

Digimar | 816 CLT

Length metrology

Measure close to production with the new Digimar 816 CLT

Measurements in the thick of the action: This is what the new Digimar 816 CLT is all about: thanks to its optimized mechanics, has proven itself in the rough and tumble of everyday production.

Measure accurately and easily like never before! The new addition to the Mahr height measuring instruments boasts outstanding measuring accuracy and is extremely easy to operate. The Digimar 816 CLT has a practical touch display with extra-large buttons, an integrated PDF memory, data transfer via Bluetooth and a wide range of accessories to make your work easier.

Max. length measuring
uncertainty:

2.0+ L/400 μ m
(L in mm)



Advantages

- Extra large buttons for quick and reliable execution of functions
- Reliable measuring results thanks to motorized contacting without manual operator influence
- Create PDF measuring records directly on the device
- Wireless data transfer or via USB
- Free MarCom software to transfer data

Best ergonomics

Ergonomic handles on both sides have an integrated operating key for the air bearing ensuring the device can be moved accurately and effortlessly on the measuring plate.



Best connection for secure data

Data can be transferred wirelessly or via USB cable via the MarConnect interface. Quickly print out a series of measurements? A Bluetooth printer is available for this purpose. Simply choose between complete measuring records in PDF format or save your measuring records as a TXT file.

Creation of PDFs directly on the device

Practical: The device creates a complete PDF file without the need for additional software or transfer to a computer. Information can be added to the PDF files directly on the device.

Simple touch measurement

Intuitive operation via extra large, clearly defined keys to ensure the reliable completion of measurements, setting and calculation functions, and the creation of measuring programs via Drag & Drop.

Important features for your quality assurance



Clarity

The touch display of the new Digimar 816 CLT features even larger buttons that make recognition and operation even easier. They lead directly to the measurement and evaluation functions. This always ensures the reliable completion of measurements, setting and calculation functions, and the creation of measuring programs via Drag & Drop.



Extensive ports

The Digimar 816 CLT has a variety of ports for backing up your measuring data. Data transfer is possible both wirelessly and by cable via the MarConnect duplex interface. The latter also transmits a measuring equipment ID, ensuring that your measuring results are traceable.



Integrate dial indicators

A port integrated in the slide enables error-free measurement of perpendicularity and straightness in conjunction with the Millimes 2000/2001 W digital dial comparators.



Ergonomic handles

Handles on both sides guarantee that you can move your device precisely and effortlessly on the measuring plate. This allows the Digimar 816 CLT to be quickly moved into position and the measurement started.

Fast, intuitive and highly compatible: **The new Digimar height measuring instruments**

Do you value high-performance and reliable measuring technology for your quality assurance? The new Digimar family offers you the ideal device for every application. With its practical functions, the new Digimar 816 CLT allows you to obtain your measuring results quickly and easily without having to forego extensive evaluation options. Do you have the highest demands regarding accuracy, ease of use and functionality? Then the top-of-the-range Digimar 817 CLT is just right for you.

The choice is yours:

	Digimar 816 CLT	Digimar 817 CLT
Measuring ranges in mm	350/600	350/600/1000
Error limit in μm	$(2.0+L/400)$ L in mm	$(1.8+L/600)$ L in mm
Plane repeatability in μm	1 μm	0.5 μm
Bore repeatability in μm	2 μm	1 μm
Control panel	10" tiltable	10" tilt, swivel and height-adjustable
Function key design	Extra large	Standard
Thumbwheel for fine positioning and quick measurement keys	–	x
2D measuring functions	–	x
Additional functions	–	Auto distance, double probe measurement, cone function, third zero point
Measuring programs	Yes	Yes, including integrated ISO tolerance table
Recording	PDF, BLE printer	PDF, BLE printer
Data transfer	MarConnect (USB or wireless)	MarConnect (USB or wireless)

Digimar 816 CLT

Height measuring instrument

FEATURES

Functions

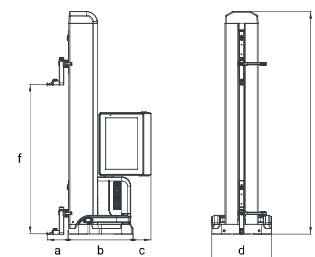
- Contacting bottom or top
 - Web width or groove spacing incl. web or groove center
 - Bore or shaft diameter incl. bore or shaft center
 - Bore reversal point (top or bottom)
 - Shaft reversal point (top or bottom)
 - Calculate distances or symmetry
 - Dynamic measuring functions
 - Perpendicularity measurement
 - Straightness measurement
 - Measuring programs
 - Measurement data processing
 - Large and clearly defined touch display with backlighting
 - User guide with self-explanatory icons
 - Multilingual user guidance
 - Option of setting additional zero points on the workpiece
 - Additional measuring instrument can be connected via MarConnect USB port
 - Future-proof thanks to software updates
 - Automatic activation of standby mode
 - Selectable auto-off function, without loss of measured values
 - Excellent measuring accuracy and reliability due to the optical incremental measuring system with the double reader head
 - Dynamic probe system enabling high repeatability
 - Air bearing system for light and smooth movement
 - Measuring head guided in precision ball bearings
 - 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 integrated temperature sensor
- **Software:** MarCom Professional free download: www.mahr.com/marcom (only for Mahr data cables and wireless systems with USB and RS-232 interface)
 - **Package contains:** height measuring instrument incl. operating and display unit, carrier 817h1, probe K6/51, setting block 817 eb, USB cable, instruction manual, power source, protection cover, calibration certificate
 - **Energy supply:** Integrated rechargeable battery (up to 14 h)



TECHNICAL DATA

Order no.	4429630	4429631
Type	816 CLT	
Measuring range	mm 0 –350	0 –600
Measuring range	inch 0 –14"	0 –24"
Application range from	mm 170	
Application range up to	mm 520	770
Numerical increment	mm 0.0001, 0.0005, 0.001, 0.005, 0.01	
Resolution	inch .001", .0005", .0001", .00005", .00001"	
Error limit	µm (2.0 + L/400) L in mm 2.0 + L/400) L in mm	
Repeatability planes	µm 1	
Repeatability bores	µm 2	
Perpendicularity error in µm	µm 5	8
Operating time max.	h 14	
Data interface:	3x USB 2.0, Wireless	
Product weight	kg 22	26

Order no.	a	b	c	d	e	f
4429630	mm 89	mm 278	mm 77	mm 255	mm 688	mm 356
4429631	mm 89	mm 278	mm 77	mm 255	mm 938	mm 610



- or via power supply unit
- **Battery type:** Rechargeable Li-Ion battery 7.2 V
- **Data interface:** 3x USB 2.0, wireless

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Height measuring instrument

ACCESSORIES

Order no.	Type	Description
4102220	i-Stick	Wireless receiver for measuring instruments with integrated wireless
6910271	DP-B1	Printer set for MarSurf M 310, MarSurf M 410 and Digimar 817 CLT
4221525	107 G	Surface plate made from granite, 1000 x 630 mm
4221573	107 Ug	Open underframe with edge protection, 1000 x 630 mm
4221526	107 G	Surface plate made from granite, 1200 x 800 mm
4221574	107 Ug	Open underframe with edge protection, 1200 x 800 mm



i-Stick



107 Ug