



M5

Industrial displays for dimensional measurement

All the precision, without the complexity.

M5

INDUSTRIAL DISPLAYS FOR DIMENSIONAL MEASUREMENT

- 5" capacitive touchscreen
- Up to 3 characteristics displayed simultaneously
- 10 programs in memory
- Several versions available depending on the type of sensor to be connected

The M5 can be used in a wide variety of applications, from the simplest to the most complex.



AT A GLANCE

Display and inputs

- 1 or 2 measurement inputs depending on version (up to 4 via external M-BUS modules)
- Simultaneous display of up to 3 characteristics
- Digital readout, colored bar graph, analog dial (galvanometer)
- Color-coded indicators based on part tolerance

Interface and connectivity

- 5-inch capacitive touchscreen (800×480px)
- USB connectivity (keyboard emulation, CSV export to USB drive)
- RS232 port → ASCII or Modbus RTU protocol
- Compatible with barcode / QR code readers

Software functions

- Management of up to 10 programs in memory
- Administrator password protection
- Class sorting, mathematical functions, temperature compensation, ...
- Automatic function trigger based on measurement stability (autotransfer)
- Fully customizable interface

Instrument connectivity

- Inductive probes, Heidenhain sensors, air gages
- Compatible with Sylvac Bluetooth instruments (via the Sylvac dongle)
- Compatible with Sylvac, Mahr and Tesa USB instruments
- Optional external modules → I/O, relay, temperature

Adapts to all your measuring equipment

The M5 connects to a very wide range of measuring equipment, from classic inductive probes to wireless portable instruments.

Inductive and digital probes

Metro, Tesa, Mahr, Marposs, Orbit®, Peter Hirt, ...

Incremental scales / Encoders

Heidenhain, Magnescale, Mitutoyo LG

Air gages

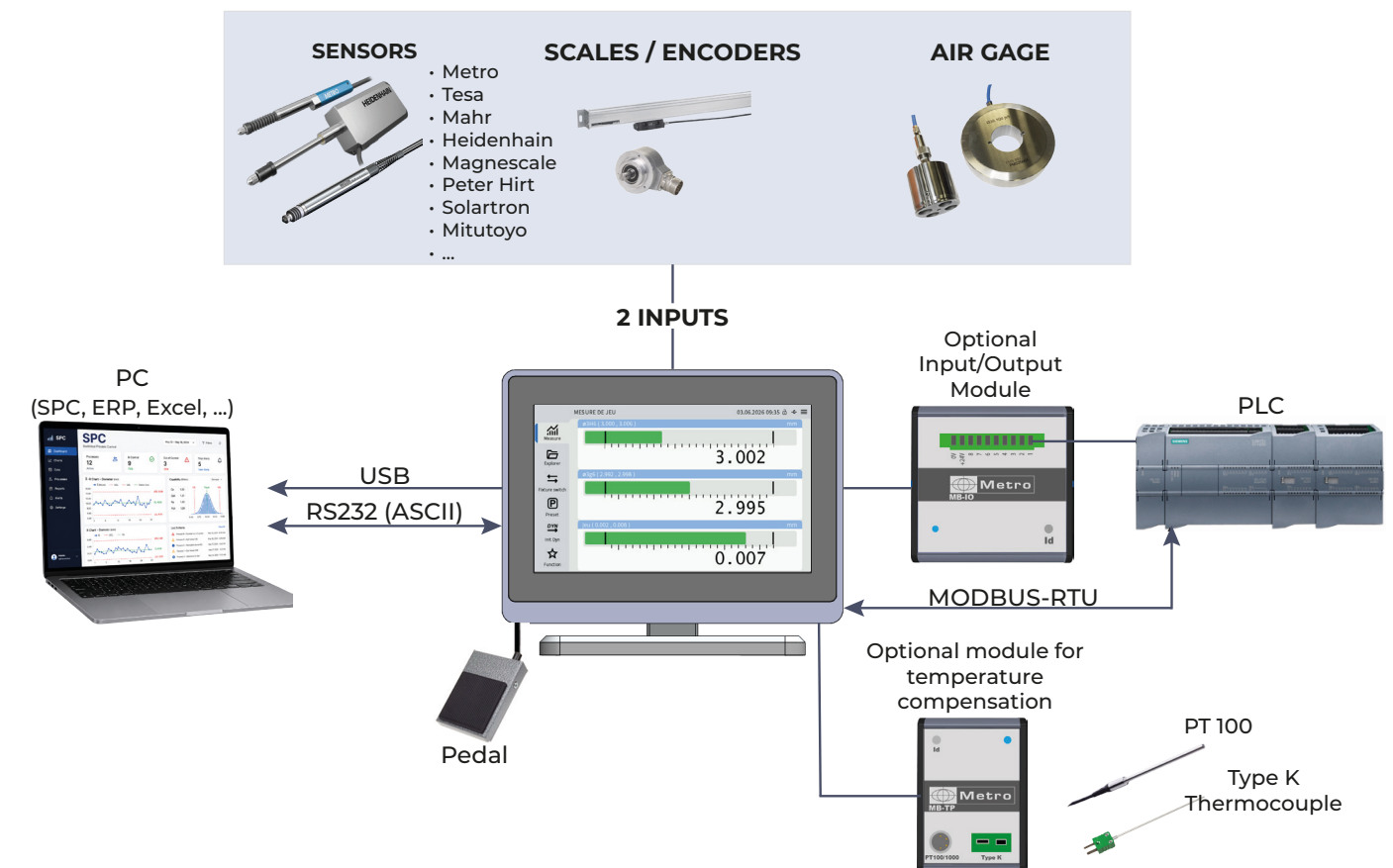
Compatible with any brands

Bluetooth and USB

Sylvac and Tesa instruments

The **M5** is a state-of-the-art tool for performing **any dimensional inspection using 1 or 2 measuring devices**. Several versions are available, allowing the connection of Metro, Tesa, Mahr, Marposs... inductive probes, Air gage compatible with all brands, Heidenhain incremental scales and encoders (Sinus 11µA, 1Vpp or TTL output), and Magnescale or Mitutoyo LG-series sensors.

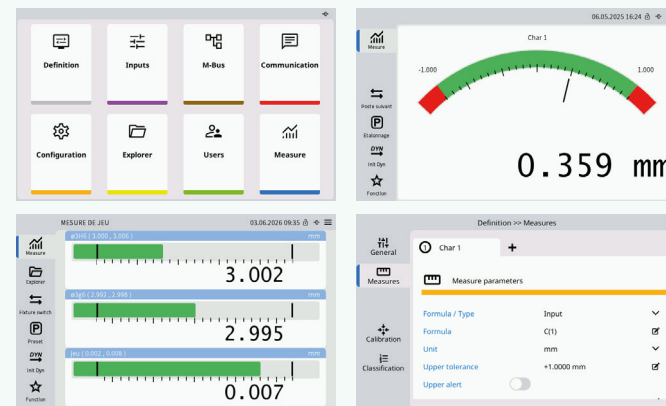
The M5 now also communicates directly with **Sylvac Bluetooth** instruments and Sylvac/Tesa USB instruments, with no additional interface module required. Other measuring devices remain accessible via optional external modules: calipers, scales, temperature, and elements with 0-10V / 4-20mA output.



Smart, powerful, and easy to use

The **M5** is equipped with a **5-inch color capacitive touchscreen with an 800×480px resolution**. Its highly intuitive user interface allows for quick configuration and simple, error-free operation.

Administrator password protection, along with the ability to customize the interface, ensures a high level of operational security. Measurements are displayed very clearly, with color-coded indicators showing the position of each characteristic within the part's tolerance range.



The M5 can display up to 3 characteristics on screen at once, for even faster multi-sensor inspection.

QR CODE COMPATIBLE



A **barcode or QR code reader** can be connected to the M5, enabling 2 functions:

- Data entry: scanning a production/batch number.
- Screen configuration: all screen settings (tolerance, etc.) can be programmed via a QR code.

OPTIONAL MODULE

Up to **4 MB-IO modules** can be connected, providing up to **32 inputs/outputs**. A graphical interface makes it easy to assign a function to each MB-IO module terminal, and also to test the wiring using a virtual button/lamp system:

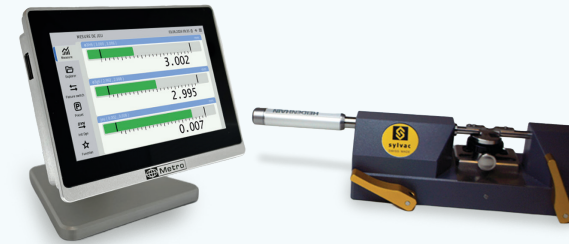
- Good/bad part output
- Calibration input
- Dynamic measurement start input
- Class output (1 to 16)
- etc.

MB-IO Module



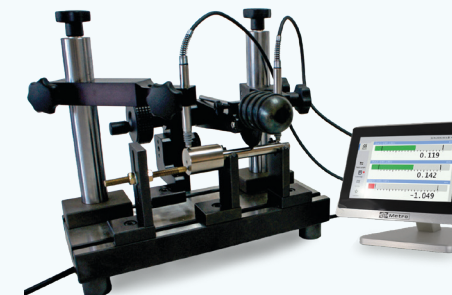
APPLICATION EXAMPLES

Heidenhain probe for watchmaking applications



Heidenhain Specto sensor mounted on a Sylvac PS15 bench. Metro displays are compatible with the entire range of Heidenhain sensors (Certo, MT12, MT25, MT101, Specto...).

Inspection of turned/machined parts (decolletage)



Retrofit of a fixture equipped with dial indicators on a 100% sorting station: improved accuracy and measurement traceability.

Air gage inspection

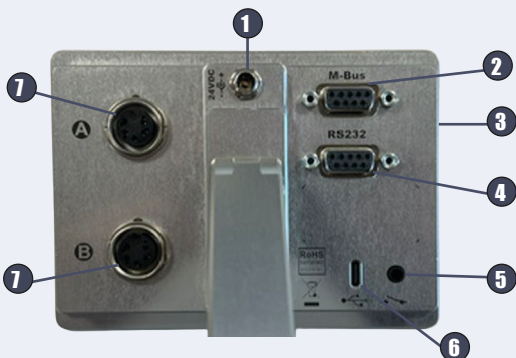


Metro systems can achieve excellent repeatability, down to 0.02µm for certain demanding applications. Metro can supply you with a complete solution: pneumatic ring or plug gauge + associated display and accessories.

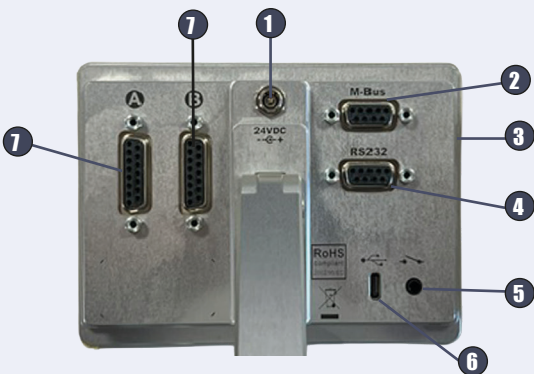
Connectors

- 1 - Power supply 24VDC
- 2 - M-Bus for connecting MB-XX modules
- 3 - USB-A port – USB drive and QR code reader
- 4 - RS232 COM port (ASCII and Modbus RTU protocol)
- 5 - External contact input (foot pedal)
- 6 - USB-C port with USB keyboard emulation + power
- 7 - Sensor / Air Gage connection

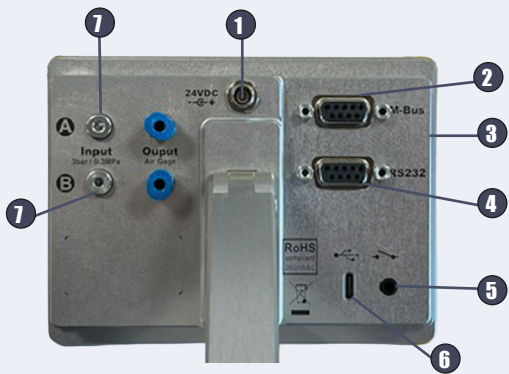
Inductive version



Heidenhain version



Air gage version



GENERAL CHARACTERISTICS

Display model	M5 inductive version	M5 Heidenhain version	M5 Air gage version
Screen size	5" (12.7cm), Capacitive, 800×480px resolution		
Measurement inputs	2 (4 via external M-BUS modules)		1 or 2 (4 via external M-BUS modules)
Simultaneous characteristics displayed	Up to 3		
Compatible sensors	Metro, Tesa, Mahr, Marposs, Peter Hirt inductive probes	Heidenhain incremental sensors, scales & encoders (Sinus 11µA, 1Vpp, TTL), Magnescale, Mitutoyo LG	Air gage (plug, ring, fork gauges), compatible with all brands
Orbit ® compatible	Yes		
Storage capacity / Programs in memory	10		
Display and evaluation of measurements	Digital values, colored bar graph, analog dial, color-coded tolerance indicators		
Password protection	Yes		
Class sorting	16 configurable		
Mathematical functions	Calculation between characteristics, trigonometric, etc		
Temperature. compensa-tion	Through external MB-TP module		
RS232 connector	ASCII (QDAS compatible) or Modbus RTU protocol		
USB-A connector	USB drive (CSV export), QR code reader		
USB-C connector	Keyboard emulation + power		
M-BUS extension	Yes		
Optocoupled inputs/out-puts	Max 32 via external MB-IO modules (4 max, 8 I/O each)		
Bluetooth/USB instrument compatibility	Sylvac Bluetooth, Sylvac/Tesa/Mahr USB		
External contact input	Foot pedal, button		
Power supply	24VDC		

Export to USB drive

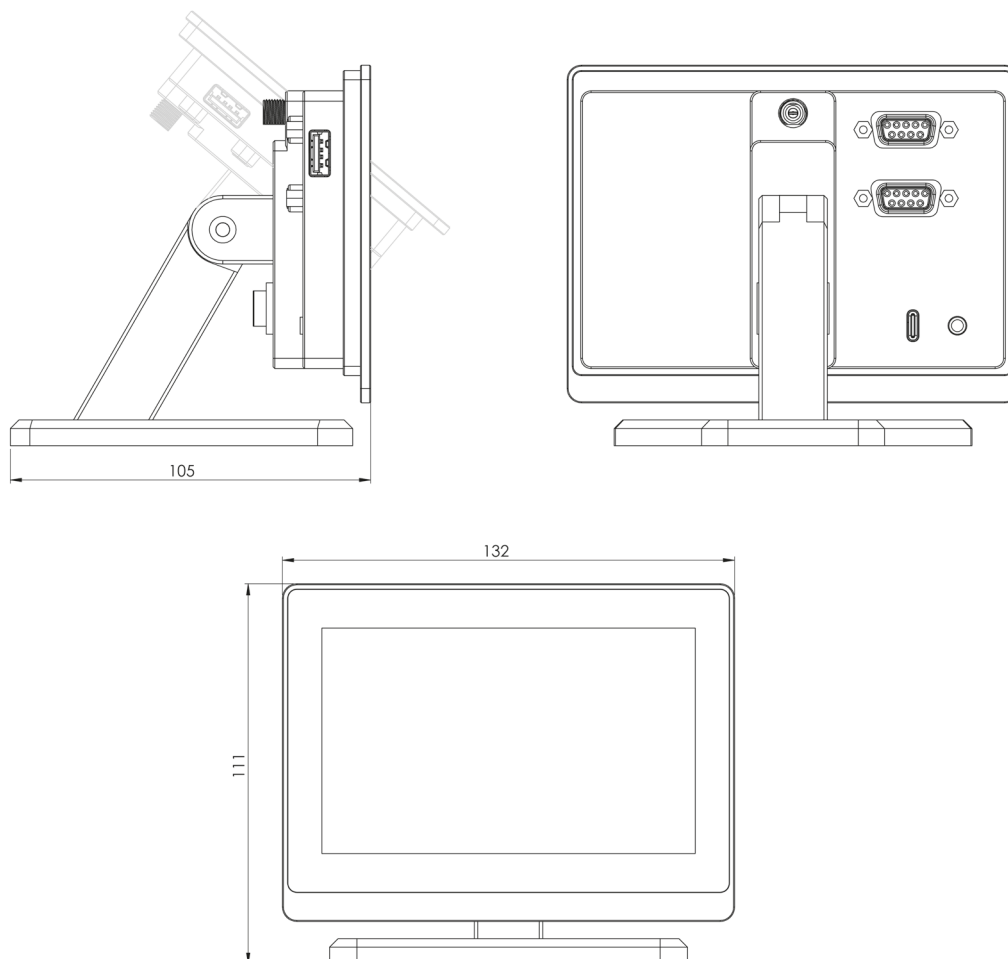
On the M5, measurements can be saved to a USB drive. A CSV file is then available for data processing in Excel or any other software.



Keyboard emulation

When connected to a PC, the M5 is detected as a USB keyboard. Measurements are written directly wherever the cursor is positioned, with no driver installation required, ideal for R&R studies in Excel.





M5	REF
M5 display for 1 Air Gage	M5AIR1
M5 display for 1 Air Gage, Mahr/Federal 1-master compatible (High)	M5AIR1-MF-H
M5 display for 1 Air Gage, Mahr/Federal 1-master compatible (Low)	M5AIR1-MF-L
M5 display for 2 Air Gages	M5AIR2
M5 display for 2 Air Gages, Mahr/Federal 1-master compatible (High)	M5AIR2-MF-H
M5 display for 2 Air Gages, Mahr/Federal 1-master compatible (Low)	M5AIR2-MF-L
M5 display for 2 Mahr inductive probes	M5MHR2
M5 display for 2 Marposs LVDT inductive probes	M5MPS2
M5 display for 2 Metro inductive probes	M5MTR2
M5 display for 2 Sinus 1V/11μA probes	M5SIN2
M5 display for 2 Tesa inductive probes	M5TES2



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