


# PRODUCT CATALOG

CONNECT - AUTOMATE - ENHANCE

Prepared by :  
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# IoT-PLC FC100-B

## SPECIFICATIONS

- Power : 24 Volt - 5 Watt
- CPU : 64bit Quad-core ARM cortex-A55 1.8GHz
- RAM : 4GB LPDDR4
- Wireless : WiFi 2.4 / 5 GHz
- Ethernet : 2 x 10/100/1000 MBps (Gigabit Ethernet)
- USB : 1 x USB 2.0 Host for external device such as Cellular Modem etc.
- IO Port :
  - 4 x DI, Isolated min. 5V max.24V
  - 4 x DO Sourcing mode 24V max.1A
- IP Rating : IP20



- Serial Port : 1 x RS485 Port for External Modbus RTU (added EMI filter + Lightning Surge Protection for field Modbus device).
- IO Connector : Port 1 x T-Bus Connector for Remote I/O Expansion Port up to 32 devices
- Power Backup : Power Backup and Emergency Shutdown: make sure the module shutdown cleanly and prevent corruption of internal storage.

EMBEDED :



# VERSATILE CONTROLLER WITH VARIOUS PROTOCOLS



ANTENNA PORT (SMA)

TB RS485

LED DIAGNOSTIC

TB DIGITAL INPUT

## Hardware Port And Interface

USB-A HOST

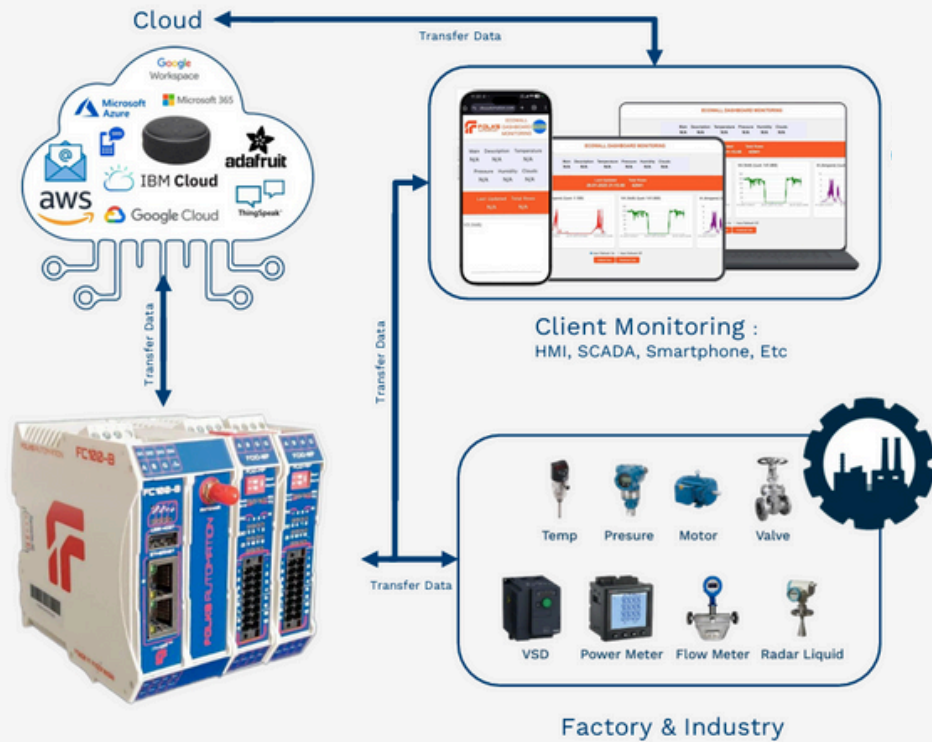
TB DIGITAL OUTPUT

ETHERNET 1

TB POWER 24V+

ETHERNET 2

**“PROVIDING  
AUTOMATION  
AND IOT  
PRODUCT  
FOR ALL”**



# Our Industries Segment



**Mining**



**Crude Palm Oil**



**Marine**



**Petrochemical**



**Oil and Gas**



**Renewable Energy**



# PLC FC100-B with IO Module

To Extend a Input – Output for PLC, we create also the IO Module with detail below

- FCIO-DI16 : 16 Channels Digital Input, 24V
- FCIO-DO16 : 16 Channels Digital Output, 24 V
- FCIO-AI8 : 8 Channels Analog Input, 24V
- FCIO-AO8 : 8 Channels Analog Output, 24V
- FCIO-MP : 2 Analog Output 4-20mA, 2 Channel Analog Input 4-20mA, 4 Channel Digital Output, 4 Channel Digital Input
- FCIO-RTD : Coming Soon



# FCIO-DI16

The FCIO-DI is a Digital Input (DI) expansion module for the FC100-B PLC, providing 16 channels of 24V DC digital inputs. It is suitable for reading signals from sensors, push buttons, or other digital devices in industrial automation systems.

## SPECIFICATIONS

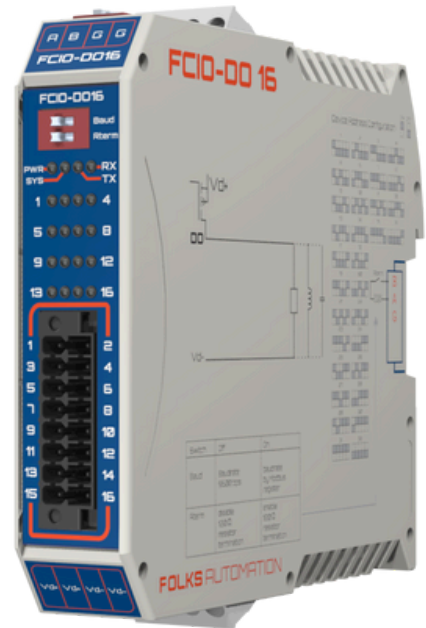
- Input voltage: 24V DC (range 15–30V)
- Status indicator: LED per channel
- Signal type: Sink/Source
- Power consumption: <1.5W
- Dimensions: 104.5 x 75 x 35 mm
- Mounting: DIN Rail (35mm)

## KEY FEATURES

- 16 sink/source digital inputs (24V DC)
- LED indicator for each input channel
- 4 common ports available (4x4 channel grouping)
- Easy integration with FC100-B via T-Bus connector
- Protection against reverse polarity and overvoltage

## APPLICATIONS

Can be used to monitor the status of sensors, emergency buttons, limit switches, and other digital logic devices in factory automation systems, palm oil mills, coal mines, and logistics facilities.



# FCIO-DO16

The FCIO-DO is a Digital Output (DO) expansion module equipped with 16 channels of 24V DC digital outputs, enabling the control of actuators such as relays, solenoids, and indicator lamps from the FC100-B PLC.

## SPECIFICATIONS

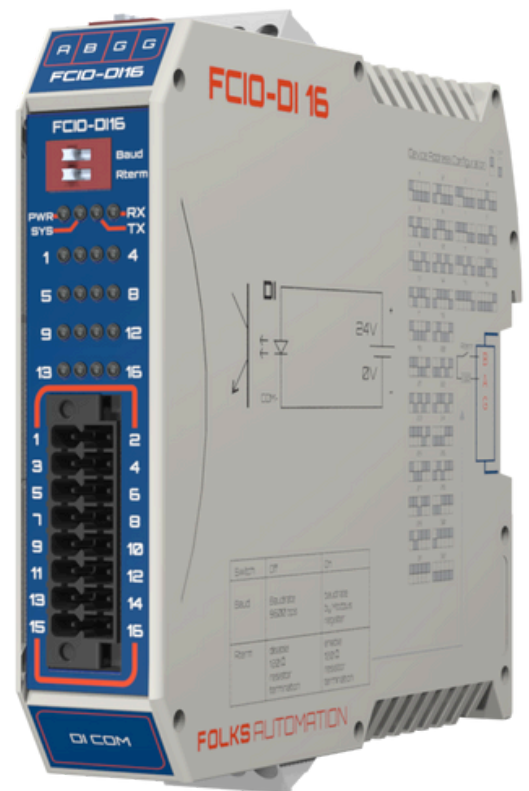
- 16 sourcing (PNP) digital outputs 24V DC
- Capable of handling currents up to 1A per channel
- LED indicator for each output
- Protection against overcurrent & short circuit
- Compatible with the FC100-B modular system via T-Bus

## KEY FEATURES

- Output voltage: 24V DC (range 15–30V)
- Current per channel: Max. 1A
- Total maximum current: 5A
- Status indicator: LED per channel
- Power consumption: 1 Watt
- Dimensions: 104.5 x 75 x 35 mm
- Mounting: DIN Rail (35mm)

## APPLICATIONS

Ideal for controlling small motors, status lights, valves, and other output devices in manufacturing automation, palm oil, or heavy industry systems.



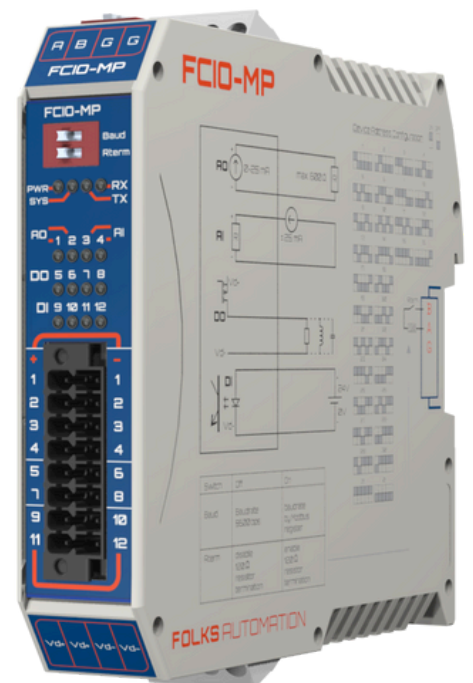
The FCIO-MP is a Multipurpose expansion module for the FC100-B PLC that combines both Analog and Digital capabilities. Equipped with 2 Analog Inputs, 2 Analog Outputs, 4 Digital Inputs, and 4 Digital Outputs, it offers a versatile solution for systems requiring diverse signal handling and precise control in a compact footprint.

## SPECIFICATIONS

- Supply Voltage: 24V DC
- I/O Configuration: 2 AI, 2 AO, 4 DI, 4 DO
- Analog Input: 0-20mA Current Loop (max. current input  $\pm 25\text{mA}$ )
- Analog Output: 0-20mA Current Loop (max. current 25mA)
- Digital Input: PNP
- Digital Output: 24V Sourcing
- Communication: RS485 via T-Bus or Terminal Block (Modbus RTU)
- Dimensions: 104.5 x 75 x 35 mm
- Mounting: DIN Rail (35mm)

## KEY FEATURES

- Multipurpose I/O: Integrates Analog (0-20mA) and Digital I/O in a single module.
- Robust Protection: Features short-circuit, thermal shutdown, ESD, and flyback protection.
- Smart Diagnostics: Includes current value monitoring, over-current alarms, and short-circuit detection.
- High Load Capacity: Digital Outputs support Inductive, Resistive, and Capacitive loads.
- Flexible Integration: Seamless connection with FC100-B via T-Bus.



## APPLICATIONS

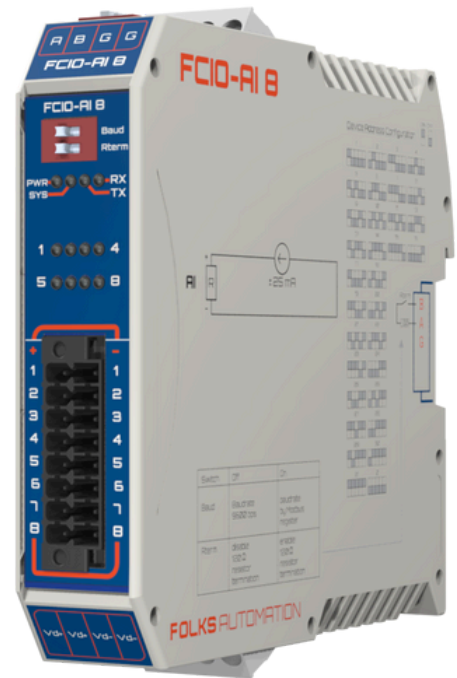
Ideal for complex control loops requiring both sensing and actuation, such as PID control systems, HVAC monitoring, pump station automation, and mixed-signal machinery in manufacturing, palm oil mills, or heavy industry systems.

# FCIO-AI8

The FCIO-AI8 is an Analog Input expansion module for the FC100-B PLC, providing 8 channels of 0-20mA current inputs. It is designed to interface with various industrial sensors, allowing for precise monitoring of continuous process variables such as temperature, pressure, flow, and level.

## SPECIFICATIONS

- Input Channels: 8 Analog Inputs
- Analog Input: 0-20mA Current Loop (max. current input  $\pm 25\text{mA}$ )
- Supply Voltage: 24V DC
- Communication: RS485 via T-Bus or Terminal Block (Modbus RTU)
- Power Consumption: Standby 1W
- Operating Temperature:  $-20^{\circ}\text{C}$  to  $55^{\circ}\text{C}$
- Dimensions: 104.5 x 75 x 35 mm
- Mounting: DIN Rail (35mm)



## KEY FEATURES

- 8 Channels High-Density: Supports up to 8 analog sensors in a compact module.
- Built-in Diagnostics: Features over-current alarm for enhanced safety and troubleshooting.
- Wide Range Compatibility: Capable of reading both 0-20mA and standard 4-20mA signals.
- Seamless Integration: Easy connection with FC100-B via T-Bus connector.
- Flexible Comms: Standard Modbus RTU protocol with adjustable baudrates (up to 921600 bps).

## APPLICATIONS

Essential for process monitoring in water treatment plants (level sensors), oil & gas (pressure transmitters), and manufacturing (temperature sensors/thermocouple transmitters) where real-time data acquisition is critical.

# FCIO-A08

The FCIO-A08 is an Analog Output expansion module equipped with 8 channels of 0-20mA current outputs. It enables the FC100-B PLC to control proportional actuators, Variable Frequency Drives (VFDs), and regulating valves, providing smooth and precise control for automation processes.

## SPECIFICATIONS

- Output Channels: 8 Analog Outputs
- Analog Output: 0-20mA Current Loop (max. current 25mA)
- Supply Voltage: 24V DC
- Communication: RS485 via T-Bus or Terminal Block (Modbus RTU)
- Power Consumption: Standby 1W
- Operating Temperature: -20°C to 55°C
- Dimensions: 104.5 x 75 x 35 mm
- Mounting: DIN Rail (35mm)



## KEY FEATURES

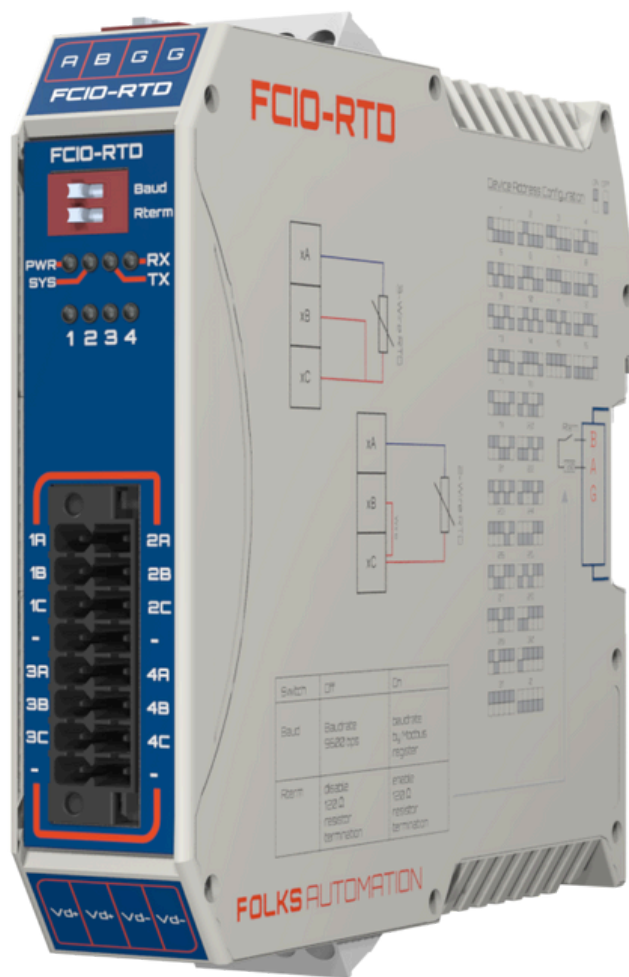
- 8 Channels Output Control: Centralized control for multiple analog devices.
- Smart Monitoring: Includes current value monitor diagnostic capabilities.
- Protection: Designed with short-circuit protection for output safety.
- Precise Control: accurate 0-20mA output for sensitive industrial equipment.
- Easy Expansion: Modular design utilizing the T-Bus connection system.

## APPLICATIONS

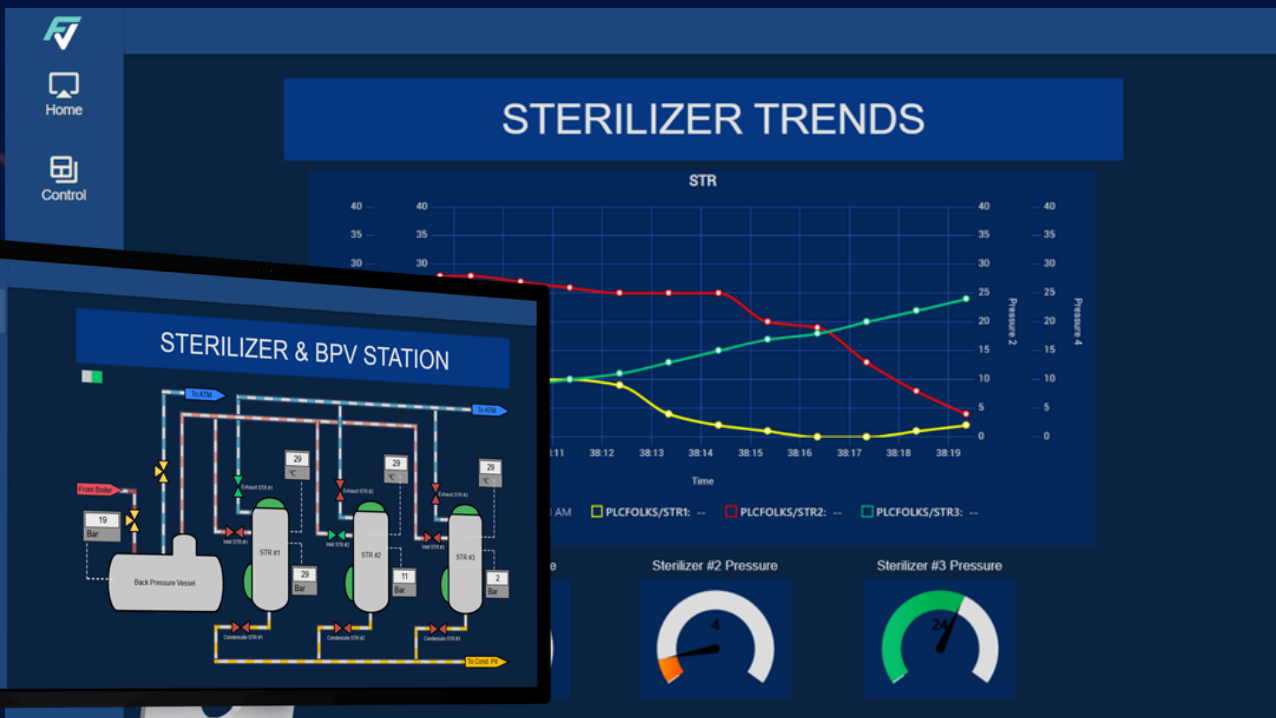
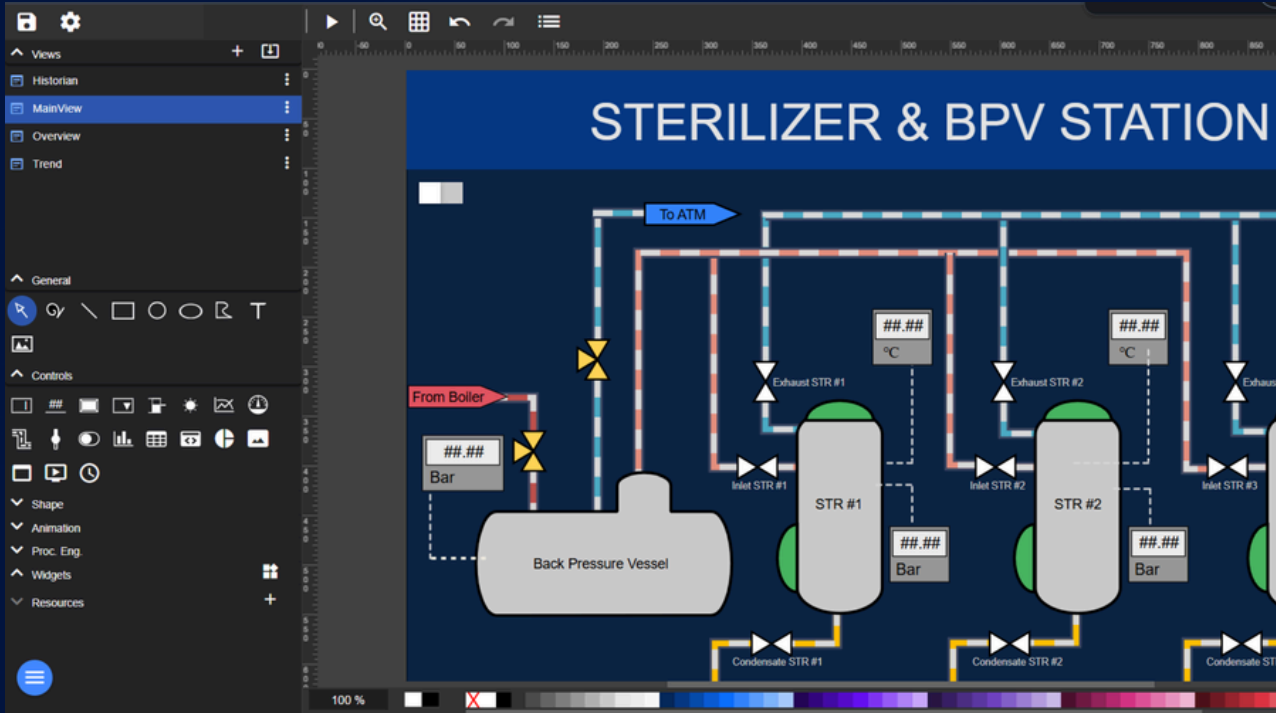
Ideal for controlling modulation devices such as control valves in HVAC systems, speed reference for inverters/VFDs in conveyor systems, and other proportional control tasks in industrial automation and palm oil mills.

# FCIO-RTD

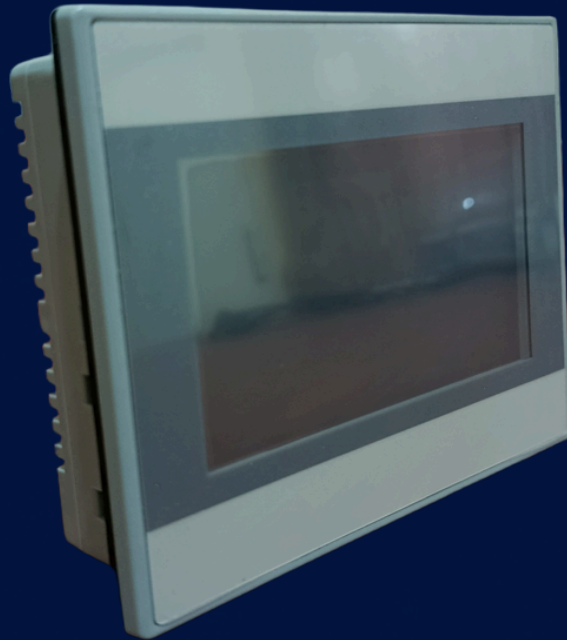
## COMING SOON



# FOLKSVIEW SCADA



# HMI FHM-MR0501NE



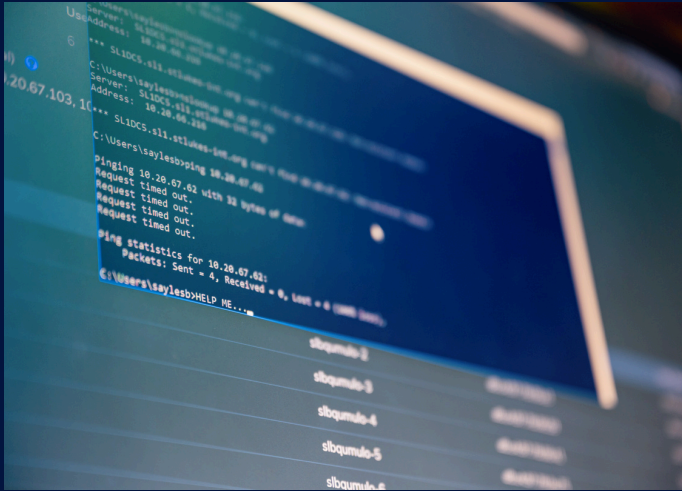
## DESCRIPTION

The FHM-MR0501NE is a compact and reliable Human Machine Interface designed to streamline the control and monitoring of your industrial automation systems.

## KEY FEATURES

- **Clear Display:** Features a resolution of 480x272 pixels, providing a clear interface for menus and control graphics.
- **Versatile Connectivity:** Equipped with multiple communication options, including Ethernet (LAN) and Serial ports (RS-232/RS-485), ensuring compatibility with various PLCs and devices.
- **Easy Data Transfer:** Supports USB Host, making it simple to upload/download projects and backup data using a USB drive.
- **Powerful Software:** Configured using SmartManager Pro, which supports offline/online simulation and standard industrial protocols like Modbus.

# SOLUTION



## WEB BASED IOT

By integrating your assets with our advanced IoT system through our adaptable web-based application, you gain access to a sophisticated ecosystem that offers real-time monitoring, control, and customizable options to meet your specific needs.



## AUTOMATION PANEL ASSEMBLY

Offering complete solutions in automation panel assembly, integrating components and advanced Programmable Logic Controllers (PLCs) into a sophisticated control system interface. This setup monitors and manages industrial processes, providing efficient, automated control over machinery, thereby boosting operational efficiency and productivity across various industries.



## SCADA SYSTEM

Folks's specialized SCADA system service leads in industrial automation, providing efficient remote monitoring, precise control, and insightful visualization of complex processes. Leveraging advanced technology, it boosts operational efficiency and offers actionable insights for strategic decision-making, driving sustained growth and productivity.



# CONTACT INFORMATION



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OUR KNOWLEDGEABLE SALES REPRESENTATIVES ARE AVAILABLE TO ANSWER YOUR QUERIES, PROVIDE ADDITIONAL INFORMATION, AND GUIDE YOU THROUGH THE PROCESS OF ENHANCING YOUR AUTOMATION EDUCATION INITIATIVES. WE LOOK FORWARD TO COLLABORATING WITH YOU AND SUPPORTING YOUR ORGANIZATION'S EDUCATIONAL GOALS.