MQ-7252M

MQTT I/O Module with 8-ch DI, 8-ch DO

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: 8 Channels
  - DO: 8 Channels

Introduction

The MQ-7252M is an Ethernet I/O device equipped with 8-channel DI and 8-channel DO, as well as the MQTT protocol is supported for connecting with a variety of digital sensors in Industrial Internet of Things (IIoT) applications. A web-based user interface is provided to configure module, monitor the network connection status and I/O status, and control digital output channels on the module via a normal web browser on a mobile device or computer.

The MQ-7252M features optical isolation for 2500 VDC of transient overvoltage protection, but doesn't provide channel-to-channel isolation. Each output channel can drive up to 650 mA load, together with configurable power-on value and safe value. It can safely be used in applications where hazardous voltages are present.

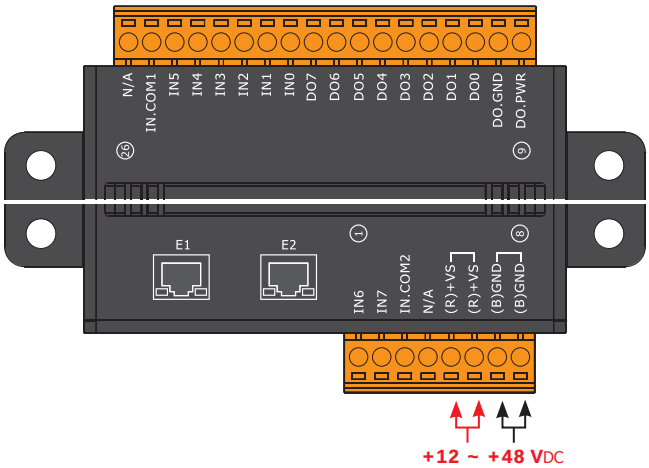
System Specifications

Model	MQ-7252M
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)	±2 kV for Power Line
Surge (IEC 61000-4-5)	±2 kV for Power Line
Power	
Reverse Polarity Protection	Yes
Powered from Terminal Block	+12 ~ +48 VDC
Consumption	3.4 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

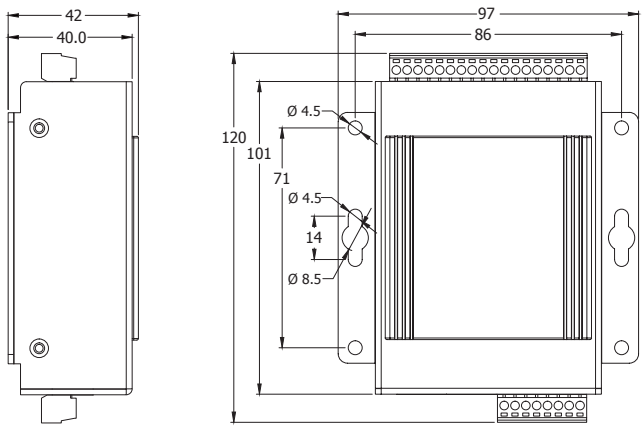
I/O Specifications

Model	MQ-7252M
Digital Input	
Channels	8
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
Digital Output	
Channels	8
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Source
Max. Load Current	650 mA/channel at 25°C
Load Voltage	+10 VDC~ +40 VDC
Overvoltage Protection	47 VDC
Overload Protection	-
Short-circuit Protection	Yes
Power-on Value	Yes, Configurable
Safe Value	Yes, Configurable

Pin Assignments

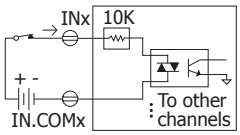
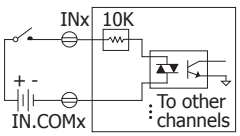
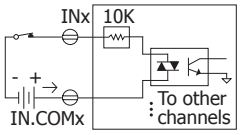
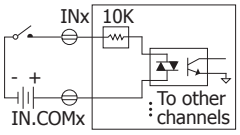


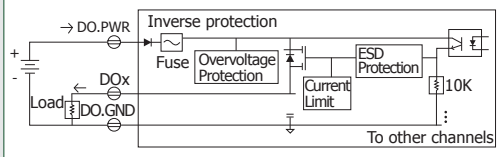
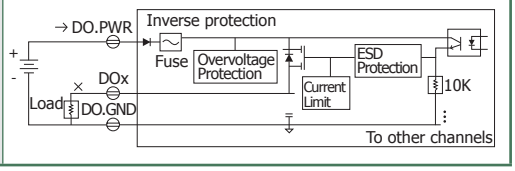
Dimensions (Units: mm)



Left View | Front View

Wire Connections

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

Digital Output	ON State Readback as 1	OFF State Readback as 0
Source		

Ordering Information

MQ-7252M CR	MQTT I/O Module with 2-port Ethernet Switch, with 8-ch DI and 8-ch DO (RoHS) Art. Nr. 150859