
- Roughness standard PRN 10 Includes Mahr Calibration certificate
- Height adjustment, probe protection, 2 x USB cable (for connection to a PC), carrying case, etc.

Product		M 300
Measuring range	µm	350
Parameters		Ra, Rz (Ry (JIS) equivalent to Rz), Rz (JIS), Rq, Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPc, Rmr (tp (JIS, ASME) equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx, Rv
Stylus tip	µm	2 µm
Calibration function		Dynamic
Memory		Store up to 40,000 results and up to 30 profiles
Dimensions (L x W x H) of the drive unit	mm	130 x 70 x 50
Dimensions (L x W x H) of the evaluation instrument	mm	190 x 140 x 75
Weight of the drive unit	G	approx. 300
Weight of the evaluation unit	kg	approx. 1
Measuring principle		Stylus method
Probe		Inductive skidded probe
Measuring force	N	0.75 mN
Order no.		**6910401**
List price	**EUR**	~~**4,470.00**~~
Offer price	**EUR**	**3,790.00**

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Prices are net EUR, excluding VAT and are valid from 9 April 2018 until 31 May 2018

MarSurf M 300 C SET Mobile Roughness Measuring Instrument

Perfect for accurate measurements in the production environment

- Automatic profile detection and corresponding selection of filters and traversing length conforming to standards
- Individual sampling lengths and short cutoff can be selected
- Printing of R-profile (ISO/ASME/JIS), P-profile (MOTIF), material ratio curve, measuring record
- Measuring units (µm/µinch) and standards (ISO/JIS/ASME/MOTIF) are selectable

M 300 C SET contents:

- M 300 evaluation instrument
- Cylindrical drive unit RD 18 C
- PHT 6-350 / 2 µm default probe (conforming to standards)
- Roughness standard PRN 10 Includes Mahr Calibration certificate
- Height adjustment, probe protection, 1x USB cable (for connection to a PC), carrying case, etc.

Offer price
3,790.00 EUR
Order no. 6910431

Note: An additional separate MarSurf RD 18 C2 drive unit for transverse tracing for M 300 C is also available!

Product		M 300 C
Measuring range	µm	350
Parameters		Ra, Rz (Ry (JIS) equivalent to Rz), Rz (JIS), Rq, Rmax, Rp, RpA (ASME), Rpm (ASME), Rpk, Rk, Rvk, Mr1, Mr2, A1, A2, Vo, Rt, R3z, RPc, Rmr (tp (JIS, ASME) equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx, Rv
Stylus tip	µm	2 µm
Calibration function		Dynamic
Memory		Store up to 40,000 results and up to 30 profiles
Dimensions (L x W x H) of the drive unit	mm	139 x ø26
Dimensions (L x W x H) of the evaluation instrument	mm	190 x 140 x 75
Weight of the drive unit	G	approx. 300
Weight of the evaluation unit	kg	approx. 1
Measuring principle		Stylus method
Probe		Inductive skidded probe
Measuring force	N	0.75 mN
Order no.		**6910431**
List price	**EUR**	~~**4,470.00**~~
Offer price	**EUR**	**3,790.00**

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Prices are net EUR, excluding VAT and are valid from 9 April 2018 until 31 May 2018

MarSurf PS 10 Set Mobile Roughness Measuring Instrument

Intuitive and simple to use

- Simple and intuitive to use: As easy to use as a smart phone
- Large, illuminated 4.3" TFT touch display
- Create complete PDF measuring records directly in the measuring instrument
- Customer-specific comments can be entered directly into the MarSurf PS 10 for the PDF measuring record
- Data backup as TXT, X3P, CSV or PDF file
- Instrument flexibility: Removable drive unit
- 31 Surface parameters: Offer the same range of functions as a laboratory instrument.

Package contents:

- Drive unit (detachable)
- 1 standard probe conforming to standards
- Built-in rechargeable battery, charger / 3 adapters, USB cable
- Roughness standard integrated into housing (detachable), including Mahr calibration certificate
- Probe protection, carry case with shoulder strap
- Extension cable for drive unit
- Operating instructions

Offer price
2,095.00 EUR
Order no. 6910230

Product		PS 10
Measuring range	µm	350
Parameters		Ra, Rq, Rz (Ry (JIS) 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) equivalent to Rmr), RSm, RSk, S, CR, CF, CL, R, Ar, Rx
Stylus tip	µm	2
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)
Data interface		USB, MarConnect (RS232), microSD slot for SD / SDHC cards up to 32 GB
Battery		Lithium-ion battery, 3.7 V, nominal capacity 11.6 Wh, min. 1200 measurements
Measuring principle		Stylus method
Probe		Inductive skidded probe
Measuring force	N	0.75 mN
Order no.		**6910230**
List price	**EUR**	~~2,430.00~~
Offer price	**EUR**	**2,095.00**

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THE SECOND DIMENSION IN METROLOGY

With MarVision optical measuring instruments, Mahr offers you a quick and reliable solution to many different 2D measurement tasks. From precision products for the manufacturing industry to medical technology and miniaturized electronic components, precise measuring instruments and efficient operating and evaluation units meet the highest demands.

MarVision SM 150 / SM 160 Stereo Zoom Microscope

Inspection of workpieces on the shop floor or in the quality control laboratory

Offer price
786.00 EUR
Order no. 4245001

- High quality optics for light intensive and sharp 3D images
- Continuously variable magnification due to the adjustable zoom lens
- Focusing with an ergonomic handwheel, mounted either side, ideal for either a left or right handed operator
- Vee-block head tilted to 45° and rotatable through 360°; with the dioptric adjustment (54 –76 mm)
- Illumination 12 V /15 W, integrated incident and transmitted light, continuously variable (SM 150 only)

Product	Magnification	Field of view diameter	Observation tube angle	Optical tube	Working distance	Max. height of test piece	Order no.	List price	Offer price
		mm	µm		mm	mm		EUR	EUR
SM 150	variable 7 – 45 times	28 – 5	45 °	Binocular	105	75	**4245001**	~~924.00~~	786.00
SM 160							**4245003**	~~1,315.00~~	1,130.00

MarVision SM 151 Stereo Zoom Microscope incl. CamSet

Powerful stereo microscope for documentation with first class optics

Offer price
1,570.00 EUR
Order no. 9104848

- High quality optics for light intensive and sharp 3D images
- Continuously variable magnification due to the adjustable zoom lens
- Focusing with an ergonomic handwheel, mounted either side, ideal for either a left or right handed operator
- Vee-block head tilted to 45° and rotatable through 360°; with the dioptric adjustment (54 –76 mm)
- Illumination 12 V/15 W, integrated incident and transmitted illumination, continuously variable

Product	Magnification	Field of view diameter	Observation tube angle	Optical tube	Working distance	Max. height of test piece	Order no.	List price	Offer price
		mm	µm		mm	mm		EUR	EUR
SM 151	variable 7 – 45 times	28 – 5	45 °	Trinocular	105	75	**9104848**	~~1,835.00~~	1,570.00

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MEASURING SOLUTIONS FOR INCREASED EFFICIENCY

Innovative measuring stations for the manufacturing sector

MarSurf CD Series – Contour Measurement 25 times faster

- High speed, all axes
- 100 mm measuring range
- 200 mm/s with the X-axis
- Clamping system with 50 mm grid
- Automatic probe arm detection

Advantages: They accelerate your processes, improve production quality, work more productively and also more economically.

MarVision MM 420 CNC – Measuring Microscope for Automatic CNC Measurement

- Completely automatic measurements on the Z, X and Y axes
- Outstanding accuracy and reliability
- Optical sensor works quickly, with precision and no contact
- Also ideal for pallet measurements

Advantages: The measuring microscope accelerates and improves quality assurance at an attractive price-performance ratio while reducing operator impact.

Precimar Optimar 100 – Economically testing gauges

- Tests dial gauges, dial comparators, dial test indicator measuring devices and 2-point bore gauges as well as measuring probes
- Partly automated or fully automated tests
- Maximum measuring accuracy

Advantages: Testing your equipment more quickly and more precisely, optimising the cost of test equipment management.

MarShaft SCOPE 250 *plus* – Measure rotationally symmetrical workpieces fully automatically

- High resolution CMOS Matrix camera with 40 mm live image area
- Superior accuracy and extremely short measuring times thanks to quick measuring value recording (120 images / sec.)

Advantages: Measure workpieces with optical sensor in a matter of seconds. Excellent entry level price into the small optical shaft measuring machine segment.

MarForm MMQ 400 – Universal, fully automatic form measuring machines

- Highly precise C, Z and X measuring axis
- For highly precise, exceptionally long as well as large and heavy workpieces
- Automated measurements in production or in the inspection room
- Path control for the nominal contour

Advantages: Workpiece assessment as per DIN ISO 1101 as well as assurance and enhancement of production quality.

Software MarCAD – Offline programming using 3D model for form tester

- Completely creates measuring program on 3D CAD model
- Automatically determines most efficient measuring strategy
- Detects optimal clamping position
- Facilitates quality assurance

Advantages: Offline programming considerably reduces auxiliary process times and safeguards valuable time in the development process.

Engineered Solutions – Measuring stations tailored to customer request

- Custom-designed measuring stations for your workpieces
- From simple, manually operated measuring stations to fully automated, robotic solutions for inline measurement

Advantages: User-friendly, efficient measurement with a perfect cost-benefit ratio.

MarSolution – Customised measuring stations for the manufacturing sector

- Simple and fast measurements
- Close to the production area or in the production line
- Semi-automatic or fully automatic
- Functions such as weighing or engraving may be integrated

Advantages: Always the right, economical solution with standard components from the Millimar line to complete your measuring task.

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