

MS1-M08G

Quick Start Guide

1. Overview

The MS1-M08G Managed Industrial Ethernet Switch is designed for harsh environments to withstand vibration, shock, free fall, power surges. The switch provides layer 2 software features commonly used in multi-axis robots and industrial devices (PLCs, HMI, and printers). The switch includes 8-port 10/100/1000Mbps RJ45 downlink ports.

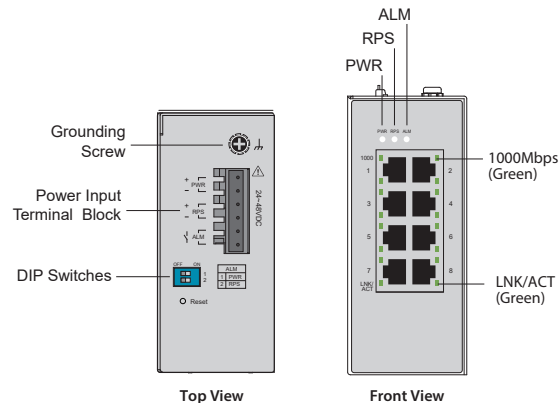
2. Package Checklist

The switch is shipped with the following items*. If any of these are missing or damaged, please contact your customer service representative for assistance.

- MS1-M08G Switch x 1
- Quick Start Guide x 1

*Contents of the package can be adjusted based on customer demand.

Panel view



3. Mounting and Dismounting to DIN-Rail



ATTENTION:

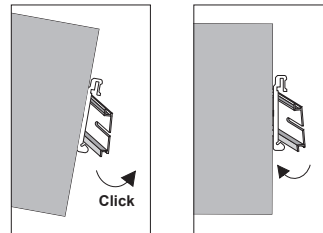
The Switch is an open type device and shall be DIN-Rail mounted or wall mounted (optional) in the cabinet and the ambient temperature should not exceed the operating temperature.

Mounting the switch

Place the switch on the DIN-Rail from above using the slot, push the front of the switch toward the mounting surface until it snaps into place with a click sound.

Dismounting the switch

Press the switch from top and pull out the lower edge of the switch and then remove the switch from the DIN-Rail.



Mounting the Switch

Removing the Switch



ATTENTION:

A corrosion-free mounting rail is advisable. When installing, make sure to allow for enough space between devices to properly install the cabling. And provide ample space for air flow.

4. Grounding the switch

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.



ATTENTION:

This product is intended to be mounted to a well-grounded mounting surface such as a metal panel.

5. Wiring requirements



WARNING:

Safety measures should be taken before connecting the power cable. Turn off the power before connecting modules or wires. The correct power supply voltage is listed on the product label. Check the voltage of your power source to make sure that you are using the correct voltage. DO NOT use a voltage greater than what is

specified on the product label. Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowable for each wire size. If current exceeds the maximum rating, the wiring can overheat causing serious damage to your equipment.

Please read and follow these guidelines:

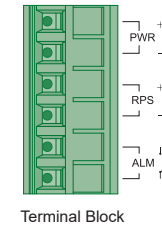
- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
NOTE: Do not run signal or communications wiring and power wiring through the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring that shares similar electrical characteristics can be bundled together.
- You should separate input wiring from output wiring.
- We advise that you label the wiring to all devices in the system.

5.1 Wiring Power Input

5.1.1 The Switch with terminal block

You can use "PWR" for Primary Power input and "RPS" for Redundant Power Input. Check the polarity while connecting.

Top view of Terminal Block is shown in the figure below:



Terminal Block



Caution:

- Use copper conductors only
- Wiring cable temperature should support at least **221°F (105°C)**
- Tighten the wire to a torque value **5lb**
- The wire gauge for the terminal block should range between **12~24 AWG**



MISE EN GARDE:

- Utilisez uniquement des conducteurs en cuivre
- La température maximale du câble ne doit pas dépasser **221°F (105°C)**
- Serrer le fil à une valeur de couple de **5lb**
- Le calibre de fil du bornier doit être compris entre **12 et 24 AWG**

To insert power wire and connect the specified voltage range at a maximum of 0.35A DC power to the power terminal block, follow the steps below:

1. Use a flat-head screwdriver to loosen the wire-clamp screws
2. Insert the negative/positive DC wires into the PWR-/PWR+ terminals, respectively
3. Tighten the wire-clamp screws to prevent the wires from loosening.

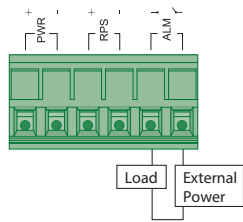


For more information contact Maple Systems at:

email: sales@maplesystems.com
Tel.: (425) 745 3229

**ATTENTION:**

Please use a power supply from 24~48VDC, the device power shall be supplied by SELV circuit.

5.2 Wiring the relay contact (ALM)

Relay rating: 24V, 1A

The switch has one alarm output. This relay contact uses two contacts of the terminal block on the switch top panel. The two contacts of the terminal block connector are used to detect user-configured events. The two wires attached to the fault contacts form an open circuit when a user-configured event is triggered. If a user-configured event does not occur, the fault circuit remains closed.

5.3 Cabling RJ45

Connect one end of an Ethernet cable into the Ethernet port of the switch and the other end to the attached networking device.

- Ports 1-8 supports 10/100/1000Mbps speed
- All the RJ45 ports on the switch support auto-negotiation and auto MDI/MDI-X to eliminate the need for crossover cabling.

* Category 5e cable or above should be used.

6. DIP Switch Setting

| | | |
|---|-----|--|
| 1 | PWR | ON: Primary power alarm reporting is enabled OFF: Primary power alarm reporting is disabled |
| 2 | RPS | ON: Redundant power alarm reporting is enabled OFF: Redundant power alarm reporting is disabled |

7. LED Indicators

| | | |
|----------------|--------------------|---|
| PWR (Green) | Illuminated Off | Primary power on Primary power off or failure |
| RPS (Green) | Illuminated Off | Redundant power on Redundant power off or failure |
| ALM (Red) | Illuminated Off | Alarm triggered for abnormal power status and anomalous features. Normal operation or DIP switch OFF |

| | | |
|--|--------------------------------|---|
| 1000 (Green) (1~8th RJ45 port) | Illuminated Off | Link speed at 1000Mbps Link speed at 10/100Mbps |
| LNK/ACT (Green) (1~8th RJ45 port) | Illuminated Blinking Off | Port link-up Activity (receiving or transmitting data) Port disconnected or link failed |

8. Environmental limits

| | |
|---------------------------|---------------------------|
| Operating Temperature | -40°F~167°F (-40°C~75°C) |
| Storage Temperature | -40°F~185°F (-40°C~85°C) |
| Ambient relative humidity | 5 to 95% (non condensing) |

**ATTENTION:**

This device complies with Part 15 of the FCC rules.

Operation is subject to the following conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

**ATTENTION:**

If the equipment is used in a manner not specified by Maple Systems, the protection provided by the equipment may be impaired.

**ATTENTION:**

Please leave at least 2in (5cm) of space at the left and right of the unit for ventilation.

9. Configuration**Connect through Web Browser:**

- Connect your computer to one of the Ethernet ports.
- Use the default IP-address 192.168.100.254 to login to the switch.

| | |
|------------------|-------|
| Default Username | admin |
| Default Password | admin |

NOTE: For more details on configuration please refer user manual.

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