

Available Products

Ethernet Switching

- Field PoE Switch
- Rail PoE Switch
- Managed Switch

Ethernet I/O

- Modbus/TCP – 4AI, 4DI, 2DO
- Modbus/TCP – 8 DI, 4 Frm A

Serial I/O

- Modbus/RS485 – 4AI, 4DI, 2DO
- Modbus/RS485 – 8 DI, 4 Frm A

Network Sensor Interface

The EMF-EIO01 is a simple field I/O devices intended to interface to remote sensors and instruments. Remote instruments can be powered over the Ethernet via Power over Ethernet (PoE). The module is able to power the instrument through its adjustable output power supply. Output power is derived from the PoE network power.

Power Over Ethernet

The EMF-EIO01 will receive power over the Ethernet network using an 802.3af power sourcing network switch, a midspan injector, or a legacy power inserter. If PoE is not available or not required, the module can be powered using a standard 24 or 48 Vdc power supply attached at its power input terminals.

Power over Ethernet is used to power PoE capable devices where running an AC power feed is either not possible or cost effective. This feature allows a wireless access point, network camera or any other PoE capable device without the need for running separate cabling for power.

The EMF-EIO01 has been specifically designed for industrial applications, and is able to deliver over 25 watts to a power to a field instrument.

I/O

The EMF-EIO01 industrial I/O device is designed to solve the most demanding industrial monitoring and control requirements by simple configuration, maximum throughput, and minimum downtime.

The device features 4 discrete inputs capable of surviving severe input transients, 4 analog inputs that will function as 0-20 mA, 0-5 Vdc or as discrete inputs, and 2 high current outputs. Outputs feature over current, thermal, and short circuit protection.

Specifications

Ethernet Network

Ports	1 RJ45
PoE	IEEE 802.3af, Legacy PoE supported
Over Current Protection	to 802.3af
Port Isolation	1200 V RMS, 1 minute

Power

Input Voltage	10-60 Vdc
Power Required	1.5 W
Output Voltage	5 – 24 Vdc, user selectable
Max Output Power	25 W

I/O Specifications

Discrete In	4 Channels
Input Voltage	24 Vdc nom, 60 Vdc max
Analog In	4 Channels
Range	0-20mA, 0-5V, Discrete
Resolution	12 bit
Discrete Out	2 Channels
Range	10-30Vdc
Max Current	1 A

Physical Parameters

Dimensions	4.25 x 2.75 x 2.25 “
Rating	IP54
Mounting	DIN Rail, 35 mm
Housing	Polycarbonate, UL94-V0
Operating Temp	-40 to 85 deg C
Storage Temp	-40 to 85 deg C

Features

Industrial Hardware

- Industrial I/O with multiple input options
- Adjustable output power supply can power remote instruments from the network cable using PoE.
- Small form factor eases installation
- Industrial rated -40 to +85 °C operation
- Standard DIN rail mounting

Control Network

- Modbus/TCP on Ethernet enables simple installation and configuration
- Supports function codes 01, 02, 03, 04, 05 and 0F
- Configurable loss of communication output action
- Discovery tool eases initial setup

Power over Ethernet

- Receives power from 802.3af power sources, midspan injectors and legacy PoE networks
- Creates adjustable output power supply from 48 Vdc PoE voltage
- Handles up to 30 watts over PoE network