masibus
A Sonepar Company

Products for Pharma

Masibus Pharma Range of Products
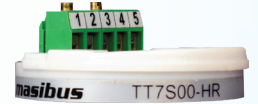
DDU-26

DDU-46

CDU

FDU

HT7S11S

DPT7S10

TT7S00-HR

TT7S10-XP

Time Synchronization

Clean Room & Filter Display Unit

Humidity & Temperature Transmitters

Enhanced Weather Proof Scanners

Smart Data Loggers

UC12

Universal Calibrators

Intelligent IO's (MINT)

Zigbee Wireless Converters

Protocol & Media Converters

AI-4 CH   **AI-8 CH**

Single & Dual Channel Signal Isolator

Multi Channel Vibration Monitor

VSW-160

MSC-ME-ZB   **HT16Ew**   **9000E**   **9000LE**   **MSC-RE-RS**   **MSC-RS-RS**

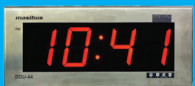# Time Synchronization Solution for Pharma Industry

RoHS ✓

MC-2

DDU-24

DDU-26

DDU-44

DDU-46

GPS Wireless Master Clock- MC-2
Features
- Receives automatic time from network of GPS satellites
- Transmits the time to clocks through RF or serial
- Synchronization of server time system through RS-232/RS-485
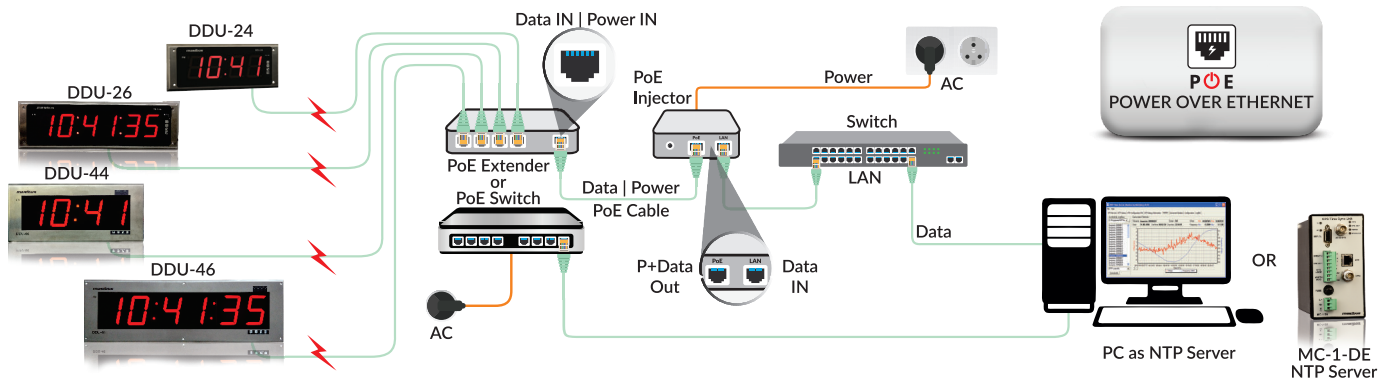
Wireless Slave Clock- DDU-24/ 26
Features
- Each clock can act as repeater to extent network range
- Works in stand-alone mode if network fails
- DDU-24 / DDU-26 is also available in Ex-proof enclosure for gas group IIA and IIB (IP65)
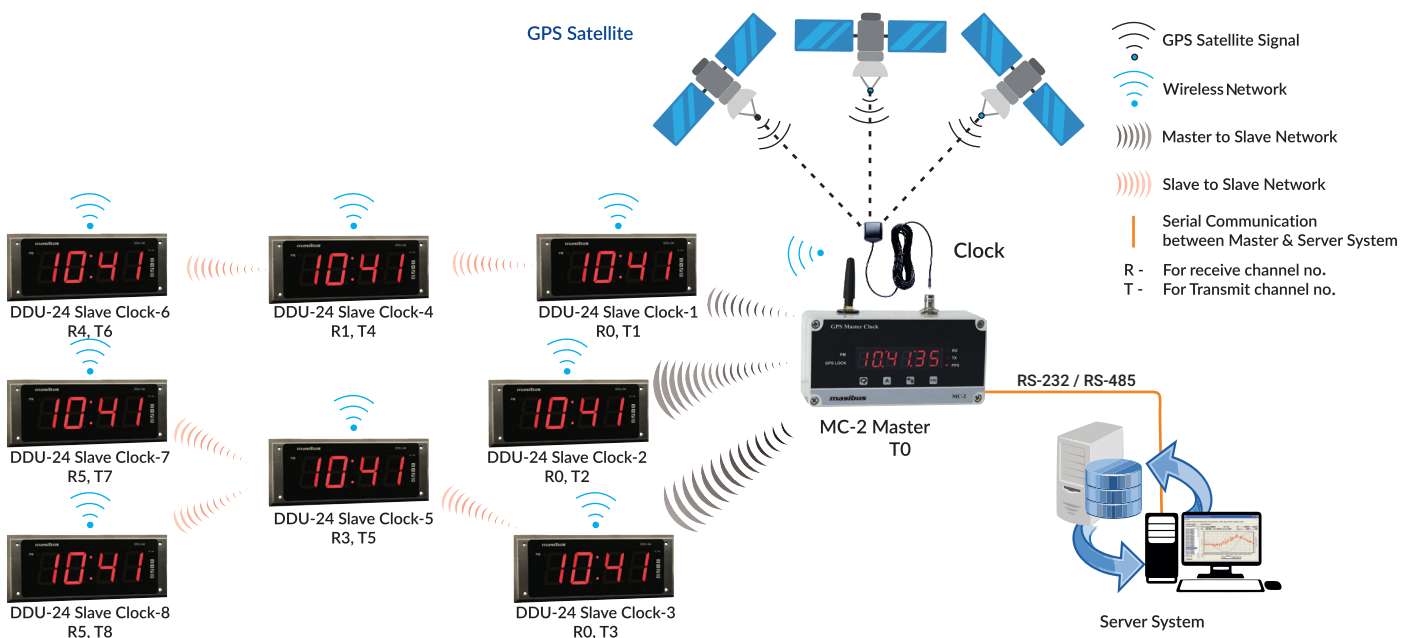
Wireless Slave Clock- DDU-44/ 46
Features
- Use of unlimited slave clocks within transmitter's range
- Optional TP (LAN Interface) with IEEE 802.3af compliant PoE
- Retains time during loss of power/time code

Wireless Master Slave with Slave Retransmission

DDU-24
DDU-26
DDU-44
DDU-46

Data IN | Power IN
PoE Injector
Power
AC
PoE Extender or PoE Switch
Data | Power PoE Cable
Switch
LAN
Data
P+Data Out
Data IN
AC
P O E POWER OVER ETHERNET
OR
PC as NTP Server
MC-1-DE NTP Server

DDU 24/26 or DDU 44/46 Wireless & NTP PoE Synchronized Slave Clocks

GPS Satellite

GPS Satellite Signal
Wireless Network
Master to Slave Network
Slave to Slave Network
Serial Communication between Master & Server System
R - For receive channel no.
T - For Transmit channel no.

Clock

DDU-24 Slave Clock-6
R4, T6

DDU-24 Slave Clock-4
R1, T4

DDU-24 Slave Clock-1
R0, T1

DDU-24 Slave Clock-7
R5, T7

DDU-24 Slave Clock-5
R3, T5

DDU-24 Slave Clock-2
R0, T2

DDU-24 Slave Clock-8
R5, T8

DDU-24 Slave Clock-3
R0, T3

MC-2 Master
T0

RS-232 / RS-485

Server System

TT7S
Isolated & Programmable Temperature Transmitters

Features

- Universal input (RTD, Thermocouple, Ohm, mV)
- Full three port isolation
- Linearized output
- Highly accurate
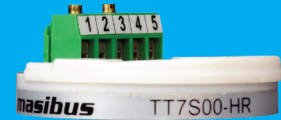- Fully programmable for input type & range

TT7S11S   **TT7S10**   **TT7S10-H**

TT7S00-HR
2-Wire Transmitter Pt-100 input

Features

- Multi-range design
- Output linear to temperature
- Analog linearized for 0.1% linearity
- Sized for DIN B heads and bigger
- Sensor break selection for upscale or downscale

TT7S00-HR

TT7S10-D   **TT7S10-XP**
(Single Compartment)   **TT7S10-XP**
(Dual Compartment)

TT7S10-D/TT7S10-XP
Loop Powered Temperature Transmitter with Display

Features

- Universal input (RTD, Thermocouple, Ohm, mV)
- Available in below options
  - TT7S10-D: DIN-Rail mount with 0.3", 4 digit LED display
  - TT7S10-XP: Wall or 2" pipe mount Ex-proof transmitter with touchsense keys
  - 0.56", 4 digit LED display in single compartment
  - 0.39", 4 digit LED display in dual compartment

- 1.5 KV RMS isolation between input & output
- Linearized output
- Highly accurate
- Fully Programmable for input type & range
- Digital filter
- Easy configuration using front keys and software

Transcriptor Offerings

DPT7S10

DPT7S10
Differential Pressure Transmitter

Features

- Wide loop supply voltage range from 10VDC to 36VDC
- Custom built LCD 4-digit display
- Configurable unit measurementin mmWC / Pa
- Available in compact and lightweight design for easy and simple wall mount installation
- Configurable by front keypad (Available in device with display)

HT7S11S

HT7S11S
Humidity and Temperature Transmitter

Features

- Wide loop supply voltage range from 10VDC to 36VDC
- Custom built LCD display
- Configurable temperature unit measurement in celsius/ fahrenheit/kelvin
- Available in wall and duct mount
- Configurable by front keypad (Available in device with display)

T/RH Transmitter and DP Transmitter for Clean Room Application

HT7S11S (Duct Mount)

4-20 mA to DDC Controller

Air Duct

Clean Room

HT7S11S (Wall Mount)

4-20 mA to DDC Controller or Clean Room Display Unit

DPT7S10 (Wall Mount)

4-20 mA to DDC Controller or Clean Room Display Unit

Passage Area

CDU
Clean Room Display Unit

Features

- RH, temperature and DP measurement
- Internal sensor option (Ease of installation)
- Remote sensor option for RH+T measurement
- Available in LED and touchscreen TFT LCD display options
- 3 Programmable alarms with visual annunciation
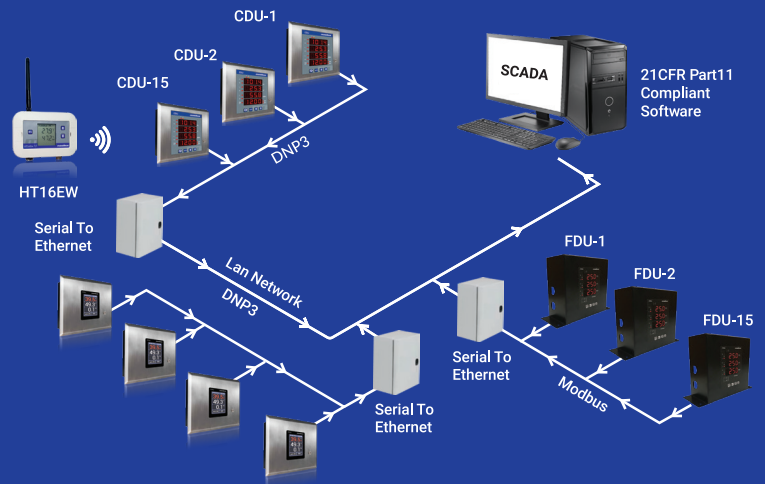- Data backfilling via DNP 3.0 avoiding data loss

CDU (LED)   **CDU (LCD)**

Environment Monitoring System

RoHS

CDU-1
CDU-2
CDU-15
HT16EW
Serial To Ethernet
DNP3
Lan Network
DNP3
Serial To Ethernet
SCADA
21CFR Part11 Compliant Software
FDU-1
FDU-2
FDU-15
Serial To Ethernet
Modbus

FDU
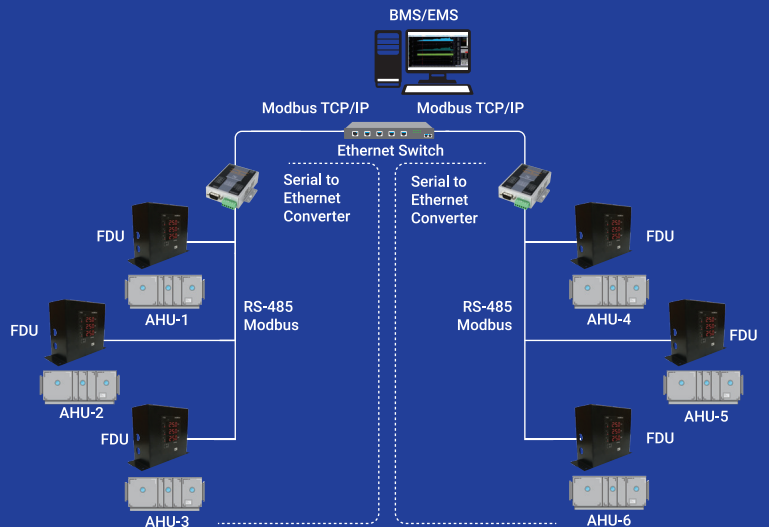## Filter Display Unit (For AHU & BMS Systems)

Features

- Micro-controller based differential pressure indicator cum transmitter up to 3 filters
- Software programmable filter ranges
- 3 Programmable Hi/Lo alarms with audio/visual annunciation
- RS-485 Modbus RTU communication for connectivity with BMS/ PLC/ SCADA etc.
- Built in AHU OFF/TRIP status LED indications via digital input

FDU

Filter Display Unit for BMS/ EMS

BMS/EMS
Modbus TCP/IP   Modbus TCP/IP
Ethernet Switch
Serial to Ethernet Converter
Serial to Ethernet Converter
FDU
FDU
FDU
AHU-1
AHU-2
AHU-3
RS-485 Modbus
RS-485 Modbus
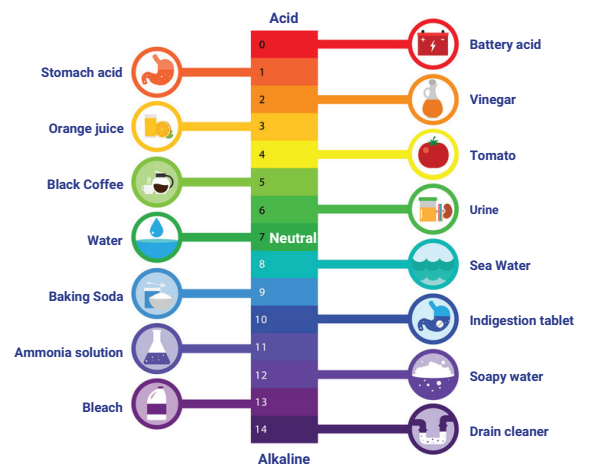FDU
FDU
FDU
AHU-4
AHU-5
AHU-6

PHI-22-XP

PHI-22-XP
Flame-Proof pH Indicator

Features

- 5 Point calibration
- Slope/offset adjustment
- Built-in-diagnostics
- User selectable: Auto/manual temperature compensation
- Electrode performance indicator

RoHS

Acid
0 Battery acid
Stomach acid 1
2 Vinegar
Orange juice 3
4 Tomato
Black Coffee 5
6 Urine
Water 7 Neutral
8 Sea Water
Baking Soda 9
10 Indigestion tablet
Ammonia solution 11
12 Soapy water
Bleach 13
14 Drain cleaner
Alkaline

Isolator Offerings

## 9000LE- Single / Dual Channel Signal Isolator

Features

- Compact DIN-Rail mount design of 35mm with one or two-channel option
- Highly stable against temperature variation, Drift ≤ 50 PPM
- 2 wire & 4 wire transmitter configuration option available
- High response time ≤ 50uS
- BEST IN CLASS ACCURACY, ≤ 0.1% of full span
- HART pass-through available with 2- wire transmitter supply configuration
- Low power consumption, ≤ 1.3 W per channel with TPS, ≤ 0.7 W per channel without TPS & low cost per channel

9000LE

Process Industries Application

9000LE
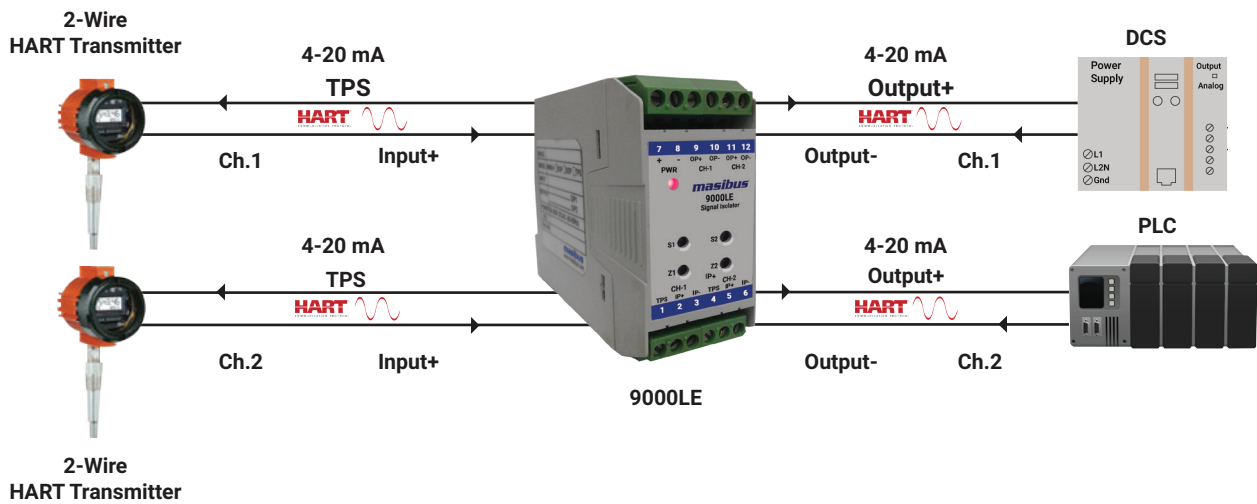
9000E- Signal Isolator

Features

- Compact DIN-Rail mount design of 17.6mm width
- 2W transmitter input with HART Pass
- High KV 3 port isolation
- High accuracy, low drift & low temperature effect
- Input and output well protected
- Fast response suits all applications
- High CMRR and NMRR
- Slim design for one/two channels

9000E

9000C- Signal Isolator

Features

- Available in Aux Powered (AP) and Loop Powered (LP) options
- Slim DIN-Rail mount design of 12.5mm for single output and 17.5mm for dual output
- Rugged & accurate 4 wire and 2 wire Isolator
- Up to 2 outputs with short circuit protection
- CE certified model option
- HART pass through model

9000C

Calibrator Offerings

UC12
Universal Calibrator

- Portable multifunction calibrator with high accuracy in all modes of operation.
- Graphical user interface for precise measuring and sourcing of electrical and physical parameters.
- Designed to give maximum battery life in one full charge, the backlight is adjustable for power saving.
- Shortcut keys to operate easily for input selection for measure and source/ measure respectively.
- Comes with a mini USB connector for charging, logged data retrieval and firmware upgrade.
- Sourcing and measurement capabilities with independent parameter and range selection.
- It has mA/ V/ mV/ mA (2W)/ switch- test / RTD/ TC/ measurement capability & also has mA/ V/ mV/ mA(2W)/ Resistance/ RTD/ TC/ Frequency/ Pulse source capability.

UC12

Calibrate Pressure Transmitter using UC12

This calibration kit is designed to make multifunction calibration, pneumatic testing, and calibration of mechanical and electronic pressure measuring instruments for a fast and reliable process. This is a cost effective, high-quality, handy, and robust kit which is essential for those who need to perform service and maintenance on pressure & electrical instruments.

Handpump with Digital Pressure Gauge **Pressure Transmitter** **UC12** **4-20mA**

The kit includes a pneumatic hand test pump, which allows you to generate a defined test pressure, and a highly accurate digital pressure gauge that serves as a reference instrument and process calibrator for measurement and calibration of process parameters. All the components of the kit are carefully stored in the case, providing protection during transport. The case is compact and easy to carry, making it convenient to take with you wherever you need to go.

Special Features

- Economical and simple operation for multifunction calibration
- Testing and adjustment of pressure gauges, pressure sensors, pressure switches, safety valves and electrical parameters
- Pressure accuracy with 0.05 % & 0.025% FS
- Pneumatic version from vacuum to 40 bar
- Hydraulic version from 0 to 700 bar

Digital Pressure Guage **Hand Pump** **UC12**

HART calibration using UC12

HART Communicator is a device used in the process control industry to configure, monitor, and diagnose field instruments. With a HART Communicator that includes a UC12 process calibrator option, users can calibrate and verify their field instruments quickly and easily, without the need for additional tools.
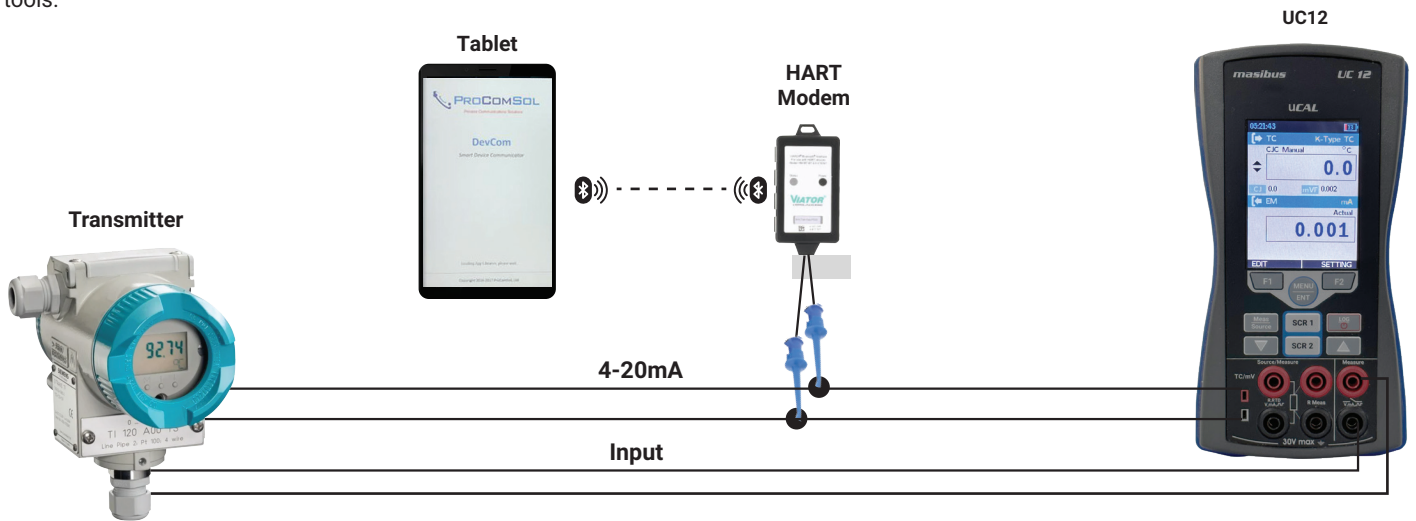
The process calibrator option allows users to apply a known input signal to the instrument and compare its output to the expected value. This enables accurate calibration and verification of the instrument's accuracy. In addition, a HART Communicator with a process calibrator option typically includes additional features such as measurement and simulation of electrical signals, allowing users to test and diagnose a wider range of instruments.

Special Features

• Full HART Device Description (DD) support of all
  HART devices with process calibrator
• Perform HART trim on HART devices
• Convenient wireless connectivity to HART modem
• Easy to use, fast connect and view HART data
• Connectivity through bluetooth and USB
• Use mobile and laptop HART communicator

TC12+
Temperature Calibrator

• Portable multifunction temperature calibrator with high accuracy in all modes of operation
• Graphical user interface for precise measuring and sourcing of electrical and physical parameters
• Designed to give maximum battery life in one full charge, the backlight is adjustable for power saving
• Shortcut keys to operate easily for input selection for measure and source/ measure respectively
• Comes with a mini USB connector for charging, logged data retrieval and firmware upgrade
• Sourcing and measurement capabilities with independent parameter and range selection
• It has mA/ V/ mV/ mA (2W)/ switch- test / RTD/ TC/ measurement capability & also has resistance/ RTD/ TC source capability


TC12⁺

I/O Cards from Masibus (MINT)

Features

- High performance IO system which can be connected with any brand of PLC / DCS / DAQ in centralized as well as in remote IO configuration
- 15 nos. of IO cards can be clubbed together in a row with one communication processor & same can be repeated for more rows
- Channel density for digital input & output is 16 channel, & for analog input & output is for 8 channel. AI card can accept universal input
- Can be integrated with existing plant network over Modbus RTU / Modbus TCP/IP protocol
- Smart IOs to capture field sensors information to IIoT gateway, which can further be pushed to cloud
- MINT IO's comes with below different options 1 RS-485 Port, 1 RS-485 + Ethernet Port, 2 RS-485 Port
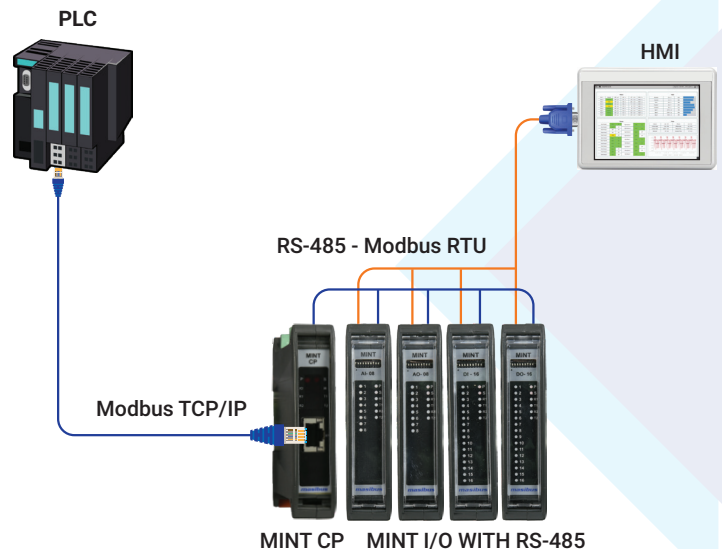
  Protocol Support - Modbus RTU, Modbus TCP I/P

Analog Input	Analog Input	Analog Output	Digital Input	Digital Output
4 CH	8 CH	8 CH	16 CH	16 CH
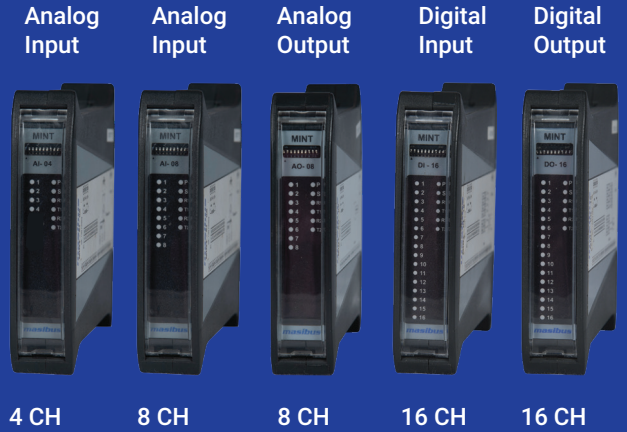
Can be connected with any make of PLC-CPU as I/O Card
Can be connected as Data Concentrator/Collector for IIoT Application

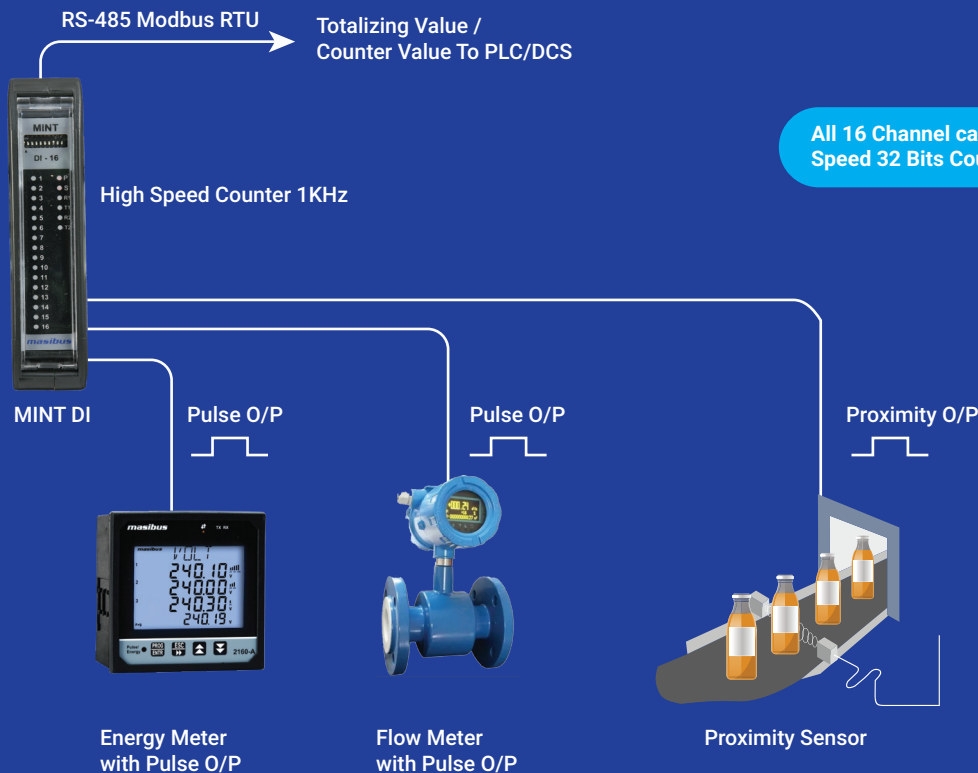| MINT IOs					
Model	**4-AI**	**8-AI**	**8-AO**	**16-DI**	**16-DO**
Channels	4	8	8	16	16
Type	Voltage/Current (Fix)	RTD/TC/ Voltage/Current (Universal)	Voltage/Current	24V DC input	Open collector 24VDC sink/ source 100mA per O/P
Isolation	Supply to field: 1500VAC RMS, Supply to RS-485: 1500VAC RMS, Field to logic: 1500VAC RMS				
Scan Time	50ms/ Ch.	RTD-100ms/Ch. Other-50ms/Ch.	All 8 Ch. in <500ms	500 μs	Configurable
Resolution/ Accuracy	16 bit ADC 0-1 %	16 bit ADC 0.1%	16 bit DAC 0.05%	1 KHz 32 Bit Counter	10ms Pulse O/P

PLC with IOs on RS-485 - Modbus RTU

PLC

RS-485 - Modbus RTU

MINT AI-AO-DI-DO WITH RS-485
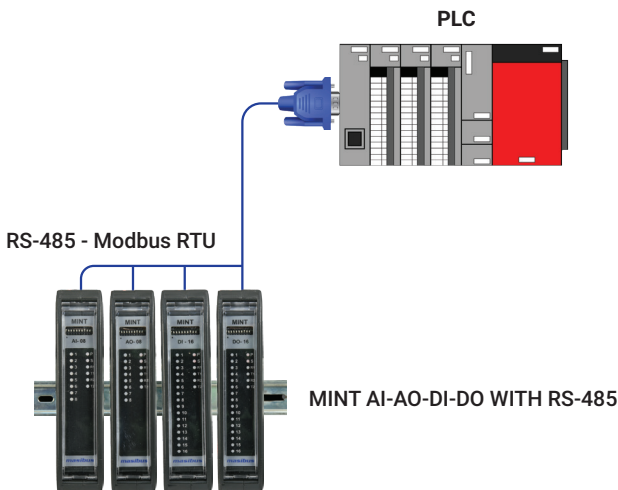
Mint CP with I/O on Modbus TCP/IP to PLC & Mint IO's to HMI on RS-485-Modbus

PLC

HMI

RS-485 - Modbus RTU

Modbus TCP/IP

MINT CP   MINT I/O WITH RS-485

MINT-DI as 1 KHz High Speed Counter

RS-485 Modbus RTU → Totalizing Value / Counter Value To PLC/DCS

High Speed Counter 1KHz

All 16 Channel can be configured as High Speed 32 Bits Counter of Frequency 1KHz

MINT DI

Pulse O/P

Pulse O/P

Proximity O/P

Energy Meter with Pulse O/P

Flow Meter with Pulse O/P

Proximity Sensor

I/O Pair for Analog Input

Analog Input from Field

RS-485 Port-1

RS-485 Port-1

Communication Redundancy

RS-485 Port-2

RS-485 Port-2

2 wire cable Upto 1200 meter

Signal Reproduced

Analog Input to PLC / DCS Cards

Analog Input Slave Pair Card

8 Channel Analog Input Master Card
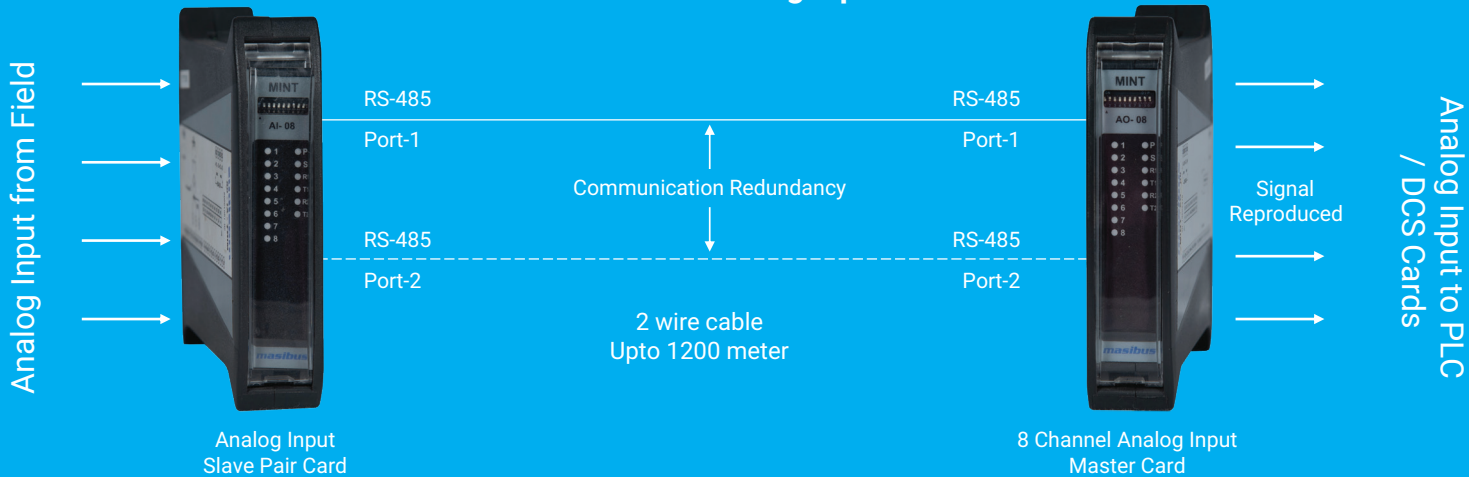
I/O Pair for Digital Input

Digital Input from Field

RS-485 Port-1

RS-485 Port-1

Communication Redundancy

RS-485 Port-2

RS-485 Port-2

2 wire cable Upto 1200 meter

Signal Reproduced

Digital Input to PLC / DCS Cards

Digital Input Slave Pair Card

16 Channel Digital Input Master Card
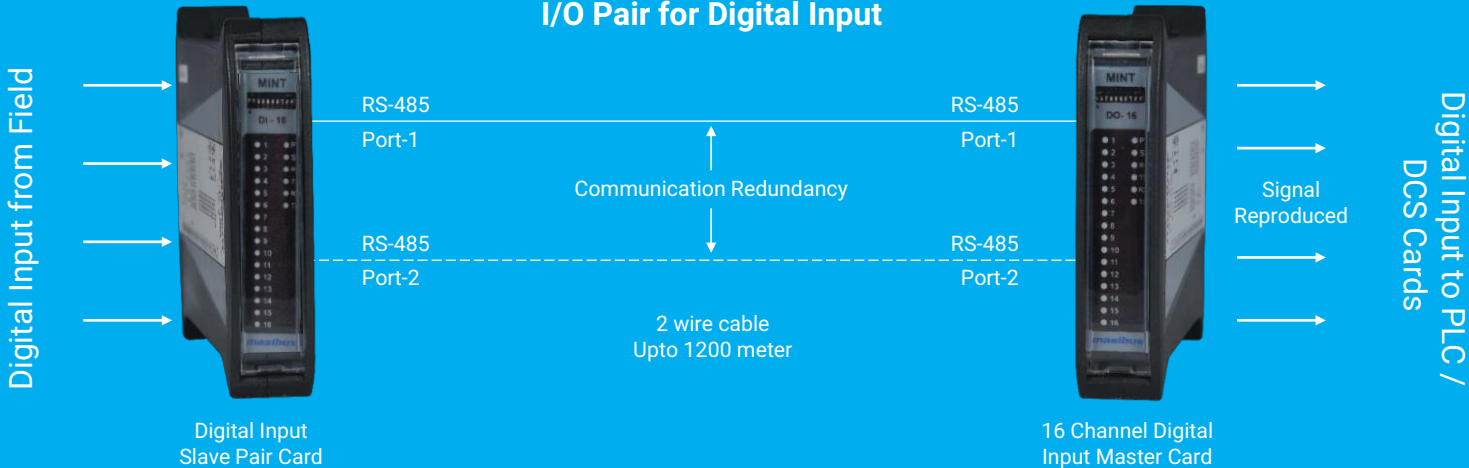
8208-IP as Transformer Protection Relay

Analog O/P to Indicator/PLC/DCS

8208-IP

Core Temp. T7

RL1 → Alarm
RL2 → Trip
RL3 → Fan Control

RS-485 Modbus RTU

PLC

T1
T2
T3
T4
T5
T6

Transformer

Winding Temperature Sensors
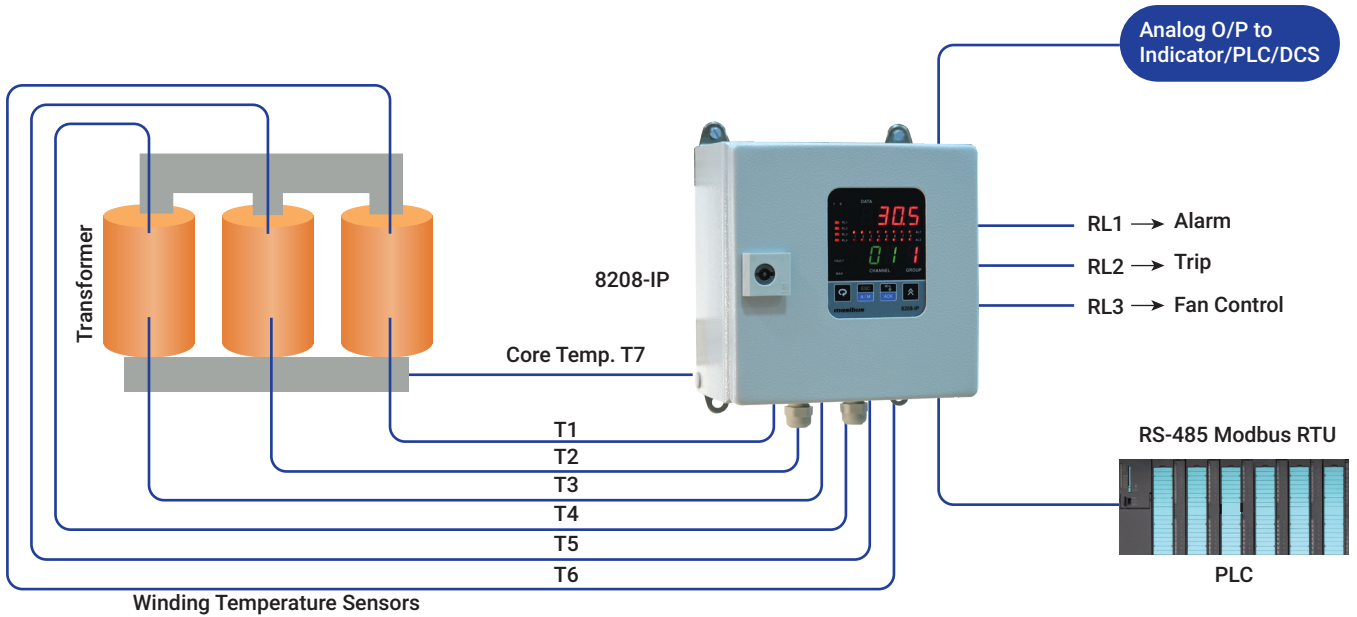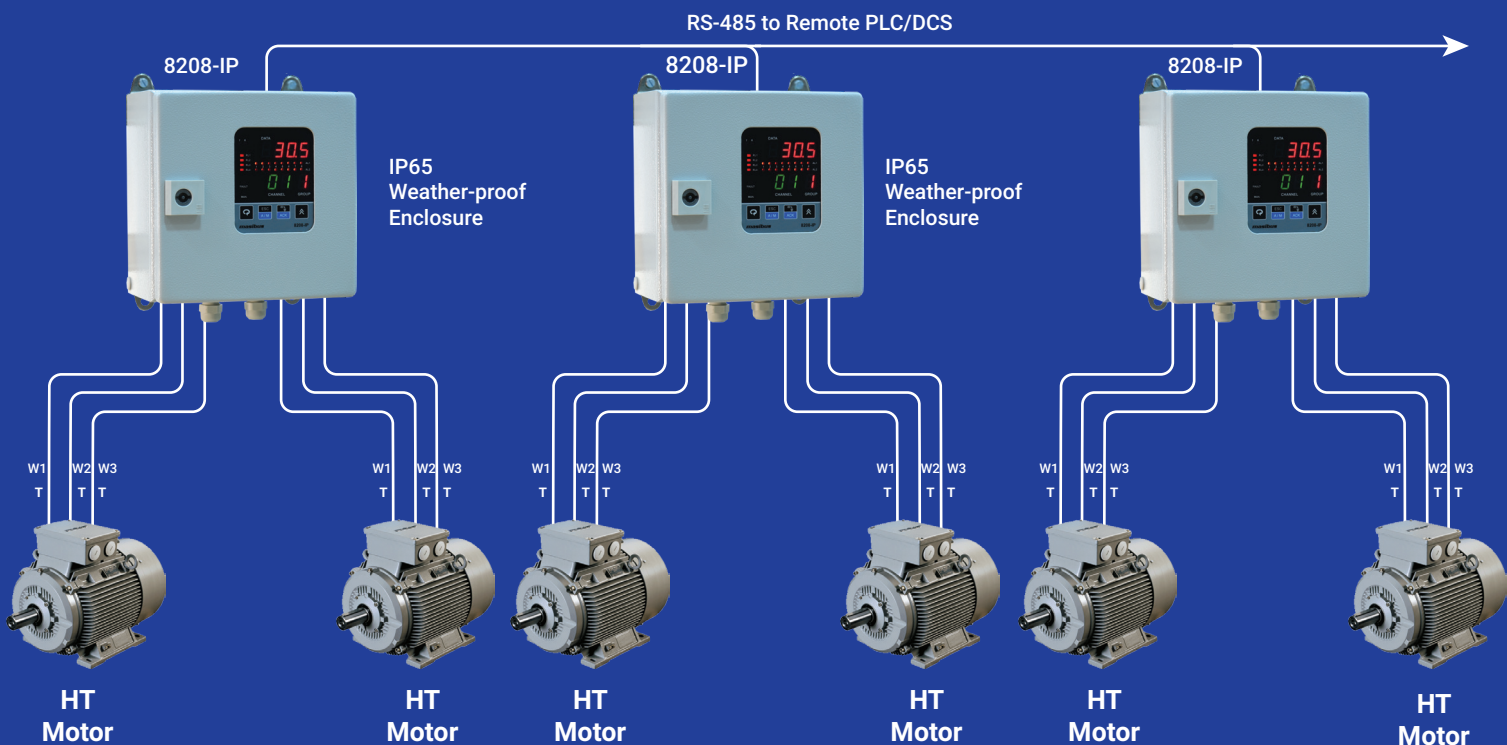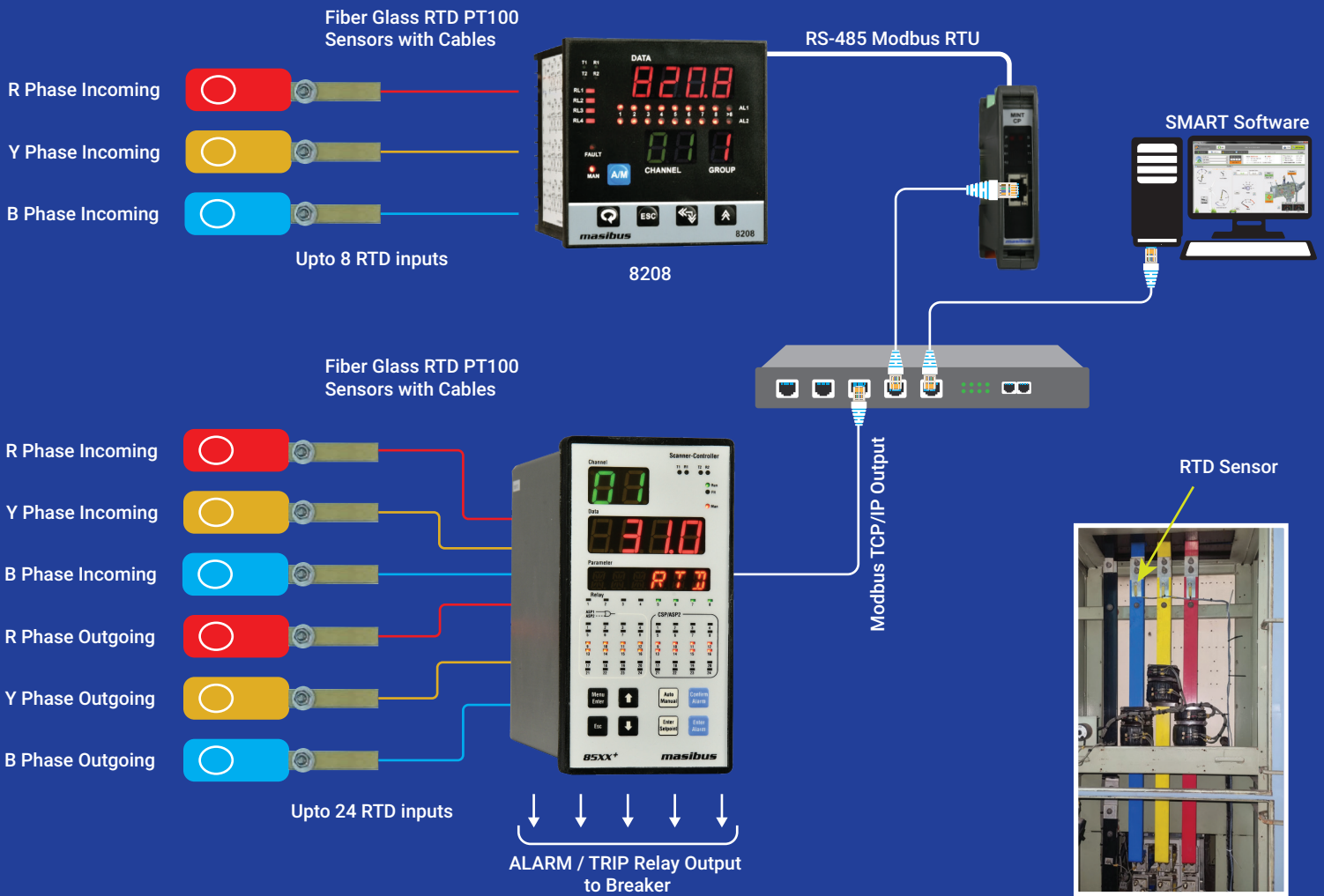
Features

- IP65 for Weather proof protection
- Fast sampling rate with instantaneous relay action
- RS-485 serial communication port for remote monitoring
- Multiple levels of configuration and password protection

- Comprehensive alarm/trip logic programming
- Re-transmission output (Optional)
- Universal analog inputs
- Four relays for alarm/trip

Motor Temperature Measurement & Protection

RS-485 to Remote PLC/DCS

8208-IP

IP65 Weather-proof Enclosure

8208-IP

IP65 Weather-proof Enclosure

8208-IP

W1 T   W2 T   W3 T

HT Motor

HT Motor

HT Motor

HT Motor

HT Motor

HT Motor

Busbar Junction Temperature Monitoring for Preventive and Predictive Maintenance of LT Distribution Panels

Fiber Glass RTD PT100 Sensors with Cables

R Phase Incoming

Y Phase Incoming

B Phase Incoming

Upto 8 RTD inputs

8208

RS-485 Modbus RTU

SMART Software

Fiber Glass RTD PT100 Sensors with Cables

R Phase Incoming

Y Phase Incoming

B Phase Incoming

R Phase Outgoing

Y Phase Outgoing

B Phase Outgoing

Upto 24 RTD inputs

Modbus TCP/IP Output

ALARM / TRIP Relay Output to Breaker

RTD Sensor

8040 Data Logger Applications

8040-128 Channel Data Logger

Benefits

- 128 Channel universal input
- Channel to channel isolation
- 3 Second update rate
- 32 MB Internal memory
- Periodic & event based data logging
- RS-485 & Ethernet communication port available

Zigbee Offerings

MSC-ME-ZB
(Modbus-Zigbee to Modbus
TCP/IP Data Concentrator/Gateway)

MSC-ZB-RS
(RS-485 Serial to ZigBee
Wireless Converters)

MSC-ME-ZB

Features

- Supports upto 64 Modbus RTU Slave devices on RS-485 & ZigBee
- Number of Master Ports (Modbus RTU): 1 RS-485 (Wired) &
  1 ZigBee (Wireless) - Only one active at a time
- ZigBee Topology: Point-Point/Point-Multipoint/Mesh
- Modbus TCP/IP (ModNet) - 10/100Mbps- Auto detecting
- No. of client supports on Modbus TCP/IP (ModNet) - Up to 15
- Supports up to 192 commands or 2048 Read/1024 Write
 Registers on Modbus

MSC-ZB-RS

Features

- Number of ports: 1 RS-485 (Wired) & 1 ZigBee (Wireless)
- ZigBee Topology: Point-Point/Point-Multipoint/Mesh
- Router/Co-ordinator/Aggregator/Master/Slave configuration
  through MSC studio
- MSC-ZB-RS (Router/Slave) can connect to MSC-ME-ZB or
  MSC-ZB-RS (Co-ordinator/Master)
- Wireless range extension possible through router

Connecting 64 Modbus Devices Wirelessly Inside a Plant

100 Meter Indoor/ Upto 1 KM Outdoor (LOS)

HT16u- Humidity Temperature Smart Logger

RoHS
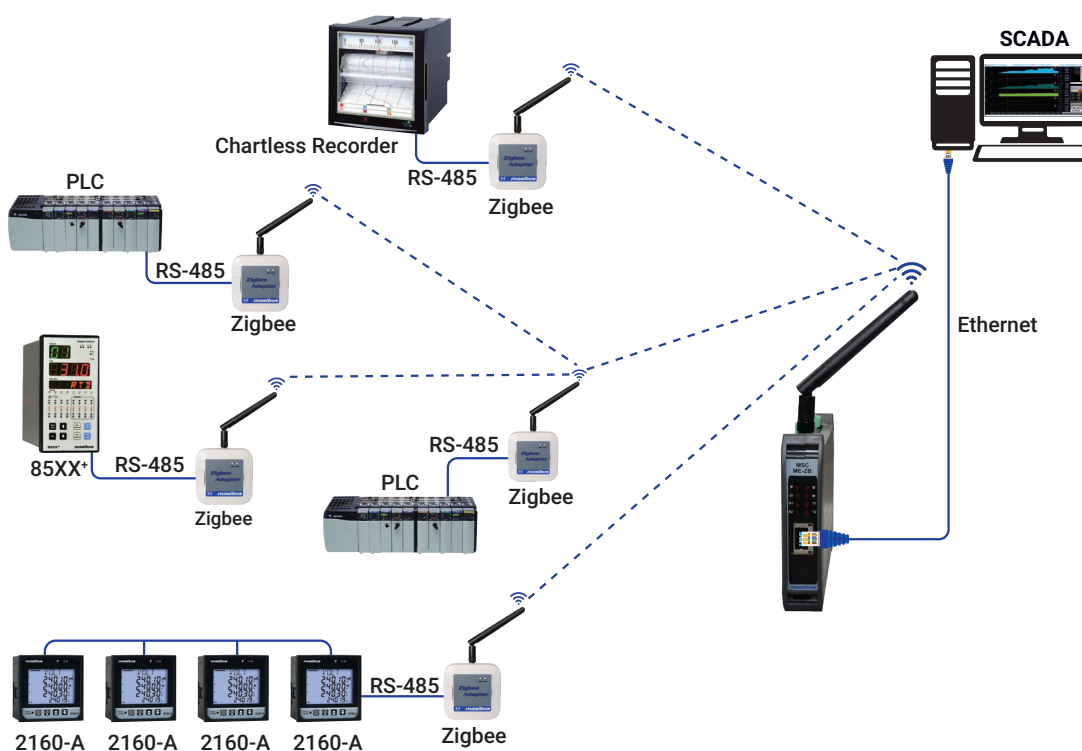
Features

- USB based HT16u with internal or external RH/T sensor with SS filter
- Temperature measurement -20 to 60 ºC / -3.8 to 140 °F
- Humidity measurement 0 to 100 %
- Best in class accuracy @ 25°C +/-0.2°C temperature & +/- 2% RH
- Ultra low - Battery power consumption with long life - CR2450 coin cell battery (1 Year @15min logging)
- Display battery status
- Logging start/stop - manual or pre-programmed (Auto) with pause facility
- SMART-HT free version - 3 devices in single report - Excel/PDF (Alarms & periodic data)
- SMART-HT license version - 10 Devices in single report/password protection in reports/21-CFR compliance with audit trials
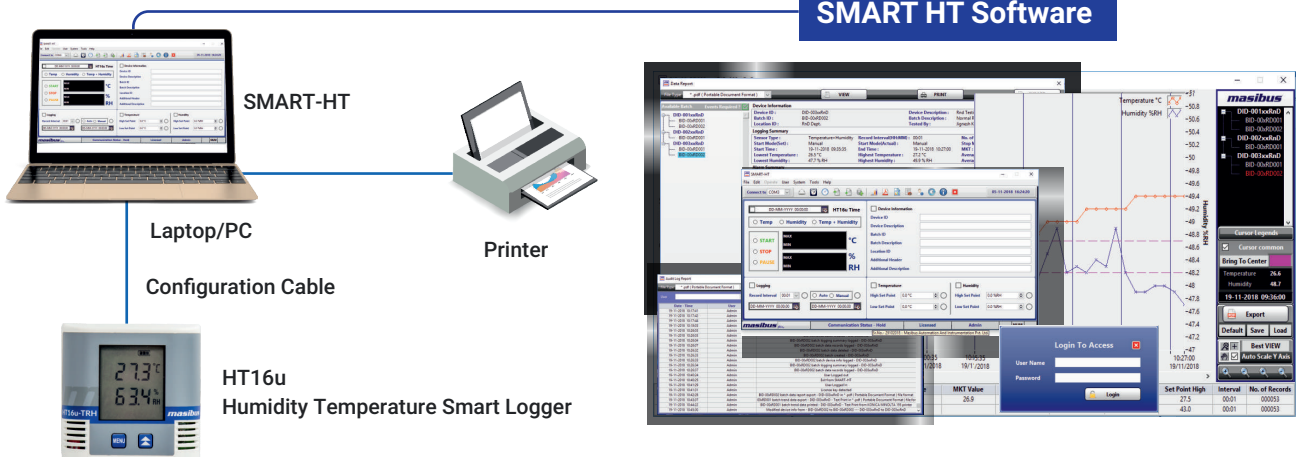

HT16u

Warehouse Layout - Room Temperature Mapping

SMART HT Software

SMART-HT

Laptop/PC

Printer

Configuration Cable

HT16u
Humidity Temperature Smart Logger

Pharma Industries **Clean Rooms & Warehouses** **Food Industries**

Cold Storages **Calibration Service Industries**

Protocol and Media Converters

Protocol Converters

MSC-ME-MS
(Modbus Serial to Modbus
TCP/IP Data Concentrator/Gateway)

Features

- It converts Modbus Serial to Modbus TCP/IP
- Supports max. upto 64 Modbus RTU slave devices on RS-485
- No. of RS-485 ports (Modbus RTU Master): 2 (Only one active at a time)
- Modbus TCP/IP (ModNet) - 10/100Mbps- Auto-detecting
- No. of client supports on Modbus TCP/IP (ModNet) - Up to 15
- Supports upto 192 Modbus commands
- 2048 Read/1024 Write Registers on Modbus

Features

- Supports max. upto 247 Modbus RTU slave devices on RS-485
- No. of RS-485 ports (Modbus RTU master): 1 No.
- Modbus TCP/IP (ModNet) - 10/100Mbps- Auto detecting
- No. of client supports on Modbus TCP/IP (ModNet) - Up to 4 No.
- No. Modbus query configuration

MSC-RE-RS
(Modbus Serial to Modbus
TCP/IP Protocol Converter)

Media Converters

Features

- RS-485 half duplex communication
- Communication speed (Baud rate) 1200 - 115200 bps
- Auto baud rate detection
- Signal boost up to 1200m (Depends upon baud rate)
- Maximum 30 RS-485 nodes per repeater
- 120Ω termination resistor selection
- Isolation 1500VAC RMS

MSC-RS-RS
(Isolated RS-485 to RS-485 Repeater)

- Convert the signals to RS-232
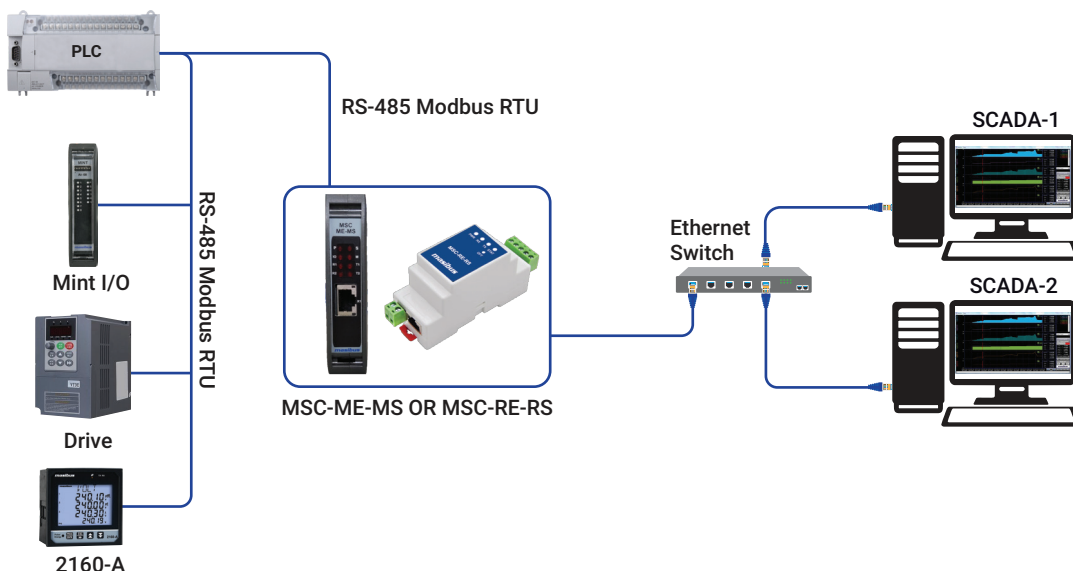- Port: 9 PIN DB male connector
- Output - RS-232 full handshaking

mUSB232
(USB to RS-232 Converter)

mUSB485
(USB to RS-485 Converter)

- Convert the signals to RS-485 level
- Outputs: D + / D -
- Maximum 32 nodes
- 120Ω termination resistor selection

MSC-ME-MS as Modbus Gateway OR MSC-RE-RS as Modbus Protocol Converter
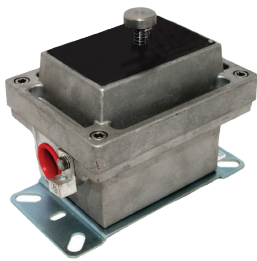
VSW-160 - Vibration Switch

VSW-160

Features

· 3 in 1 - Switch/ Indicator/ Transmitter

· Capacitive touch screen operation - Ease of maintenance

· Built-in remote sensor option

· Type of protections: Flameproof (Explosion proof) EX-d

· Area classification: Zone 1 & 2, Gas groups: IIA/ IIB & IIC

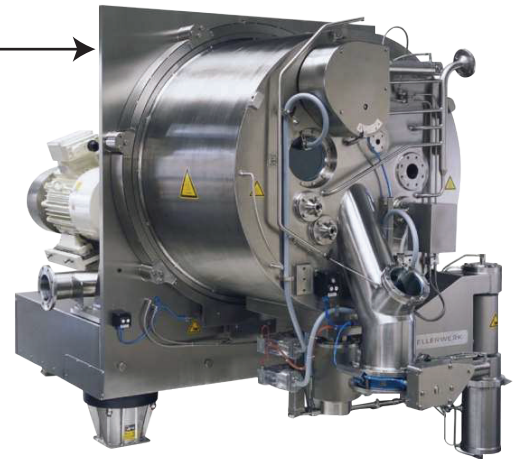· Trim port for vibration set-point adjustment
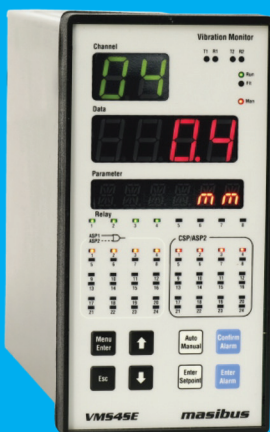
Vibration Monitoring of Centrifuges

Old
Mechanical
Vibration Switch

New
Electronic
Vibration Switch

VMS4SE - Multi-Channel Vibration Monitor

VMS4SE

Features

· Configurable upto 8 vibration channels

· Can accept analog inputs (Temperature, Current & Sound)

· Additional buffered output on BC connector for analysis

· RS-485 & Ethernet Port for interface with PLC, DCS, SCADA & HMI

· Extruded aluminum chassis with IP-55 front fascia

· Field configurable for acceleration, velocity or displacement range

· Modbus RTU over serial and Modnet over Ethernet Protocols

Beamex
MC6

Beamex
MC6-EX

Multi Function
Test Bench

INOR
R530

VibraSens
Accelerometer

VibraSens
Loop Powered Sensor

EWON
Cosy 131

EWON
Flexy 205

PULS
FIEPOS

PULS
PIANO

Advanced Field Calibrator and Communicator

beamex

Features

- **Accuracy**

  High-accuracy, advanced field calibrator and communicator.

- **Usability**

  Combines advanced functionality with ease-of-use.

- **Versatility**

  Versatile functionality beyond traditional calibration applications.

- **Communicator**

  Multi-bus communicator for HART,

  FOUNDATION Fieldbus and Profibus PA instruments.

- **Integration**

  Automates calibration procedures for paperless calibration management.

Beamex MC6

Intrinsically Safe Advanced Field Calibrator and Communicator

- **Safety**

  Approved for Ex ia IIC T4 Ga – classification.

- **Versatility**

  Versatile functionality beyond traditional calibration applications.

- **Communicator**

  Full multi-bus communicator for HART, FOUNDATION Fieldbus and

  Profibus PA instruments.

- **Internal loop supply**

  MC6-Ex features an internal loop supply for transmitters, so no

  additional supplies are needed.

- **Integration**

  Automates calibration procedures for paperless calibration management.

Beamex MC6-EX

Multi Function Test Bench

Features

- Calibration facility for pressure, temperature &

  electrical instruments
- Flexible maintenance - Device modules structure
- Option for (HART, PA, FF) communication
- Documenting version available with PC connectivity

Accelerometer

Features

- Uniaxial Accelerometer output 10mV/g, 50mV/g, 100mV/g, 500mV/g
- Electrical connection: M12 Connector, MIL grade connector and integral cable
- Annular shear technology
- Temperature output also available
- ATEX certified
- Hermetic glass sealing

Features

- MEM's based Loop powered sensor
- Velocity output in form of 4-20mA
- Electrical connection: M12 connector, MIL grade connector and integral cable
- Suitable for frequency 10Hz- 1KHz
- DA/DV/Temperature output also available

Loop Powered Sensor

PULS Power Supply

PULS

DC-UPS
Efficient, compact & **reliable** DC-UPS

FIEPOS
Decentralized field power supplies

PIANO
Cost effective, long lifetime
DIN-Rail power supply

DIMENSION
High efficiency &
reliable power supply

No. 1 Manufacturer of **Din-Rail** Power Supplies

World' **Slimmest** Power Supply

Upto **95.6%** Efficiency-**New Record** for Power Supplies

FIEPOS- Available in **IP54, IP65 & IP67**

Designed in **Germany**

3 year warranty for all PULS standard products

Special Standards and Approvals

CE & UL Approval | ATEX Approval | IECEx Products | Class I Div 2 | Railway EN 50155 | NEC Class 2 | Marine Approval

HMS

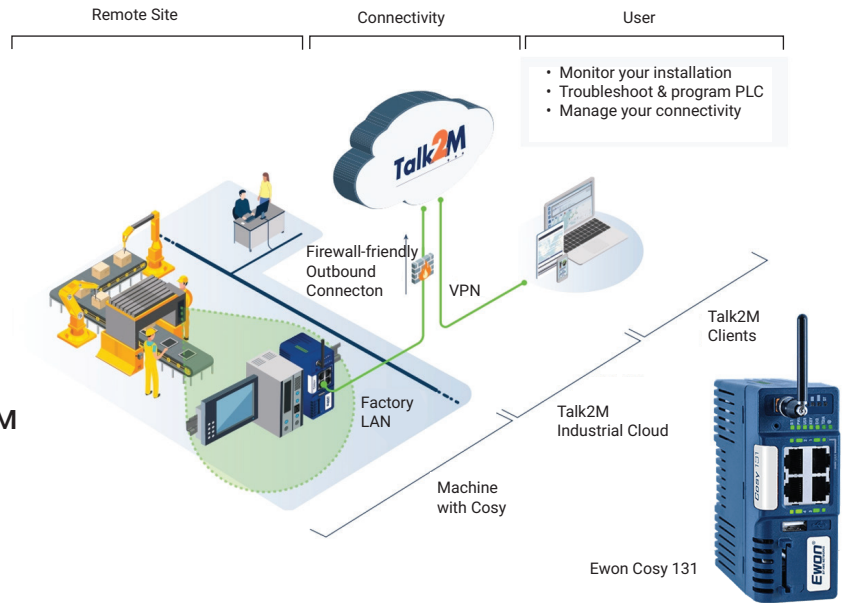## Benefits of Industrial Remote Access

- Minimize downtime through fast remote support
- Save time and money by avoiding unnecessary service trips
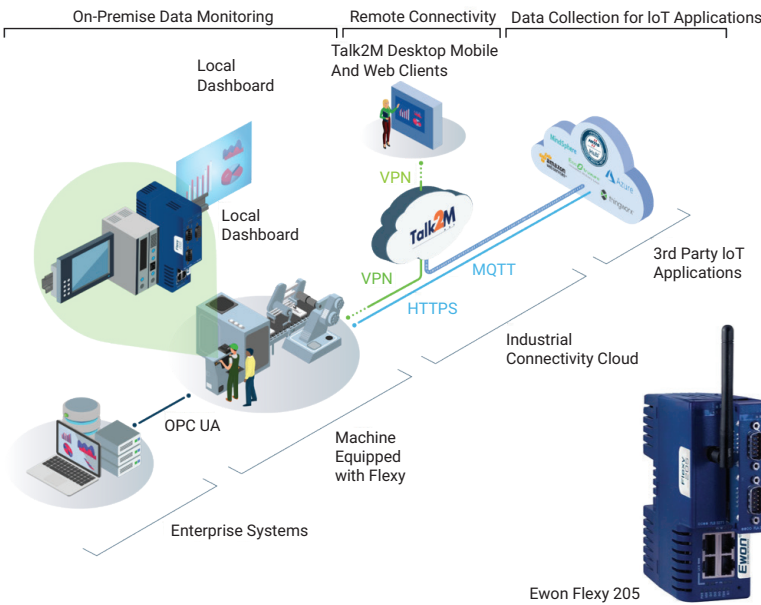
State-of-the-art Security

- New generation of devices with built-in hardware security
- Increase safety with digital output indicating active connection

Successful Worldwide Connectivity through Talk2M

- Scalability: Add as many devices & users you need at any time
- Email & SMS services- Receive notifications from your machine

Remote Site   Connectivity   User

- Monitor your installation
- Troubleshoot & program PLC
- Manage your connectivity

Talk2M

Firewall-friendly Outbound Connecton   VPN

Factory LAN

Talk2M Clients

Talk2M Industrial Cloud

Machine with Cosy

Ewon Cosy 131

On-Premise Data Monitoring   Remote Connectivity   Data Collection for IoT Applications

Local Dashboard

Talk2M Desktop Mobile And Web Clients

Local Dashboard

VPN

Talk2M

VPN   MQTT

HTTPS

3rd Party IoT Applications

Industrial Connectivity Cloud

OPC UA

Machine Equipped with Flexy

Enterprise Systems

Ewon Flexy 205

On-Premise Data Monitoring

- All major PLC protocols for data logging and alarm notification
- Local web-dashboard for easy monitoring of KPIs through Talk2M's M2Web service

Remote Connectivity

- VPN Remote Access for PLC troubleshooting
- Talk2M global cloud infrastructure included

Data Collection for IoT Applications

- Full flexibility to send data to any server (local or cloud)
- Multiple IoT connectors, and MQTT/HTTPS through embedded BASIC or JAVA scripting engine

---

INOR

Features

- Increased process control through extended diagnostic information
- Flexible workflow using wireless communication
- Temperature Transmitters for in-head and DIN-rail mounting
- App for wireless configuration and monitoring via NFC and Bluetooth
- Loop Powered Isolators and Isolation Transmitters
- ATEX, SIL2 and HART Certified Products
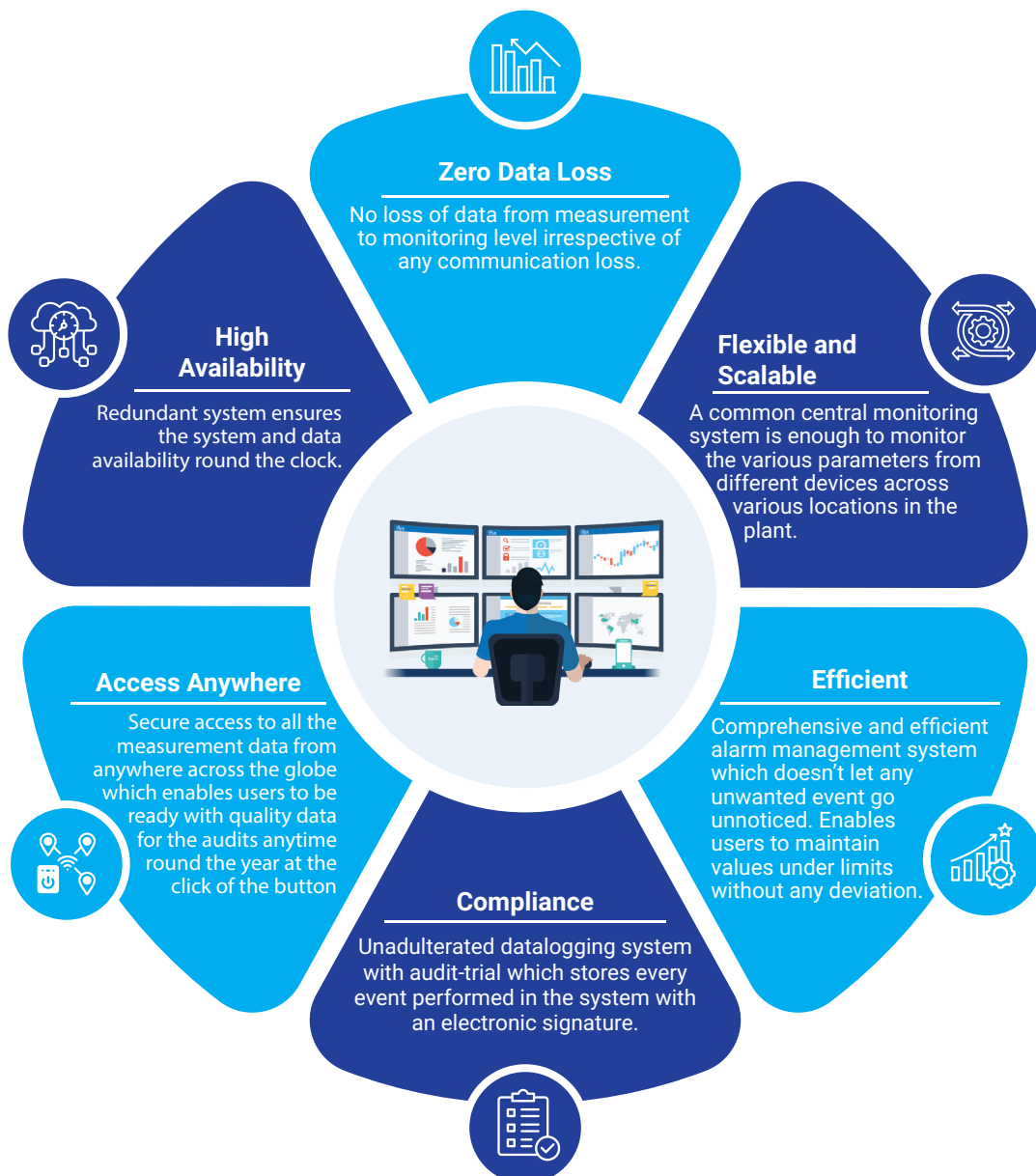- Made in Sweden, 5 Years Warranty

Clean Room Environment Monitoring System

Cleanrooms or clean zones environment monitoring system is a critical application mainly in pharmaceutical industry where processing or manufacturing is carried out in a controlled environment which means the differential pressure, temperature, and relative humidity of the room must be maintained as per the requirement of the batch/process.

As per Good Manufacturing Practice (GMP) to ensure quality of product and comply regulatory requirement as per US Food and Drug Administration (USFDA) 21 CFR Part-11 guidelines, these parameters values have to be recorded electronically. Under these guidelines, the electronics records and signatures are considered trustworthy, reliable, and generally equivalent to the paper records & handwritten signatures executed on paper. One of the most important aspects of these guidelines are the availability of data, i.e., the system should automatically record data of all parameters and events without fail and under no circumstances manual intervention is allowed.

Masibus, A Sonepar Company provides a state-of-the-art USFDA 21 CFR Part 11 Compliant Clean Room Environment Monitoring System with guaranteed Zero Data Loss from measurement level to the monitoring level, using its own indigenously manufactured CDU (Clean Room Display Units) packaged with AVEVA Plant SCADA and Historian.

The CDU comes in LED/LCD variants having internal/external sensor provisions, wired/wireless external Rh+T sensors. The device comes with full SS front fascia as well as in flame-proof version also as per the nature of requirements of pharma clean rooms. The device is equipped with internal memory which ensures that no data is lost in case of any communication loss with the SCADA system.

Zero Data Loss
No loss of data from measurement to monitoring level irrespective of any communication loss.

High Availability
Redundant system ensures the system and data availability round the clock.

Flexible and Scalable
A common central monitoring system is enough to monitor the various parameters from different devices across various locations in the plant.

Access Anywhere
Secure access to all the measurement data from anywhere across the globe which enables users to be ready with quality data for the audits anytime round the year at the click of the button

Efficient
Comprehensive and efficient alarm management system which doesn't let any unwanted event go unnoticed. Enables users to maintain values under limits without any deviation.

Compliance
Unadulterated datalogging system with audit-trial which stores every event performed in the system with an electronic signature.

Clean Room Environment Monitoring System

CDU
Clean Room Display Unit

Features

- RH, temperature and DP measurement
- Internal sensor option (Ease of installation)
- Remote sensor option for RH+T measurement
- Available in LED and touchscreen TFT LCD display options
- 3 Programmable alarms with visual annunciation
- Data backfilling via DNP 3.0 avoiding data loss

CDU (LED)   **CDU (LCD)**

FDU
Filter Display Unit (For AHU & BMS Systems)

Features

- Micro-controller based differential pressure indicator cum transmitter up to 3 filters
- Software programmable filter ranges
- 3 Programmable Hi/Lo alarms with audio/visual annunciation
- RS-485 Modbus RTU communication for connectivity with BMS/ PLC/ SCADA etc.
- Built in AHU OFF/TRIP status LED indications via digital input

RoHS

FDU

HT16Ew
Wireless Humidity and Temperature Transmitter

Features

- Temperature & Humidity Measurements -20 to 60° T/ 0-100% RH
- Deep sleep wakeup transmit on 2.4 Ghz ZigBee Wireless
- Zero data loss from device to SCADA with data backfilling
- 12 HT16Ew can connect to one wireless receiver
- HT16Ew with rechargeable battery - 1 year @ 15 min log
- RTC display and synchronization with SCADA
- IP65 Enclosure for protection against dust and water
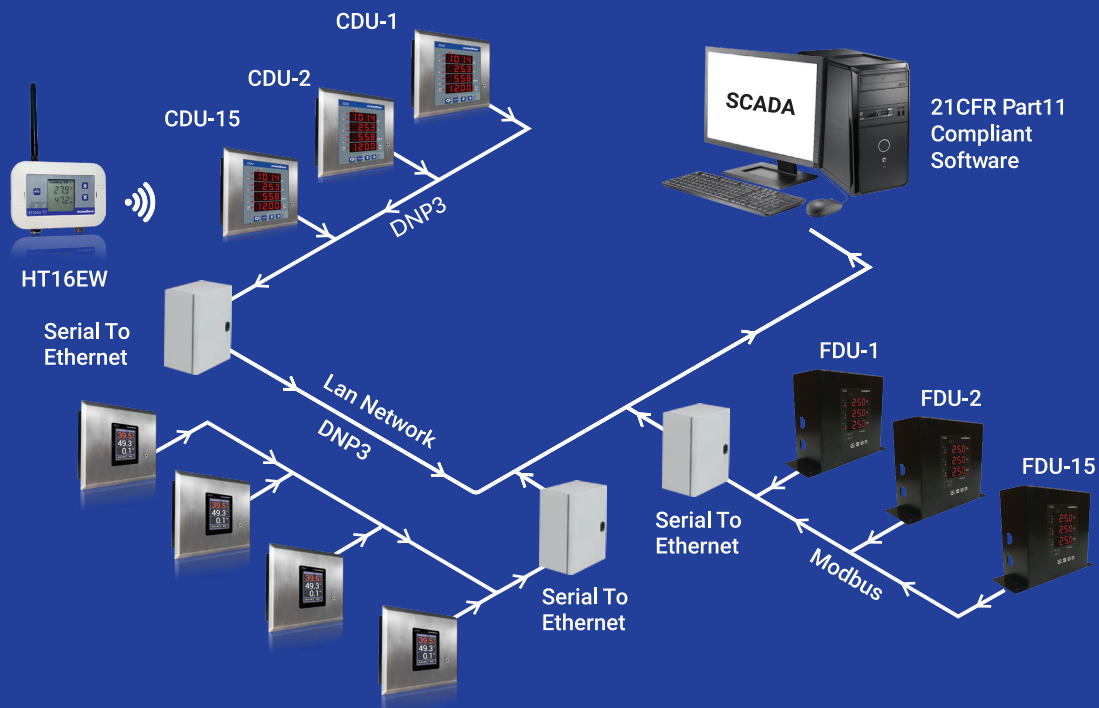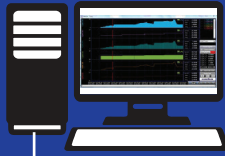- Wireless receiver can connect to SCADA on DNP3 Ethernet

HT16Ew   **RH/T External Sensor Probe**
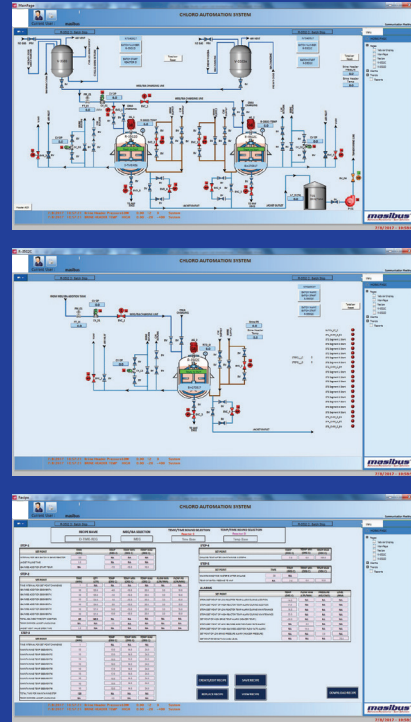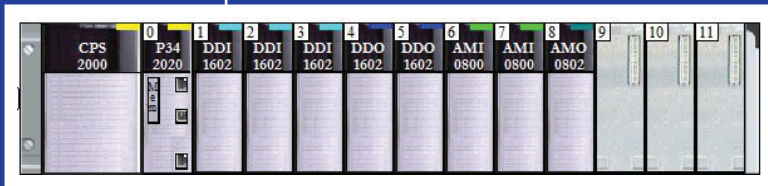
Environment Monitoring System

CDU-1

CDU-2

CDU-15

HT16EW

Serial To Ethernet

DNP3

Lan Network
DNP3

SCADA

21CFR Part11 Compliant Software

FDU-1

FDU-2

FDU-15

Serial To Ethernet

Serial To Ethernet

Modbus

Reactor Automation System

SCADA System 21CFR Comply

PLC

| CPS 2000 | P34 2020 | DDI 1602 | DDI 1602 | DDI 1602 | DDO 1602 | DDO 1602 | AMI 0800 | AMI 0800 | AMO 0802 | | |

Reactor Automation Benefits

- High productivity
- Less operational cost
- Batch wise reports
- 21CFR Part 11 compliant system
- Alarm and audit trail reports
- Adherence to regulatory needs
- Guidance of quality systems
- Turnkey based solution

Why do you need Reactor Automation Systems ?

To fulfill the requirement of an efficient system that needs continuous process monitoring & control parameters like temperature, utility, presure, aqitator, addition monitoring etc.
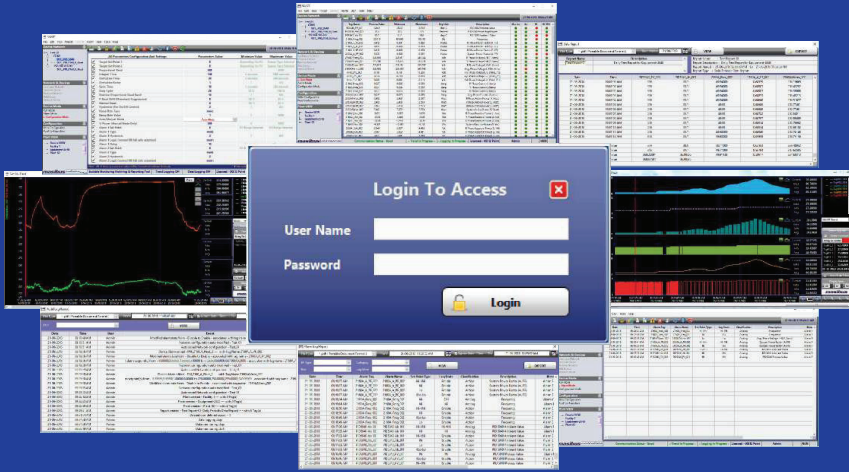
Thermography Services

- IR Inspection of MCC / PCC / VFD Panels
- IR Inspection of Furnace Insulation
  - Blast Furnace
  - Reheat Furnace
  - Tempering Furnace
  - ARC Furnace
  - Ladle Furnace
  - Carburizing Furnace
- IR Inspection of High Voltage Transmission & Distribution Line
- Leak Detection & Fault Report
- Hot & Cold Junction Detection & Fault Report

MCC Panel

Furnace

VFD Panel

Distribution
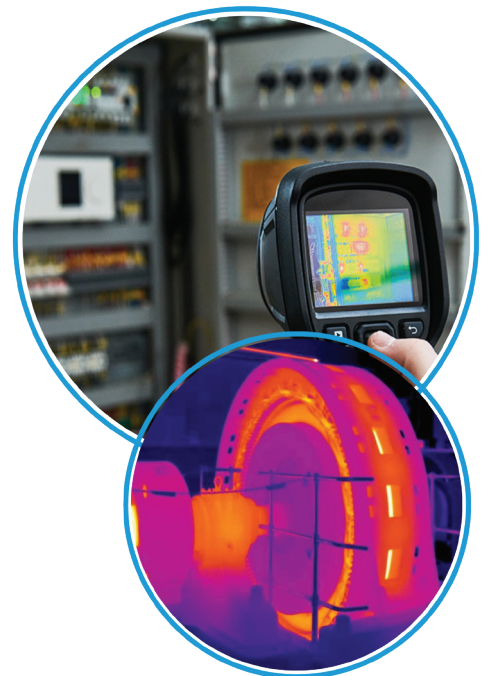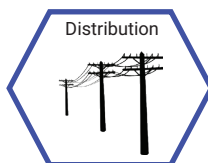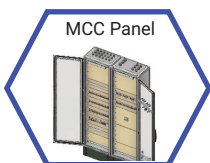
21CFR Enalbed SMART Software for Reporting

smart
Scalable Monitoring Archiving & Reporting Tool

Features

- Online monitoring, data logging and reporting software
- Supports any Modbus devices
- Real time & historic trends display
- Report format supports - Excel/CSV/PDF/DOC/openoffice
- Database supports - MS access/ MySQL
- Licensed software - 64/128/256/512 tags supports

21 CFR Part 11 Compliance Features

- 125+ Audit trials
- Authorization and access control groups upto 5 level
- Electronic signature components and controls
- Protection and ready retrieval of records
- Access security features
- Temper proof data management

Minimum 1 Second Acquisition

Recognize Alarms Instantly (In Red)
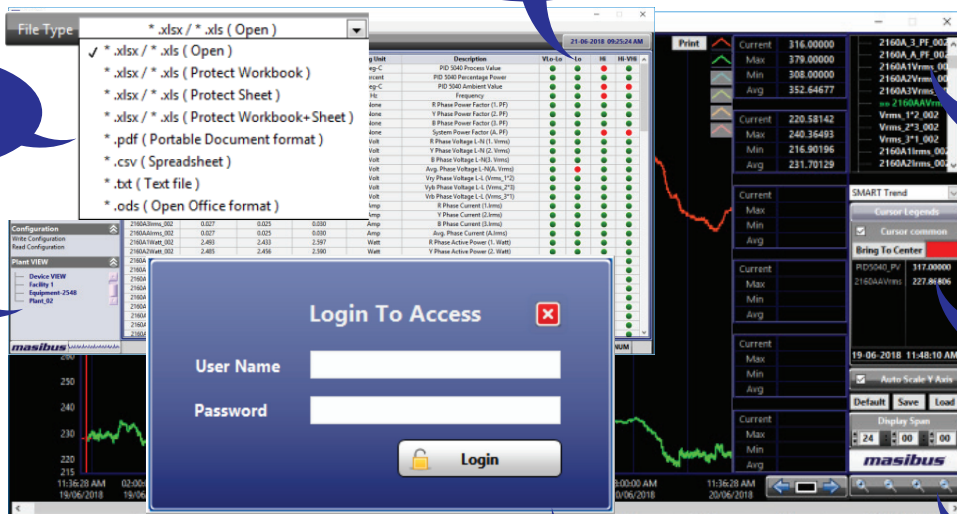
Maximum upto 512 Tags

Supported File Format

Displays Trends of Interest

User Defined Channel Grouping

Check Value with the Cursor

Authorized User can only Access
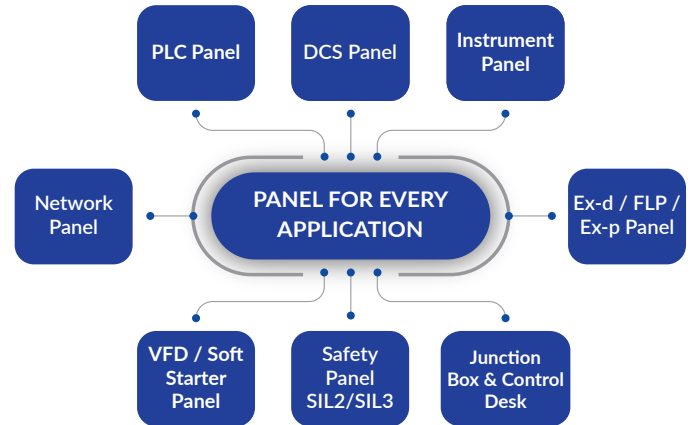
Zoom in/out on both the Scales

Panel Integration Services

Why Masibus ?

- World class facility with 47 years of experience to stage 170+ panels
- Transparent Business Model (Cost + Contract)
- World class facility to stage 150+ Panels with Remote Access, Testing & Simulation facility
- Fully equipped to conduct IR/ HV tests, I/O test, Voltage adjustment test, Burn-in test, etc.
- All kind of customised Panels, JB and Control Desk with various MOC like CRCA, SS and Aluminium etc.
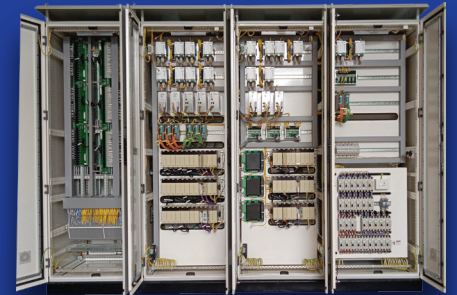- Preferred Partner for MNCs

Specializations

PLC Panel

DCS Panel

Instrument Panel

Network Panel

PANEL FOR EVERY APPLICATION

Ex-d / FLP / Ex-p Panel

VFD / Soft Starter Panel

Safety Panel SIL2/SIL3

Junction Box & Control Desk

PLC Panel

DCS Panels

SS Panel

Instrument Panel

Explosion Proof Enclosures

Control Desk

Enclosures

Network Panels

Project Engineering Services

Masibus has 47+ years of experience in Industrial Automation and Instrumentation. Our core competency of Automation, Engineering, and integration helped us to design, install and commission complex automation projects using Citect SCADA, Historian, PLC & IIOT in diverse industries.

Annual Maintenance Contract
We provide cost-efficient AMC services during or after the warranty period to provide quick & immediate access to solutions without emergency breakdowns

Spare Systems
Backup systems as spares allow customers timely solutions during emergency without going through logistical or procurement delays

Services
We provide all types of automation services, online onsite, hourly basis & emergency basis. Based on customer needs to minimize the shutdown time

Training
Enhance technical knowledge on various platforms, Masibus provide certified training programs on SCADA, PLC, DCS & other offered solutions

Software Services for Dashboard & Reports
This is an add-on module on SCADA, where SCADA or any type of database is used to prepare customized dashboards & reports based on customer requirements

Engineer Deputation at Big House
We deliver engineering & project outsourcing services in India & overseas. We provide tailor-made solutions as per our client's needs

OT Integrations
We provide services for OT integration of field sensors to level-2 system (Like PLC, SCADA) & make data available on cloud compatible protocol

Upgradation of the Executed Project
We act as a touchpoint for product & software upgrades as & when they are released from manufacturers; reducing the time spent

Calibration & Validation Services
We provide services for instrument calibration & automation system validation to provide error-free measurement reading

As-Built Drawings Preparation
We have a team of experts puts all of their brains into work to provide you as-built drawing services with the utmost satisfaction

Platform Independent Industrial Automation Competency

Networking Media	Protocol	Hardware	Software
Serial Communication	Modbus, Profibus IEC 101/103, DNP3.0 MELSEC	PLC: Schneider Siemens, Rockwell, GE, Toshiba, Mistubishi	SCADA: Aveva Citect Scada, Wonderware, iFix Wincc Professional AB RS View
Ethernet Communication Cat6, Fiber Optic Wireless (Zigbee, Wifi, GPRS/M2M VPN)	Modbus TCP/IP Profinet Ethernet/IP IEC61850 IEC 104 DNP3.0 OPC DA OPC UA MELSEC NTP/SNMP FINS Bacnet TONs	HMI:Schneider, Siemens, Proface, Beijer, Exor, Delta, Stahl RTU: Schneider PAC System: OPTO22 DCS: Toshiba Remote Monitoring: Ewon Drive:Schneider, Delta, Siemens	Opto22: Groov, PAC Display Database/reporting Tool: Aveva Historian SQL MYSQL MS access Inter PC Connectivity: Cogent Kepware Matrikon IIOT Platforms: Datacrew, Altizon Ewon
IOT Connectivity	MQTT Restful API Node-RED, HTTP/HTTPS	Opto22 :Groov EPIC Cloud Solution	Othertool: MS Project, Autocad

masibus
A Sonepar Company

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Aurangabad
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Panchkula
Address: Plot No. 263, Industrial Area, Phase-II, Panchkula, Haryana, 134113, India

Bhubaneshwar
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Website: www.soneparindia.com

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