

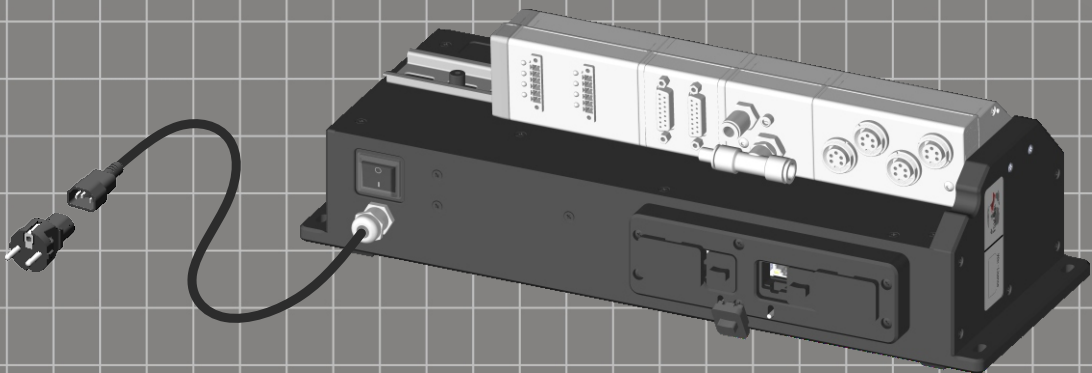



Messtechnik GmbH & Co. KG



Meic - Core

Messrechner
Measuring computer



 Windows 10 IoT Enterprise™

The image displays several software windows for configuring the Meic-Core measuring computer. These windows include:

- Programming of the Numeric Display:** Shows settings for display elements, value display, and background color. A preview shows the numeric value '23456'.
- Programming of the Analog Meter:** Shows settings for the analog display, including scale, range, and background color. A preview shows an analog gauge.
- Programming of the Histogram:** Shows settings for the histogram display, including scale, range, and background color. A preview shows a histogram.
- Programming of the Quality Control Chart:** Shows settings for the quality control chart, including scale, range, and background color. A preview shows a quality control chart.

Hardware accessories shown include a stylus, a USB cable, a multi-pin connector, and a multi-pin connector block.



Meic-Core : Messrechner für den industriellen Einsatz



Der Messrechner **Meic-Core** ist ein robuster und universeller Industriecomputer zur manuellen und automatischen Messwerterfassung mit statistischer Auswertung. Programmierbare Messabläufe und Steuerfunktionen ermöglichen den automatischen Betrieb von Mehrstellenmessvorrichtungen bis hin zur Korrekturwertübergabe an CNC-Maschinen. Durch den Einsatz von IMBus Modulen kann der Messrechner individuell für jede Applikation mit 1 ... 512 Messeingängen konfiguriert werden.

Merkmale

- Kompakter, robuster Aufbau mit massivem, gedichtetem Metallgehäuse (IP54), passiver Kühlung und Flash-Speicher sowie Monitor-Anschluss (VGA)
- IMBus - Module für Induktivmesstaster, inkrementale Geber, pneumatische Messköpfe (Luftmessung), Sensoren mit analogem Spannungs- oder Stromausgang, Messgeräte mit Datenausgang und Sensoren mit IBR ISi Schnittstelle
- Profibus-, Profinet- und SPS kompatible Ein- / Ausgabemodule für Steuerungsaufgaben
- Standard PC-Anschlüsse : 2x USB, 2x Ethernet, 1x VGA und 1x RS232 (COM-Port)

ComGage

Software für die Messtechnik und statistische Prozesskontrolle in der Fertigung.
Software for metrology and statistical process control in manufacturing facilities.

Merkmale anlegen / Create characteristics

CHARACTERISTICS :		Drawing data				Statistics		Reference Information			
No.	Name	Nominal	USL	ULCL	LCL	LSL	Unit	Max Inputs	Mode	1 Master	2 Master
C1	Diameter 1	28	0.02	0.0225	-0.0225	-0.02	mm	M1+M2	Static	18.9892	---
C2	Diameter 2	28	0.02	0.015	-0.015	-0.02	mm	M3+M4	Static	28.0002	---
C3	Diameter 3	32	0.027	0.0236	0.0034	0	mm	M5+M6	Static	32.016	---
C4	Taper	12	0.04	0.03	-0.03	-0.04	mm	M5+M6; (M1+M2)	Static	12.0168	---
C5	Staightness	0	0.01	0.0075	-0.0075	-0.01	mm	M1+M2; M5+M6/2	Static	0	---
C6	Roundness D1	0	0.008	0.005	---	---	mm	M1+M2/2	TIR (Ma...)	---	---
C7	Roundness D2	0	0.008	0.005	---	---	mm	M3+M4/2	TIR (Ma...)	---	---
C8	Roundness D3	0	0.008	0.005	---	---	mm	M5+M6/2	TIR (Ma...)	---	---

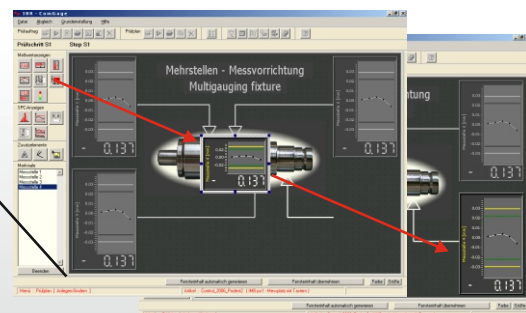
Eingabe der Merkmale mit Einheit, Nennmaß, Toleranzen, Formel zur Messtaster-Verknüpfung, Messmode und Meisterwerten zur Kalibrierung.
Input of characteristics with unit, nominal size, tolerances, formula for probe-mixing, measuring mode and master values for calibration.

Prüfschritte anlegen / Create test steps

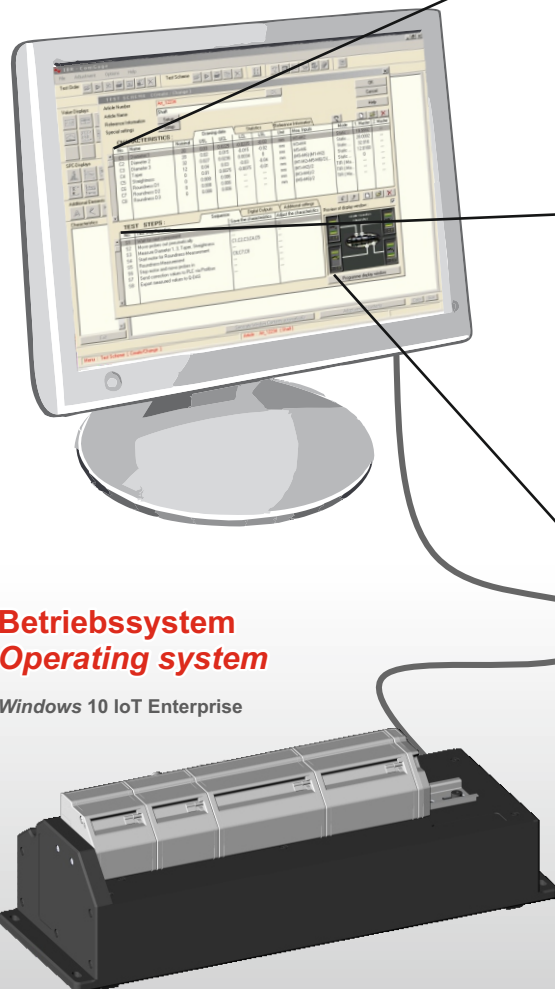
TEST STEPS :		Sequence	Digital Outputs	Additional settings
No.	Test Step Function	Save the characteristics	Adjust the characteristics	
S1	Wait for next component	---	---	---
S2	Move probes out pneumatically	---	---	---
S3	Measure Diameter 1, 3, Taper, Straightness	C1,C2,C3,C4,C5	---	---
S4	Start motor for Roundness-Measurement	---	---	---
S5	Roundness-Measurement	C6,C7,C8	---	---
S6	Stop motor and move probes in	---	---	---
S7	Send correction values to PLC via Profibus	---	---	---
S8	Export measured values to Q-DAS	---	---	---

Prüfschritte anlegen mit Funktionen wie Messwerte speichern, Kalibrierung, Q-DAS Export, Korrekturwert an SPS übergeben, ...
Create test steps with functions such as saving of measured values, calibration, Q-DAS export, correction value transfer to PLC, ...

Anzeigefenster anlegen / Create display windows



Zur Führung des Werkers durch den Messablauf können bis zu 128 frei gestaltbare Anzeigefenster angelegt werden.
Up to 128 freely designable display windows can be created for guiding the operator through the measuring sequence.



Betriebssystem Operating system

Windows 10 IoT Enterprise

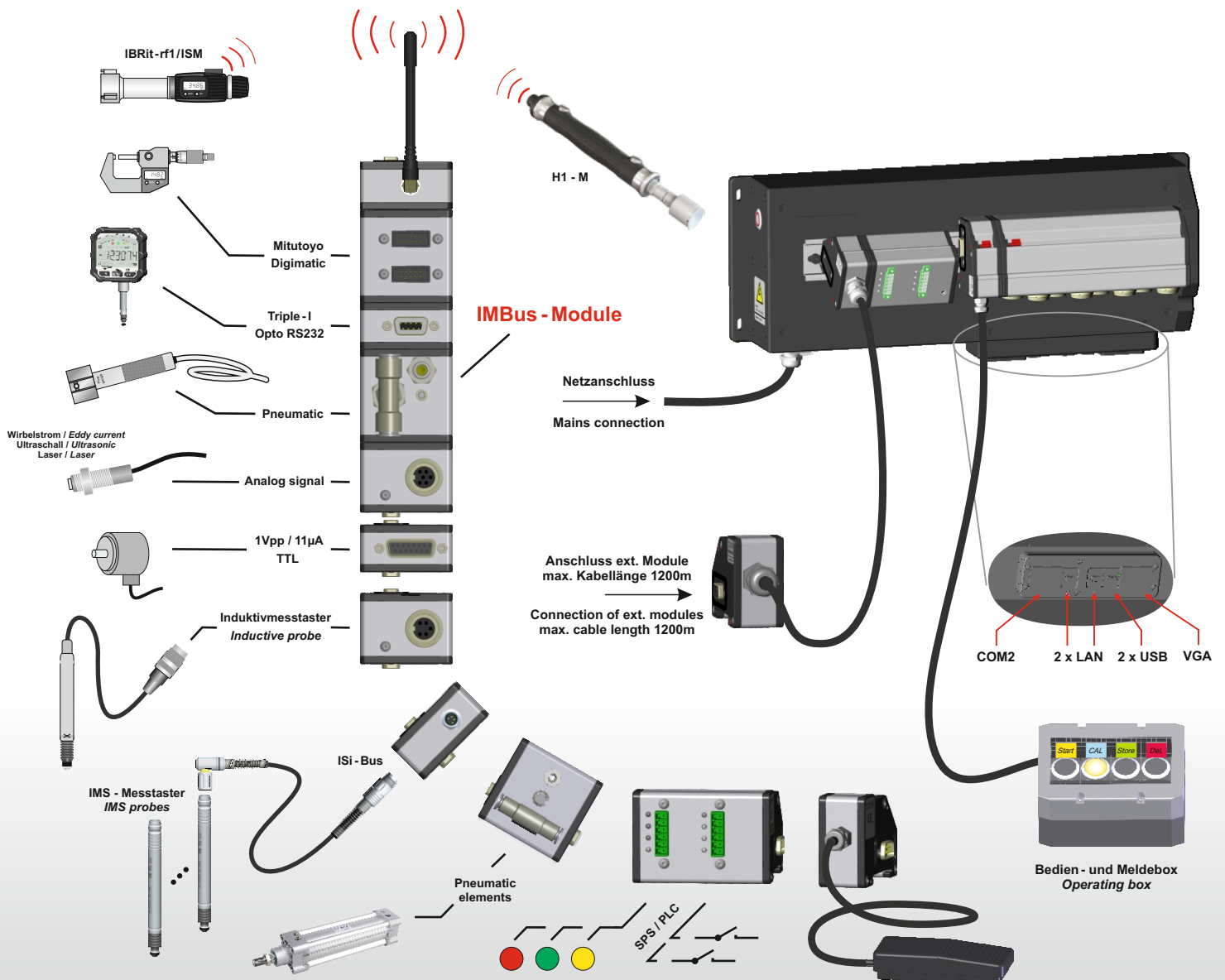
Meic-Core : Measuring computer for industrial use



The measuring computer **Meic-Core** is a robust and universal industrial computer for manual and automatic collection of measured values with statistical analysis. Programmable measuring sequences and control functions allow automatic operation of multi-gauging fixtures up to the transfer of correction values to CNC machines. By the usage of IMBus modules the measuring computer can be individually configured for any application with 1 ... 512 measuring inputs.

Features

- Compact and robust construction with solid, sealed metal case (IP54), passive cooling and flash memory as well as connector for standard monitor (VGA)
- IMBus modules for inductive probes, incremental systems, pneumatic gauge heads (air gauging), sensors with analogue voltage or current output, gauges with data output and sensors with IBR ISI interface
- Profibus-, Profinet- and PLC compatible input / output modules for control applications
- Standard PC-connections : 2x USB, 2x Ethernet, 1x VGA and 1x RS232 (COM port)



Hinweis : Weitere IMBus-Messmodule sind verfügbar (für USB-Messgerätekabel, Solartron Orbit Bus, Sylvac Bluetooth, Temp.-Sensoren), siehe IMBus-Prospekt.
 Note : Further IMBus mea. modules are available (for USB gauge connection cables, Solartron Orbit bus, Sylvac Bluetooth, temp. sensors), see IMBus brochure.

Technische Daten : Meic-Core

Mechanische Kennwerte

Gehäuse	Aluminium pulverbeschichtet
Abmessungen / Gewicht	(BxHxT) 400 x 107 x 160 mm / 3,9 kg
Schutzart	IP54, CEI / IEC 529

Elektrische Kennwerte

Schaltnetzteil	100 ... 240 VAC, 70 Watt
Max. Leistungsaufnahme	10 Watt (ohne Messmodule)

Computer Merkmale

CPU	Intel Celeron J1900, 4 Kerne, 2,42 GHz
RAM	8 GB
Hard disk	64 GB / 256 GB Flash - Karte
Betriebssystem	Windows 10 IoT Enterprise

Anschlüsse

Standard PC - Anschlüsse	2xUSB 2.0, 1xRS232 (COM2)
	2xLAN (Gigabit), RJ45 - Buchse
	VGA
IMBus	EIA RS485, 64 Clients (Erweiterbar auf 512 Clients)

Messdaten

Siehe technische Dokumentation der jeweils angeschlossenen IMBus - Module

Umgebungsbedingungen

Arbeits- / Lagertemperatur	0 ... 50°C / -20 ... +70°C
Relative Feuchte	5 - 80% (nicht kondensierend)

Technical data : Meic-Core

Mechanical characteristics

Case	Aluminium powder-coated
Dimensions / Weight	(WxHxD) 400 x 107 x 160 mm / 3.9 kg
Protection class	IP54, CEI / IEC 529

Electrical characteristics

Switched power supply	100 ... 240 VAC, 70 Watt
Max. power consumption	10 Watt (without measuring modules)

Computer characteristics

CPU	Intel Celeron J1900, 4 cores, 2.42 GHz
RAM	8 GB
Hard disk	64 GB / 256 GB Flash - Card
Operating system	Windows 10 IoT Enterprise

Connections

Standard PC connections	2xUSB 2.0, 1xRS232 (COM2)
	2xLAN (Gigabit), RJ45 - jack
	VGA
IMBus	EIA RS485, 64 clients (Expandable to 512 clients)

Measurement parameters

See technical documentation of the connected IMBus modules
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Environmental conditions

Operation / Storage temp.	32 ... 122°F / -4 ... +158°F
Relative humidity	5 - 80% (non condensing)

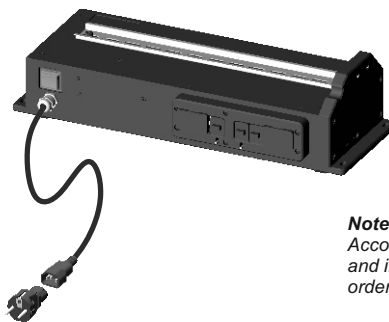
Bestellinformationen

Order information



Typ	[Art. Nr.]	Artikel
Meic-Core	[F124 020]	Messrechner mit VGA -Ausgang ohne Betriebssystem und ohne Flashkarte
	[F125 010]	Lizenz Windows 10 IoT Enterprise (multi-language) und 64 GB Flashspeicher
	[F125 012]	Lizenz Windows 10 IoT Enterprise (multi-language) und 256 GB Flashspeicher

Anmerkung :
Entsprechend der Applikationsanforderungen müssen die IMBus - Module und ggfs. ComGage - Module zusätzlich bestellt werden.



Type	[Art. No.]	Article
Meic-Core	[F124 020]	Measuring computer with VGA output without flash and without operating system
	[F125 010]	License Windows 10 IoT Enterprise (multi-language) and 64 GB flash memory
	[F125 012]	License Windows 10 IoT Enterprise (multi-language) and 256 GB flash memory

Note :
According to the application requirements the IMBus modules and if necessary ComGage modules must be ordered additionally.



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