MQ-7251M
MQTT I/O Module with 16-ch DI

Features
- Built-in Web Server
- Web HMI
- Support for MQTT Protocol
- Support Modbus TCP Protocol
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Built-in I/O
  - DI: 16 Channels

CE FC RoHS

Introduction

The MQ-7251M is an Ethernet I/O devices equipped with 16-channel DI, as well as the MQTT and Modbus TCP protocols, which are 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 the 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 do not provide channel-to-channel isolation. It can safely be used in applications where hazardous voltages are present.

System Specifications

Model	MQ-7251M
CPU Module	
Watchdog Timer	Yes, Module (0.8 second), Communication (Programmable)
EMS Protection	
EFT (IEC 61000-4-4)	±4 kV for Power Line
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal and ±8 kV Air for Random Point
Software	
Built-in Web Server	Yes
Ethernet	
Ports	2 x RJ-45, 10/100 Base-TX, Swtich Ports
Protocol	MQTT 3.1.1 Modbus TCP
Isolation	1500 V$_{DC}$
Power	
Reverse Polarity Protection	Yes
Consumption	2.9 W Max.
Powered from Terminal Block	12 ~ 48 V$_{DC}$
Mechanical	
Casing	Metal
Dimensions (mm)	97 x 120 x 42 (W x L x H)
Installation	DIN-Rail or Wall mounting
Environmental	
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
Type	Wet
Sink/Source (NPN/PNP)	Sink, Source
ON Voltage Level	+10 V_{DC} ~ +50 V_{DC}
OFF Voltage Level	+4 V_{DC} max.
Input Impedance	10 kΩ
Overvoltage Protection	+70 V_{DC}

■ Pin Assignments

+12 ~ +48 V_{DC}
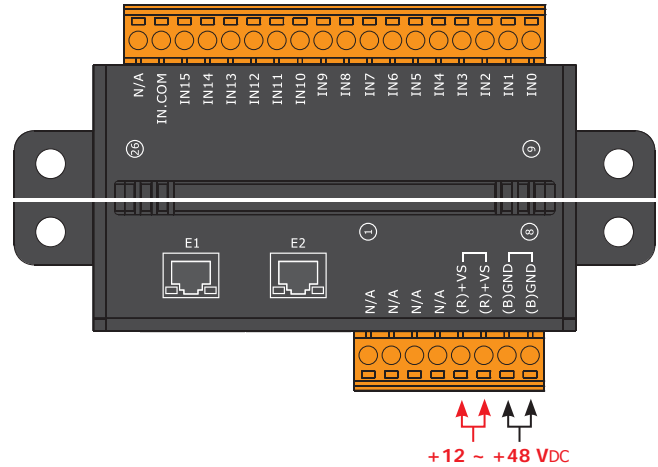
■ Wire Connections

Digital Input	Readback as 1	Readback as 0
Sink	+10 ~ +50 V_{DC}	OPEN or <4 V_{DC}
Source	+10 ~ +50 V_{DC}	OPEN or <4 V_{DC}

■ Dimensions (Units: mm)

Left View

Front View
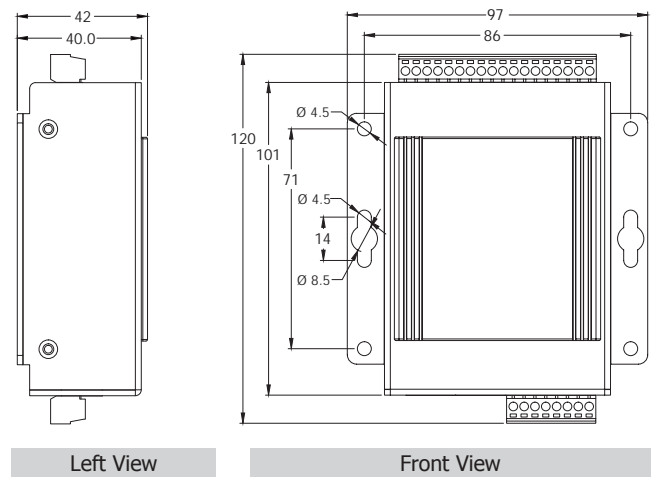
■ Ordering Information

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