



MQ-7251M

MQTT I/O Module with 16-ch DI

Features

- Built-in Web Server
- Web HMI
- Support for MQTT Protocol
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C
- Built-in I/O
 - DI 16 Channels



Introduction

The MQ-7251M is an Ethernet I/O device equipped with 16-channel DI, as well as the MQTT protocol is supported for connecting with a variety of digital sensors in Industrial Internet of Things (IIoT) applications. A friendly web-based user interface is provided for users to configure module, access the network connection status and I/O status via a normal web browser on a mobile device or computer.

The MQ-7251M features optical isolation for 2500 VDC of transient overvoltage protection, but doesn't not provide channel-to-channel isolation. It can safely be used in applications where hazardous voltages are present.

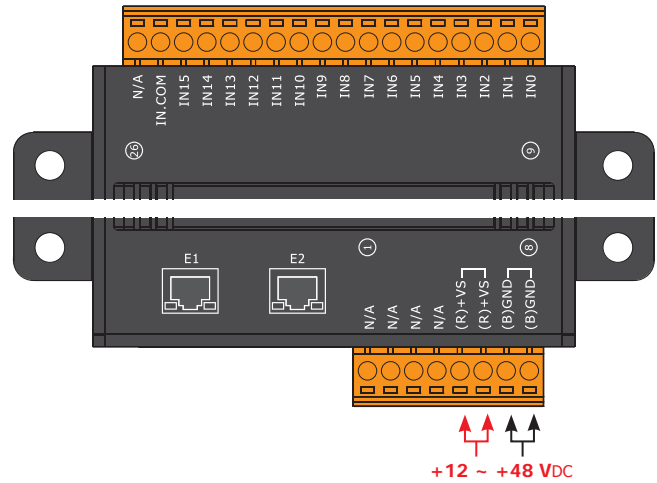
System Specifications

| Model | MQ-7251M |
|-----------------------------|--|
| Software | |
| Built-in Web Server | Yes |
| Web HMI | Yes |
| Communication | |
| Ethernet Port | 2 x RJ-45, 10/100 Base-TX, Switch Ports |
| Protocol | MQTT 3.1.1 |
| Dual Watchdog | Yes, Module (0.8 seconds), Communication (Configurable) |
| PoE | - |
| LED Indicators | |
| for System Running | Yes |
| for Ethernet Link/Act | Yes |
| for DI/DO status | Yes |
| 2-Way Isolation | |
| Ethernet | 1500 VDC |
| I/O | 2500 VDC |
| EMS Protection | |
| ESD (IEC 61000-4-2) | ±4 kV Contact for Each Terminal and ±8 kV Air for Random Point |
| EFT (IEC 61000-4-4) | ±4 kV for Power Line |
| Power | |
| Reverse Polarity Protection | Yes |
| Powered from Terminal Block | +12 ~ +48 VDC |
| Consumption | 2.9 W |
| Mechanical | |
| Dimensions (L x W x H) | 120 mm x 97 mm x 42 mm |
| Housing | Metal |
| Installation | Wall Mounting |
| Environment | |
| Operating Temperature | -25 ~ +75°C |
| Storage Temperature | -30 ~ +80°C |
| Humidity | 10 ~ 90% RH, Non-condensing |

I/O Specifications

| Model | MQ-7251M |
|------------------------|-------------------|
| Digital Input | |
| Channels | 16 |
| Contact | Wet |
| Sink/Source (NPN/PNP) | Sink/Source |
| ON Voltage Level | +10 VDC ~ +50 VDC |
| OFF Voltage Level | +4 VDC Max. |
| Input Impedance | 10 kΩ |
| Overvoltage Protection | +70 VDC |

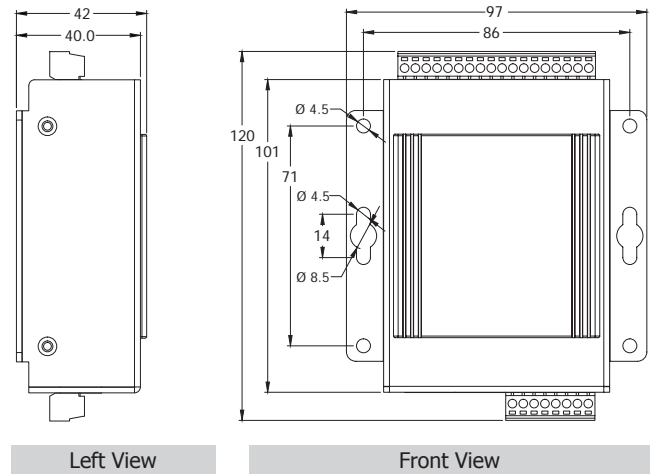
Pin Assignments



Wire Connections

| Digital Input | Readback as 1 | Readback as 0 |
|---------------|---------------|----------------|
| | +10 ~ +50 VDC | OPEN or <4 VDC |
| Sink | | |
| Source | +10 ~ +50 VDC | OPEN or <4 VDC |
| | | |

Dimensions (Units: mm)



Ordering Information

| | |
|-------------|---|
| MQ-7251M CR | MQTT I/O Module with 2-port Ethernet Switch, with 16-ch DI (RoHS) |
|-------------|---|