

# ET-MIX24880 EtherTRAK<sup>®</sup> Ethernet I/O Module

Sixnet Automation Series



## ▶▶▶ Ethernet Combination I/O Module

The ET-MIX24880-D is a double density EtherTRAK I/O module with 24 discrete inputs and/or 8 discrete outputs and 8 analog inputs. It is ideal when you have a mix of I/O types or when you have limited panel space and need a direct Ethernet or RS485 connection.

### PRODUCT HIGHLIGHTS

- 24 Discrete Inputs and/or 8 Discrete Outputs and 8 Analog Inputs in one compact module
- Ethernet or RS485 Modbus compatibility
- High density design saves space and cost
- 16 bit A/D for precision measurements
- True hot swap of modules in live systems

### PERFORMANCE SPECIFICATIONS

- Ethernet port 10BaseT at 10 Mbps
- Isolation 1200 Volts RMS 1 minute
- Protocols Sixnet and Modbus over TCP/IP or UDP

### RS485 PORT

- Up to 38,400 baud
- Operation Master (passthru) or slave
- Supported modes (see Usage Tips in the catalog for details)
- Expansion I/O (as a master), distributed I/O or backup communications path (as a slave)
- Protocols Sixnet, Modbus RTU / ASCII
- Maximum distance Up to 0.5 mile (0.8 km)

### ENVIRONMENTAL

- DIN rail or panel mount
- Required user supply 10-30 VDC
- Power (typical) @ 24 VDC 1 Watt, 42 mA (excluding I/O)
- Operating temp. range -40 to +70°C
- Storage temp. range -40 to +85°C
- Humidity (non-conden.) 5 to 95% RH
- Vibration IEC68-2-6
- Electrical safety UL508, CSA C22.2/14; EN61010
- EMI emissions FCC part 15, ICES-003; EN55022
- EMC immunity EN50082-1, EN61326-1
- Surge withstand IEEE-472
- Hazardous locations (Class 1, Div 2 / Zone 2) UL1604, CSA C22.2/213, EN50021, EEx nA II T4 X

All specifications are subject to change. Consult factory for latest info.



### DISCRETE INPUTS

- 24 Discrete Inputs<sup>1</sup> 10-30 VDC
- Channels 1 through 8 sinking or sourcing (as a group)
- Channels 9 through 24 sourcing only
- Guaranteed ON voltage 9 VDC
- Guaranteed OFF voltage 5.0 VDC
- Guaranteed OFF current 1.5 mA DC
- Input resistance and current 10K Ohms and 2.4 mA @ 24VDC
- Filtered ON/OFF delay 25 mS (10 Hz max. counting)
- Fast ON/OFF delay 4 mS (100 Hz max. counting)
- Counters on 1st 8 channels 50 KHz on channel 1 & 2
- Counter modes count up, run time and pulse rate (with selectable time bases)

### DISCRETE OUTPUTS

- 8 Discrete Outputs<sup>1</sup> 10-30 VDC
- Max. Output current 1A per channel, 8A per module
- Max. OFF state leakage 0.05 mA
- Min. load 1 mA
- Inrush current 5 Amps (100 mS surge)
- Typical ON resistance / volt. 0.3 Ohms / 0.3 VDC (@1A)

### ANALOG INPUTS

- 8 Analog Inputs 4-20 mA (other ranges available)
- A/D resolution 16 bits (0.003%)
- Full scale accuracy +/-0.1% (@20°C)
- Span & offset temp. coeff. +/-50 ppm per °C
- Input impedance 100 Ohm
- Current protection self-resetting fuses
- DMRR 66 dB at 50/60 Hz
- Current limiting short circuit protection

**Note:** <sup>1</sup> Discrete I/O channels 16-24 can be configured individually to be discrete inputs or outputs. There are a total of 24 discrete I/O channels.



# ET-MIX24880 EtherTRAK® Ethernet I/O Module Specifications

## I/O GROUP DESCRIPTIONS

### 1<sup>st</sup> Group of 8 DI

- Sinking or sourcing (select as group with jumper)
- Can be counters up to 100Hz (50 KHz on channel 1 and 2)
- Input threshold can be lowered to 4 Volts by modifying the base

### 2<sup>nd</sup> Group of 8 DI

- Sourcing 10-30 VDC only
- No software counters

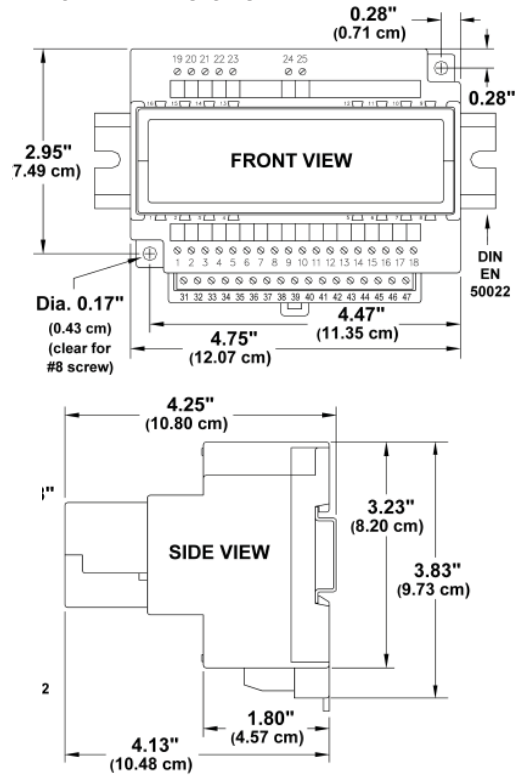
### 3<sup>rd</sup> Group of 8 D/O

- Can be individually configured as sourcing discrete inputs or outputs
- Input channels monitor state of outputs to detect shorts or open circuits

### Analog Input Group

- Single-ended 4-20 mA inputs with common ground
- Voltage ranges available with special wiring base (contact Sixnet)

## MECHANICAL DIMENSIONS



## ORDERING INFORMATION

ET-MIX24880-D	Module and wiring base pair
ET-MIX24880-M	Replacement module only
ET-MIX24880-DB	Replacement wiring base only
RM-PS-024-01F	Optional AC to DC power supply, 1A

