



Metro Products - IMT Newsletter

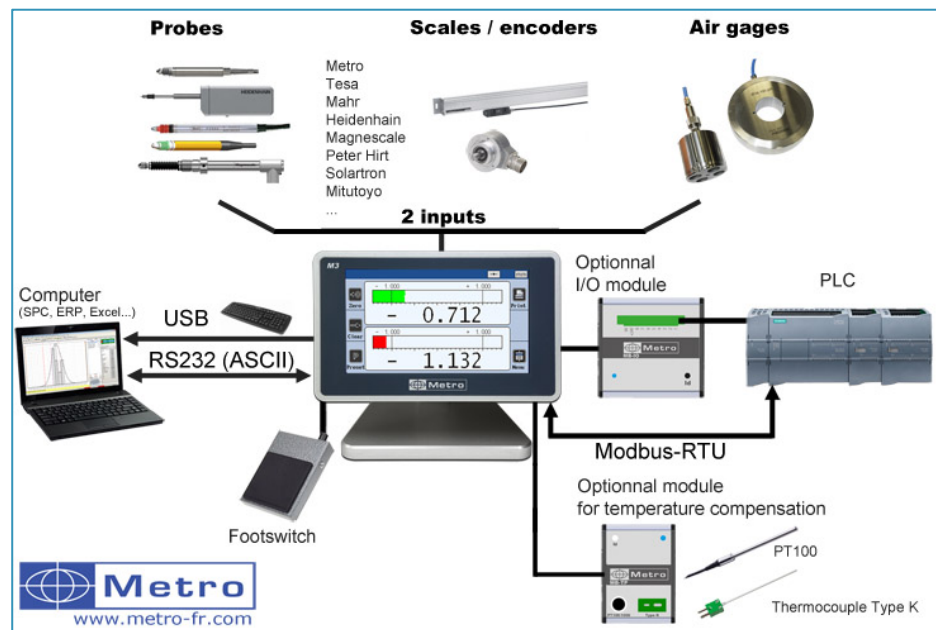


Innovative Measurement Technology Ltd are authorised resellers of Metro products



About

Metro is a French company founded in 1986 who specialise in precision mechanical control. Since 1986 the product range at Metro has expanded and today we can see the benefit of all the years experience in their popular display units and connection modules.



Metro Products overview

Metro high performance digital displays, M3 and M400 are a great addition to the Innovative Measurement Technology line up because they can be used to connect directly with our transducers and encoders. Furthermore, for improved flexibility the Metro M-Bus modules can be used to increase the number or type of measurement inputs used. The Multiplexers (MUX series) are another option to connect measurement inputs. Rather than connecting to a digital display, the MUX instead connects to a computer using free to download software.



Did you know....

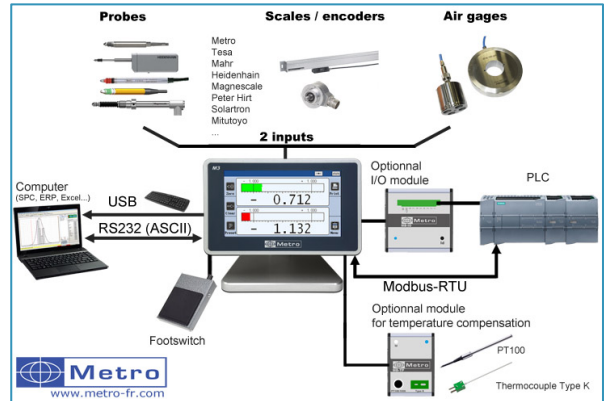
Metro have just moved into a new state of the art factory in Boège

Display unit M3

The M3 is a user friendly two characteristic display. It's the most compact display that Metro offers with a resistive touch screen measuring 4"3. Produced by machining a solid block of aluminium, the M3 is robust enough to survive in the most severe industrial environments.

Product advantages

- Touch screen
- Very easy to use
- Reliable
- Economic
- USB communication as a keyboard to a computer
- Static and dynamic measurement
- Designed for industrial conditions
- Combined measurements (with two probes), sums, differences....



Display with needle indicator



Desktop (Configuration Menu)



2 characteristic display

The easy to use M3 can be configured to display readings in different ways such as bar graphs for two characteristics or needle indicators. Its ease of use should give credit to its own operating system. Rather than running a windows based system, Metro have designed its own which gives high performance, continuity of the hardware, lack of a software licence and absence of a virus risks. These are features essential in an industrial environment where device reliability is a must.

Furthermore, most European languages are available as standard as well as Asian languages such as Chinese, Japanese and Korean.

Depending on what the measurement inputs are, the M3 is built to three different specifications They are M3 for 1 or 2 Air gages, 2 inductive probes or 2 incremental probes.

When the M3 display is used in combination with an M-Bus module then it is possible to connect probes from different sources or brands.

The display has several methods of communication (*depending on specification*), these are USB and RS232 in order to control or send measurement to an external system such as a PC.

MUX: Multiplexers for measuring instruments

The multiplexer MUX enables the communication of 1 to 8 measuring instruments (caliper, digital indicator, micrometer, weight scale, torque wrench...) from any brand to a PC or similar equipment equipped with a USB port or a RS 232 interface.

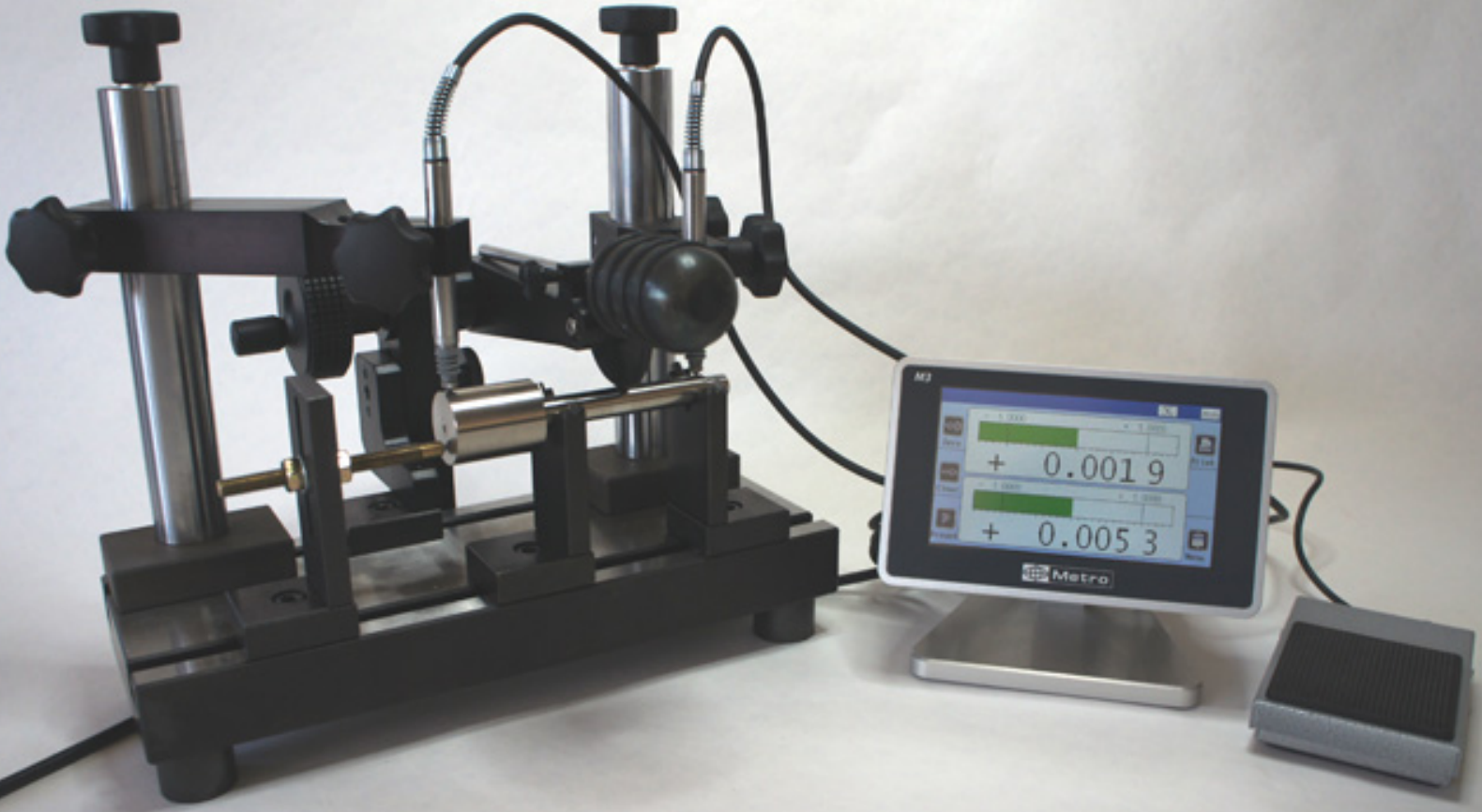
Main Characteristics:

- 1 USB port for a connection to a PC and power supply
- 1 RS232 port (MUX4 RS232 only) for connection to a PC
- 4 or 8 inputs for measuring instruments with 1 LED by channel
- 1 input for external command (footswitch)
- 1 Reset button
- Storage temperature -40 °C to +70 °C.
- Operating temperature : +5°C to +40°C.
- Power supply 235 V Consumption : 2 VA

Connection possible with the following instruments (but not limited to):

- Digimatic : Mitutoyo, Mahr
- Opto RS232 : Sylvac, Tesa, Bowers, Käfer etc...
- RS232
- Analogue output, single or bipolar, in current or in voltage...





Did you know.... The M400 display can display up to 32 measurement characteristics at any one time

M-Bus: Universal bus for gauging probes & measuring instruments



MB-AG: Module for 1 Air gauge

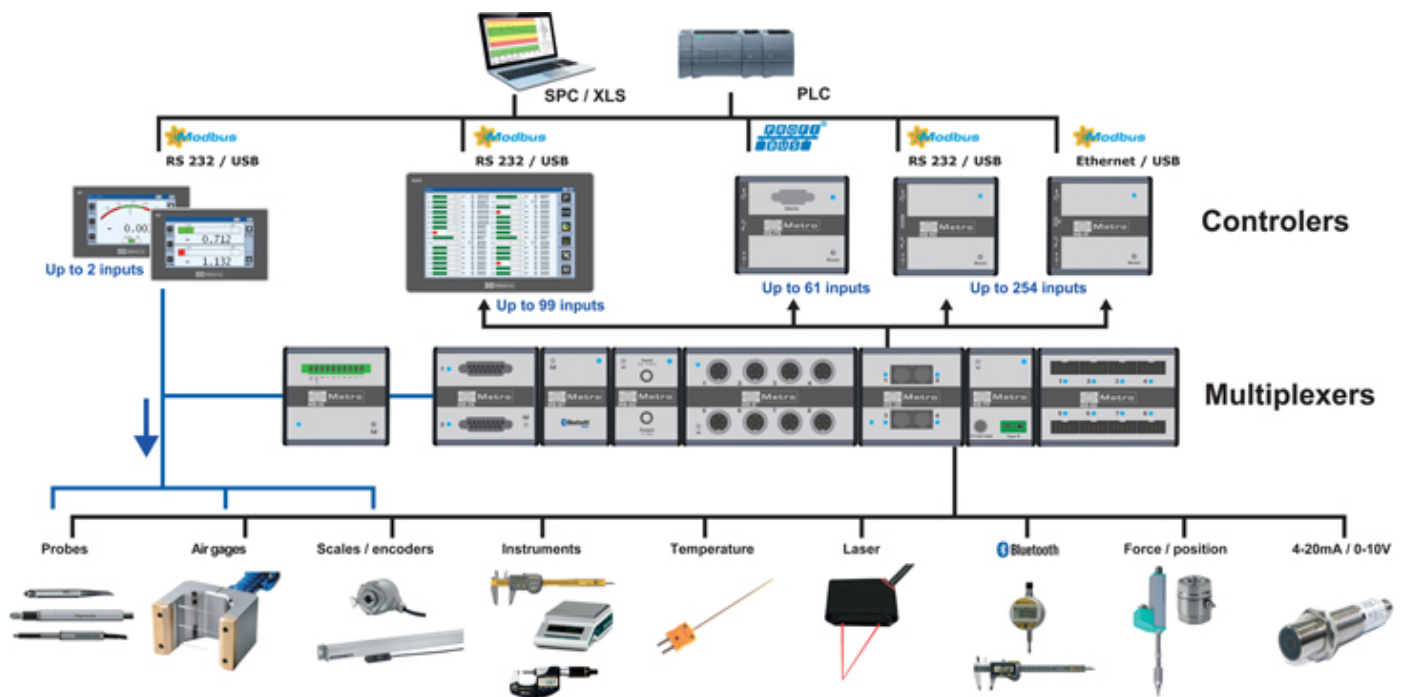
Continuously improved and developed since 1996, Metro' M-bus allows to connect numerous gauging probes and instruments from various brands and technologies to the Metro display units. It allows the user to keep probes already owned to give extended functionalities and performances by using a Metro display.

The M-Bus is mechanically and electrically compatible with the Solartron Orbit bus.

The M-bus is based on a RS485 link that gives the possibility to have important distances between the displays and the transducers without loss of signal.

The module's enclosures and electronic have been redesigned in 2012 to offer the best performance to users. The M-Bus modules are today made out of anodised extruded aluminium profile that can be clipped on a standard DIN rail. It is very adapted to be used on a severe industrial environment.

There are many variants of the M-Bus modules, for example air gauging, Bluetooth connection to connect Sylvac or Bowers measuring instruments, Magnescale probes, encoders and much more. For the full list see our website.



Featured Product – MB-4i/8i



M-Bus module to connect 4 or 8 inductive probes. Several models are available allowing the user to connect different brands of inductive gauging probes to the Metro display units:

- Metro (M802, M804S etc)
- Tesa type (GT21, GT31 etc)
- Mahr / Feinprüf (P2004M, 1300 etc)
- Marposs (F10, F25 etc)
- Peter Hirt (T101F etc)
- Innovative Measurement technology (3TLX... etc)
- Solartron Metrology (AX/1/S etc)



Did you know.... The Metro displays are used in many applications including retrofitting a manual lathe

M400

The M400 is the larger brother of the Metro M3. It features a larger 7" touch screen which can connect up to 99 measuring instruments. The M400 is universal meaning that it accepts many different probe technologies. It is also powerful and can display up to 32 characteristics at the same time, trigonometrical functions, statistical functions, PLC functions and more...

Much like the M3, the simplistic and intuitive menus allow the device to be immediately adopted by every operator.

The M400 can either be delivered as a table device or for panel mounting thanks to its incomparable robustness. The housing is machined out of a solid block of aluminium with the front face covered in an integral polyester sheet to ensure maximum protection from liquids such as oils.



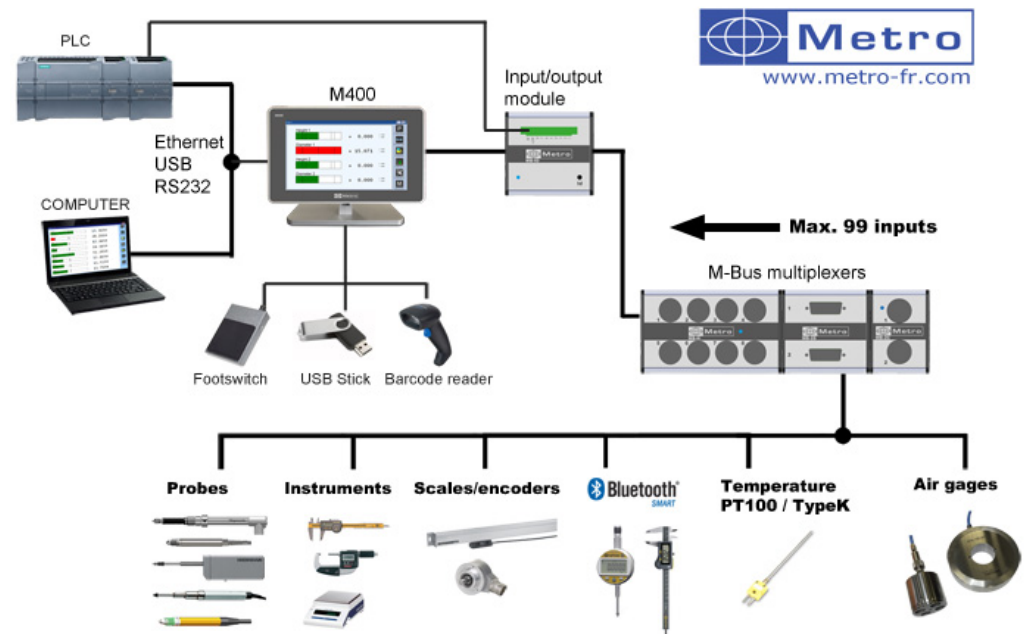
Histograms with Gauss curve



Pareto Analysis



Run chart



Main features

- Up to 99 inputs : Air gages, Inductive or digital probes (LVDT, HBT), incremental encoders (Heidenhain, Magnescale, Mitutoyo) or capacitives (Sylvac), temperature, I/O etc..
- Possibility to display measurements from instruments (calipers, dial gauges etc.) from any brand
- Compatible with the Sylvac and Bowers bluetooth instruments
- Up to 32 characteristics displayed in the same screen
- SPC functions
- Various means of communications and connections facilities : Ethernet, Modbus TCP, RS232, Footswitch...
- Direct automation possible
- Very easy to use and reliable



A Unit 3E, Vinnetrow Business Park, Vinnetrow Road, Chichester, West Sussex, PO20 1QH, United Kingdom

T +44 (0) 1243 942010

E sales@imeasure.co.uk / support@imeasure.co.uk

W www.innovative-measurement-technology.co.uk



IMT Website QR code