MARPOSS



MANUAL GAUGING COMPONENTS QUICK GUIDE













Marposs produces electronic metrology systems designed to perform dimensional, geometrical and surface checks on mechanical pieces in harsh shop floor environments, and systems for monitoring machine tools and their cutting or forming tools during the working cycles.

The company offers standard or customized solutions for each stage of the production process; starting with the checks carried out before, during and after the machining process, as well as for inspection of finished pieces, and collecting and processing measurement data. In particular: measurement and control for machine tools; dimensional and geometrical inspection of mechanical pieces; non-destructive and leak testing; integrated measurement and assembly systems; statistical process and quality controls.

Marposs products are designed for machine tool and measurement station manufacturers, and end users in the following sectors: automotive and associated sub-contractors, bearings, gears, compressors, electrical motors, aerospace, glass, energy, electronics and hi-tech, biomedical.

Today the Marposs group has approximately 3500 employees in 80 branch offices located in 34 countries worldwide.

Testar is the division of Marposs whose mission is to develop and offer innovative measuring component products to end users and system integrators as well as fixture and gauge makers, whose final products are used in above mentioned sectors.

All Testar products originate in the Research and Development center within World Headquarters in Italy. Here the knowledge gained from both customer applications and our own internal manufacturing operations, is the basis for developing new ideas. Testar' product development process integrates Marketing, Research and Development, Engineering and Manufacturing through simultaneous engineering methodologies. As a result, all new product platforms use the latest production technologies available. Testar' manufacturing area operates with the most advanced equipment to assure the quality of its products is first class.

Headquarters - Bentivoglio (BO) Italy





DISPLACEMENT SENSORS



REDCrown2 LINE

The second generation of pencil probes developed to meet industry's new global demands for improved performance in a measuring product.

The new precision engineered design incorporates ball cage movements, improved protection from electrical/magnetical interference, by the introduction of Mu-metal shielding, and added robustness throughout, all produced from a refined manufacturing process.

Performance of RedCrown2[™] is guaranteed to give excellent accuracy under the harshest conditions where high reliability is constantly required in the manufacturing field.

The RedCrown2 line offers a variety of measuring solutions; it is composed by:

- RedCrown2, analogue pencil probes available with LVDT and HBT circuitry.
- DigiCrown2[™], digitized version with high levels of accuracy and versatility, used in combination with DigiCrown Network System[™] and GagePod[™]
- RedCrown2 Smart[™], the newest digital probe which can be interfaced with SmartNet[™]
- RedCrown2 USB[™], a linearized probe version with the interface integrated in the standard USB connector, for direct connection to any host device.
- The unplugged version allows customers to complete it using their preferred type of connector

These products are available with the following options:

- With gasket (IP 65, standard version) or without (IP 54, soft touch version)
- With HBT or LVDT type transducers
- Six standard measuring ranges: $\pm 0,5mm,\ \pm 1mm,\ \pm 2mm,\ \pm 2,5mm,\ \pm 5mm$ and $\pm 10mm$
- Actuation / retraction by spring, pneumatic or vacuum methods

AMA

Advanced Measuring Armsets developed to meet the requirements of fixture makers, gauge makers and measuring solutions where direct sensor contact is not recommended. The universal feature of the product line is to use the AMA[™] between the workpiece and the transducer. This is achieved with:

- 15 different designs
- 8 mm or 3/8" clamping diameter for sensors
- high precision and reliability
- compact design (12 mm thickness)
- · variety of mounting options
- wide range of contacts including offset types

They can be used with any pencil probe, as well as dial and digital indicators. Pneumatic actuation, available on some models, allowing contact retraction, to eliminate interference with the workpiece, during manual and automatic part loading and unloading.



DISPLACEMENT SENSORS



QUICKBLOCK

Compact, universal, high accuracy measuring device available with \pm 5 mm range. Supplied with built-in full-bridge (LVDT) or half-bridge (HBT) transducer, or user can install any Marposs Red Crown / Digi Crown probes device, or other measuring sensors, linear encoders with clamping diameter 8 mm or 3/8" for all third party electronic units.

Features a twin linear ball bushing mechanical transmission, spring activated with gaiters to protect the bearings - IP65. It is extremely robust, can be used in any position and can be equipped with pneumatic actuation to facilitate part loading/unloading in the measuring station.

Precision ring dowels ensure each unit can be located repeatably in any gauge or fixture assuring the measuring contact is precisely positioned every time, even when something is replaced on the system.

It is completely toolable / retoolable by the customer, using their own contact designs, or standard measuring arms and contacts can be supplied from stock.

A124

The compact dimensions allow A124[™] miniature cells to be easily integrated into measuring devices. They are easy to apply and universally applicable.

- Small dimensions (7 x 7 x 31 mm) for solving measurement tasks in limited spaces
- Simple design and low number of components
- Interchangeable measuring contacts (this saves time and costs, since the exchange does not require the removal of the entire measuring cell)
- Reliable and robust
- Maintenance-free and suitable for production use (degree of protection: IP67)

A124 miniature cells are available in full-bridge (LVDT) and half-bridge (HBT) version, as well as with USB connection or for the connection to a Digi Crown[™] Network System.





USB LINE

The Marposs USB Line includes RedCrown2 USB pencil probes and Quick Block USB[™] transmission elements, as well as encoder (U1-E) and I/O (U2-I/O) interfaces. They can connect to electronic display units and computers through a standardized virtual COM port. Marposs USB probes reach, through the electronic linearization, an even higher accuracy than inductive measuring probes. This is documented for every unit by a calibration protocol.

- PLUG & PLAY Direct connection via compact USB plug
- EASY TO USE Instantly applicable with Marposs display electronics. Own PC applications can be realized using a simple ASCII protocol
- For static or high sampling rate dynamic measurements (up to 1000 measuring values/s)
- The encoder interface (U1-E) allows the connection of incremental sensors such as displacement, rotary or torque encoders from various manufacturers

DISPLACEMENT SENSORS



CHROMATIC CONFOCAL SENSORS

STIL is the inventor of the chromatic confocal imaging principle. With nearly 30 years of experience, Stil has successfully developed a unique technology for contactless optical measurement that meets the most demanding applications, in industry as well as in research laboratories. STIL offers two families of sensors based on this innovative concept.

- point sensors (from 0.1 μ m to 100 mm measurement range)
- line sensors (180 points from 1.35 mm to 12 mm line length with different measurement ranges)

that generate 5 product families:

- Point sensors
- Multipoint sensor
- Line sensor
- Line camera
- 3D System

These high-resolution contactless sensors meet the needs of the most demanding metrological applications, such as texture analysis, dimensions, thickness and roughness measurement, as well as micro-defect detection.



Capable of operating in any industrial environment for production line control as well as in research laboratories, these sensors can measure on any type of object (transparent or opaque, polished or rough) and any type of material (metals, glass, semiconductor, ceramic) without prior sample preparation. The main advantages offered by this technology are:

- · High axial resolution: few nm
- High lateral : few μ m
- High signal to noise ratio
- Works on all types of samples
- Wide choice of measuring ranges
- High slope angle measurement thanks to high numerical aperture
- Coaxial (free from shadowing effect)
- Speckle free
- Insensitive to ambient lighting
- Compatibility in vacuum chamber
- Passive optical head

The Stil product mix is suitable for many market segments like 3C, aerospace, medical, semiconductor, energy, mechanical components, electrical and hybrid vehicles, conventional vehicles, automotive glass, R2R.

BORE GAUGES LINE



M1STAR

The premier line of Mechanical (MBG) & Electronic (EBG) Bore Gauges for precision measurement of inside diameter, ovality and taper.

Standard measurable diameters range from 3 mm to 300 mm with special super light versions for diameters up to 525 mm.

The MBG is easily interfaced to a handle with any pencil probe, dial / digital indicator or the ultimate I-Wave2 wireless handle.

The EBG can be supplied wired with connector or the M1Wave wireless handle. Retooling either model can be as simple as replacing the nosepiece and contacts.

Both models are completely robust and durable, with a measuring transmission system, capable of more than 10,000,000 measuring life cycles, delivering 1,0 μ m repeatability for the MBG and 0,5 μ m repeatability for the EBG. Choose Through -T, Blind -B or Super Blind -SB nosepiece styles to suit your

needs. A full line of accessories is available to meet all customer requirements like depth stops, depth extensions, gauge storage and fixture adaptations.

IWAVE2 - WAVE2

I-Wave2[™] & Wave2[™], the innovative handle with Bluetooth[®] transmission and integrated colour display for commercial gauge heads with mechanical and electronic transmission system respectively, offers the ideal solution for wireless bore measurement in harsh manufacturing environments.

- Shockproof 1.8" TFT color display with automatic display orientation
- The measured values are simultaneously displayed on the handle and on the gauge computer, PC or tablet PC connected via Bluetooth[®].
- Commercial gauge heads can be mounted on the handle within seconds using an adapter, to obtain a bore gauge, a snap gauge or a depth gauge. For frequent changeovers of mechanical gauge heads, the quick-change system "Star-Lock" is available.
- The handle receives the programming parameters by radio transmission from the gauge computer or tablet PC and is constantly synchronized with it to make sure that current tolerance, nominal dimension and setting master values are used at any time. The zeroing of the gauge is also monitored and synchronized.
- Smart user interface in association with Quick SPC[™]/E9066[™], Merlin[™] and Merlin Plus[™]: the display of the gauge to be used in the next step of the measuring sequence is automatically turned on.
- Measurement buffering when the I-Wave2 or Wave2 are outside the transmission area and automatic transmission as soon as they are is again in the transmission range to the measuring computer.
- Stand-alone operation mode , only as a display unit, only as a display unit is possible.
- IP67 or IP65 protection degree, respectively, for use in harsh manufacturing environments.
- Durable, fast-charging Lithium-Ion batteries (inductive) with non-contact charging technology. The charger serves also as a stand for the gauge.



BORE GAUGES LINE



IWAVE

I-Wave[™] is an interface handle with Bluetooth[®] transmission for standard mechanical gauge heads. Any head with M10 x 1, M6 x 0.75 or M3.5 x 0.35 connecting threads can be mounted or changed within few seconds. The wireless transmission of the value allows a comfortable measurement operation on spanned or large workpieces and avoids the failure due to damaged connection cables.

- The handle is designed for use in the workshop and very robust (protection degree IP67).
- Version with Li-Ion batteries and inductive charger
- Version with standard alkaline batteries
- Reliable and secure wireless transmission

M1MULTI - MULTIWAVE

Manual electronic multiple bore gauges for the measurement of diameter and geometry (ovality, taper, etc.) of machined bores in a number of sections, in one operation.

The plug gauge is composed of a nosepiece and measuring armsets featuring two or four contacts for each section to be measured. Each gauge is designed according to application or customer's specific requirements to position the measuring contacts precisely throughout the bore. Bores can be multiple (sizes), interrupted, or long and continuous.

The nosepiece is the guiding element ensuring the operator' action does not affect the result of the measurement.

The M1 Multi has been designed to be used in the harshest production environments, and features IP67 protection level (waterproof, dirt and dust sealed).

It is available in two versions:

- with cable, for connection to electronic interface units.
- wireless, featuring the Marposs "Wave" Bluetooth[®] transmission technology with Li-lon batteries and inductive recharging system.





M1AIR

Pneumatic manual bore and ring gauges are used to measure bore or shaft diameters with small tolerance classes. They are preferably used when the measurement is to be made without contact to the workpiece. The principle of pneumatic measurement is based on the detection of pressure differences, that are proportional to the variation of the distance between the nozzles of the gauge and the workpiece to be measured.

Through A/E converter modules (i.e. Easy Box U1Air, U3Air, U4Air or Duo Air) the measured value is converted into an electronic signal and displayed on an electronic amplifier.

For special applications conical versions, bore and ring gauges with multiple measuring sections or special arrangement of the nozzles are available.

FORKS AND RING GAUGES, BENCH GAUGES



M3STAR

High technology, manual snap gauges for checking external diameters on round shaft type components.

The M3 Star[™] is available with a slim line body design, only 10mm wide, as either a Mechanical Snap Gauge (MSG) or Electronic Snap Gauge (ESG).

Fully retoolable between diameter ranges 5-30 mm & 30-70 mm with a choice of a 10 mm or 20 mm wide, adjustable reference 'Vee'.

The 10 mm wide Vee allows the measurement to be taken within a narrow space or at a distance of only 5 mm from an edge or shoulder

The M3 Star[™] has two versions to suit part tolerance requirements.

The Mechanical (MSG) system repeating to $< 2 \,\mu$ m, with optional handles for dial/digital indicators; wired electronic pencil probes, or the Marposs wireless iWave device.

The Electronic (ESG) system repeating to $< 0.5 \,\mu$ m, with optional handles for a cable connection, or the Marposs wireless Wave device.

M4STAR

Mechanical and electronic manual ring gauges for checking external diameters on pin and shaft type parts in the range 4 to 125 mm. The M4 Star[™] design can measure, close to a shoulder, at minimum 1 mm distance and then variably up to 6 mm from a face in the standard version.

It can be used directly on the work piece, by sliding over the diameter to be measured, or be fixture mounted, allowing a short part to be checked. Special design versions are available for larger diameters.

The Mechanical Ring Gauge (MRG) and Electronic Ring Gauge (ERG) uses the same handle arrangement as the M3Star Snap Gauges. MRG has handles for dial/digital indicators; wired electronic pencil probes or the Marposs wireless I-Wave[™] device.

ERG has handles for a cable connection, or the Marposs wireless Wave device.





QUICKSET LINE

Modular measuring system conceived to allow rapid delivery of a mechanical gauging fixture without traditional design and build. Component modules are built for shop floor use, for easy assembly by any user. They are available from stock, off the shelf, for immediate fixture build, allowing simple to semicomplex fixtures to be created. Once assembled to suit the specific part gauging requirements, the system delivers and ensures consistent part quality. With no design & build time lines, the user achieves cost reductions and gains application flexibility (add or subtract modules as required). The system is available in three basic & different configurations:

- horizontal and vertical types for multidimensional and geometric checking of shaft-like parts
- chuck type for multidimensional and geometric checking on parts that cannot be referenced horizontally such as bushings, pistons and cylindrical parts that are manufactured with a flange.
- universal type for multidimensional and geometric checking on cylindrical parts such as bushings, bearings, hubs, gear wheels.

INDICATORS



TD

High quality dial indicators, whose design, accurate components, precision engineered mechanism and robust construction offer accuracy, reliability, durability and long working life.

Standard features for all models are:

- Adjustable tolerance markers to set tolerance limits
- Hardened, stainless steel mounting shank and measuring spindle are corrosion proof
- Lapped spindle increasing resistance to wear
- Sturdy metal housing

Available types are:

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- High precision dial indicators
- Dial comparator gauges
- Error free dial indicators

QUICKDIGIT

Digital indicators with a highly accurate measuring system featuring:

- 5 mm and 12,5 mm measuring range (other ranges available on request).
- 0,001 / 0,0001 mm resolution.
- Replaceable 3V lithium battery.
- External power supply using Power type cable for data transmission.
- RS232 compatible output for data transmission.
- Functions:
- Preset
- Zero setting at any point within the measuring range
- Automatic switch-off without loss of the original value
- REF I / REF II dual reference point
 Dynamic Min /Max /TIB measuring n
- Dynamic Min./Max./TIR measuring mode
- Setting and display of tolerance limits (not available for 5 mm model)
- Measuring value classification through tolerance indicator lights (green, yellow, red) (not available for 5 mm model)
- Input of a multiplicative coefficient
- Transmission of the measuring value by Bluetooth[®] technology (not available for 5 mm model)



ELECTRONIC DISPLAY UNITS



QUICKREAD

Compact slim electronic display unit with a thickness of only 12 mm, complete with 3-colour (green, yellow and red) analogue display and 8-digit alphanumeric display providing clear definition and easy reading of the measurement results. Using the local keypad, the Quick Read[™] can be easily programmed to set the digital display resolution, measuring unit, tolerance limits, full scale range and master deviations.

- The unit will also provide:
 - A coefficient when a reading is not 1 to 1.
- Absolute or comparative reading of the measurement result.
- The data format for serial transmission (ASCII or binary format).

It is available with a remote probe attached to the main display by means of a standard 2 metre cable or as a microcolumn version allowing to connect MARPOSS standard probes with half-bridge transducer ranging from \pm 0,25 mm (.010") to ± 5 mm (.200").

Two microcolumn versions are available :

- For connection of one sensor to carry out one static measurement . For connection of one or two sensors to carry out one static or dynamic measurement [Hold, Max, min, Maxmin, (Max-min)/2, (Max+min)/2].

E4N

Microprocessor column designed to display a single dimensional or geometrical condition, featuring a 101-Led three colour bargraph scale and an eight-digit large display. It can accommodate

- different LVDT or HBT transducer modules provided with 1, 2 or 4 input channels
- a one channel air to electronic module

It is equipped with a wide range of interfaces, Digimatic and analog, RS232-C, Relay/BCD and for external push-buttons or foot-switches.





DUO

Extremely compact and powerful, 4.3" true flat touch screen unit for display and storage of measuring data acquired from bore, snap and ring gauges. Duo[™] can connect one or two probes or gauges, and is the best choice for simple manual applications allowing up to two measurements to be simultaneously displayed.

Duo guarantees premium features at an affordable price being as small as a smartphone.

- Intuitive user interface
- Two direct input channels for LVDT/HBT/TESA HBT sensors
- Three-colour analog and digital measurement display .
- Extremely clear visualization of the measurement status •
- 2IN/2OUT for cycle management, 1 input for a footswitch •
- Optional field-bus connection (Ethernet/IP, Profibus, Profinet) •
- Suitable for the workshop (IP54 front panel) .
- Data storage format: .CSV; .DFQ (K-fields) •

GAUGE COMPUTERS



NEMO

Ultra compact embedded gauge computer with 5.7" True Flat touch screen, designed for simple measuring applications up to 16 sensor inputs and 8 characteristics. Bargraph and analog style for measurement display are available. Different data acquisition systems allow the connection of a variety of measuring devices, such as probes, digital indicators, digital calipers, altimeters or measuring devices with Bluetooth® transmission. Nemo main features:

- it is extremely simple to set-up and use
- it can manage numerous part types and define measurement batches
- it can manage step measurement cycle and complex formulas
- it offers multi-lingual and multi-operator support
- its touch-screen human interface is designed to allow programming and acquire measurements without any additional input/command devices.
- in order to simplify production certification and monitoring, it is possible to export batches or single cycles on files that can be stored locally, saved on a Usb Flash Drive or uploaded to a LAN network.

MERLIN LINE

Merlin [™], Merlin Plus [™] and Merlin Plus Box [™] are compact gauge computers with data storage and statistics capability. Different data acquisition systems allow the connection of a variety of measuring devices, such as probes, digital indicators, digital calipers, altimeters or measuring devices with Bluetooth[®] transmission.

No moving parts (no fan, a Flash memory) guarantee for extreme robustness (IP65 front panel) and compact dimensions of the units.

The software is very intuitive and easy to use through the touch-screen display, and provides a clear representation of the measuring values, as well as extensive statistical evaluations with graphic visualization (histogram, control chart, single value chart...). The batch or order management allows separation of the evaluations e.g. per machine or production lot.

The measuring data can be stored in .dfq or .csv format in the internal memory, on a USB stick or on the network. With data export in the Q-DAS transfer format all common K-fields are supported. Available models are:

- Merlin[™] with 8.4" touch screen display, Microsoft[®] Windows[®] Embedded Compact 7 operating system; optional True flat display available
- Merlin Plus with 12.1" True-Flat touch-screen display, Microsoft[®] Windows[®] 10 IoT operating system
- Merlin Plus Box, barebone industrial PC for use with an external touch screen monitor, Microsoft[®] Windows[®] 10 IoT operating system

Both Merlin Plus and Merlin Plus Box are supporting the software tool Merlin Plus Designer ™ for optimized user guidance. Merlin Plus Designer, a standalone software tool, allows the creation of customer-specific display pages in Merlin Plus ™, Merlin Plus Box and Merlin Plus Software. To optimize user guidance, pictures, labels and other features can be included. Many other design options, such as different measuring value display bars, graphics, control charts or histograms etc., allow to optimally display the measuring value according to the operator's needs.

The following display pages can be prepared:

- a measuring value display page for a complete part program
- several measuring value display pages for individual measuring steps
- a summary page, e.g. with the workpiece status
- several display pages for individual zeroing steps



INTERFACE BOXES FOR DATA ACQUISITION



DUOAir

Duo Air^m is an interface box for easy and economical management of a wide range of air gauges. It can be supplied with one or two analog air-to-electronics converters with adjustable sensitivity and zeroing nozzles, to connect one or two gauges respectively.

Each converter is supplying an LVDT output signal, which is conveniently managed by the Duo display unit to offer a compact and affordable solution for your measurement applications.

It is accurate, robust and versatile, accepting air gauges from different manufacturers.

EASYBOX

USB interface boxes designed for easy and economical management of inductive and incremental transducers, air gauges, Digimatic and serial gauges, I/O signals, thermocouples via a USB port. The power to the measurement devices and Easy Boxes[™] is provided through a standard USB cable connection to a Marposs amplifier or PC.

The measurement values are transmitted through the same USB cable from each box. Some models may require an external power supply according to the type of connected transducer or device being operated. A data trigger can be made with the external signal of a footswitch or with a data request from the host PC.





DIGICrown **NETWORK SYSTEM**

Modular digital network with easily assembled components to create your customized measurement system using a wide range of standard interfaces with different types of input signals.

DigiCrown2[™] sensors are automatically recognized by the system and can be changed without any reprogramming or errors. The system recognizes up to 744 inputs.

Modular interface modules accept various different types of sensors such as analogue LVDTs, incremental encoders, analogue signal devices and is able to manage INPUT / OUTPUT signals to any PLC.

The communication is based on RS485 serial protocols. The network interface to a PC (commercial or industrial) is through PCI cards, ISA, RS232 interfaces (easily integrated with PLC controls), USB High Speed and Ethernet.

Using USB HS guarantees a dynamic synchronized acquisition at a speed of 4,000 samples / sec. For applications with a PC, Marposs SW packages & SDK's are available for integration into 32 or 64 bit systems.

INTERFACE BOXES FOR DATA ACQUISITION



SMARTNet

SmartNet[™] is the new fast, flexible and modular measurement system that is automatically configured to facilitate the acquisition of measurements.

Pencil probes, plug gauges, measuring cells, QuickBlocks and any other Marposs sensor can now be supplied with the SMART connector to be integrated in the SmartNet.

The SMART connector integrates conditioning, digitization and linearization of the measurement signal. It is equipped with a two-colour LED for quick and intuitive measurement feedback.

SmartNet exploits single-cable Ethernet bus communication to connect sensors in a daisy-chain. It supports up to 250 sensors for each network and allows a distance of up to 20m between two successive sensors.

SmartNet automatically recognizes and configures all connected sensors, simplifying application layouts.

The digital communication bus combines performance (up to 32.000 synchronized measurements per second for each measuring point with 40 sensors connected simultaneously) and high reliability.

TCI

A line of Transducer Conditioning Interfaces available with 1, 4, or 8 inputs to accept LVDT or HBT pencil probe sensors. The input converts the measurement value into a signal, compatible with most analogue cards for data acquisition. The output of each unit provides a direct signal (Voltage: \pm 5Vdc, \pm 10Vdc, 0-10Vdc; Current: 4-20mA), proportional to the measurement value of the sensor at the input stage.

The PLC analogue card can receive the output signal from the TCI[™] in order to control and manage automatic processes and can be incorporated into SCADA controlled systems. TCI[™] interfaces are PLUG&PLAY units.

Each unit is calibrated specifically for the sensor being used.

This offers quicker installation, lowers machine downtime and reduces maintenance operations.





ASC

ASCTM (Automation Signal Controller) is a family of interface boxes designed to integrate analog and digital transducers via RS232 into PC and PLC using simple ASCII protocol commands. ASC is therefore perfect for the automation and bearing industry. Available in many different models, depending on the number (2 or 4) and the type of transducers, it's ready to be connected as a plug and play device.

Compact, robust and equipped with DIN rail mounting accessories, it is suitable for cabinet and automation applications layouts.

Both LVDT and HBT (with LVDT pinout) sensors can be connected to ASC. Analog (RedCrown2) or digital (DigiCrown2) pencil probes with ± 0.5 mm, ± 1 mm, ± 2 mm, ± 2.5 mm, ± 5 mm and ± 10 mm measuring range can be managed. Transducer values are continuously available through the RS232 interface using ASCII protocol commands. ASC requires +24 Vdc nominal value with an input range of 18-36 Vdc.

INTERFACE BOXES FOR DATA ACQUISITION / E9066 INDUSTRIAL COMPUTERS



GAGEPOD

GagePod[™] is a modular data acquisition system for simple, manual measuring equipments, as well as for complex, fully automated measuring and testing systems.

The GagePod modules are directly assembled together according to the application and without any connection cable. Through USB or Ethernet the GagePod can connect to a Marposs E9066^T industrial PC or other computers running the Quick SPC^T software package.

GagePod modules include:

- 16-channel sensor module
- 16 and 32 Inputs / Outputs (24VDC opto-isolated) modules
- Linear/rotary encoder module
- Motor driver module
- Fieldbus module

E9066E

The E9066E[™] is a fanless and diskless industrial computer providing a compact, economic and no compromise solution for any shop-floor environment.

Designed on leading edge, embedded PC technology, it features state of the art 64 bit industrial-grade platform and Microsoft® Windows® 10 IoT Enterprise operating system, and is supplied with the Quick SPC software package for measurement, SPC and quality control.

The E9066E uses an industry-grade ultra low-power quad-core processor, providing high throughput for complex calculations and graphical applications alike, without impacting system performance.

Connectivity is the best in its class: 5 USB ports, 2 Ethernet Gigabit ports, 1 RS232 port, up to two solid-state storage devices (Compact Flash or SSD).

Industrial fieldbus is also supported using specific fieldbus modules.

The E9066E is provided in a sealed, compact, shop-floor proof enclosure (IP65), and readily adapted for bench-mount or swing-arm solutions using industry standard, VESA-compliant supports.

E9066E is the ideal complement to the GagePod[™] and Easy Box[™] interface boxes.





E9066T

E9066T[™] is a high-performance, maintenance-free Industrial PC without wear & tear parts like fans and traditional hard disks.

The Trueflat front panel with its integrated touchscreen and IP66 protection delivers the best and most reliable user-interface experience.

An integrated UPS (Uninterruptible Power Supply) with industrial grade battery pack provides battery backup upon power failure.

E9066T features full-power Intel[®] Core^m i3, i5 or i7 processors providing "no compromise" performance, even for the most mission-critical, demanding application, and is supplied with the Quick SPC software package for measurement, SPC and quality control.

In combination with a specifically designed, integrated heatsink, they guarantee for continuous use up to 50°C (122 °F).

The E9066T can be panel-mounted or provided in a Marposs-standard IP54 shop-proof cabinet, for benchmount or swing-arm solutions using industry standard supports.

The E9066T-BB, a blind-panel version without display, provides wall-mount and DIN-rail mounting solutions as well.

SPC SOFTWARE



QUICKSPC

Quick SPC[™] for Windows[®] is a suite of software products designed to comply with any requirement ranging from simple measurement acquisition to complex gauging applications. Framed in a simple, wizard driven, common user interface it is possible to complement the base product by means of software Add-ons purposely conceived for specialized industry fields.

Main characteristics are:

- Templates and wizard driven programming interfaces.
- Safe and reliable with checks on programmed data consistency, data back-up and restore utility, multi-level user security access.
- Fully customizable software environment matching current and future metrological and statistical needs: page layouts, short cuts, hot tabs, application templates, reports, customers' based statistical evaluations and more.
- Capable of connecting to a variety of analogue and digital measuring devices and machine tool CNC's.
- Operator prompts with multimedia files (pictorials, drawings, photos, movies).
- Comprehensive fully integrated software modules for data acquisition, measurement elaboration, statistical analysis, machine tool compensation, network integration and data storage.

MERLINPlusSW

Merlin Plus Software[™] combines the ease of use and the abilities of the Merlin Plus[™] gauge computer with the capability of running on customer PC with various display formats. The Marposs utility Merlin Designer[™] allows to produce dedicated measuring pages. The human-machine interface offers touch-screen operation or traditional mouse / keyboard commands to acquire measurements. Merlin Plus Software[™] is capable of:

- collecting data acquired by measurement devices, made by Marposs or third-parties
- delivering innovative software features capable of acquiring data from wired and wireless measurement devices
- providing a basic statistical control software (featuring graphic display and numeric summary, Gage Capability and R&R studies facilities, data segregation, part counters) and an easy-to-use user interface supporting both multi-language and multi-user management
- managing an high number of characteristics through table programming and group features



