

MS1-U16G

Quick Start Guide

1. Overview

The MS1-U16G is an Unmanaged Industrial Switch specifically designed to suit your heavy industrial environments and contains all necessary standard features to deploy in automation systems. MS1-U16G is equipped with 16x10/100/1000 Base-T ports enclosed in IP30 housing. The IP30 housing is not certified by UL.

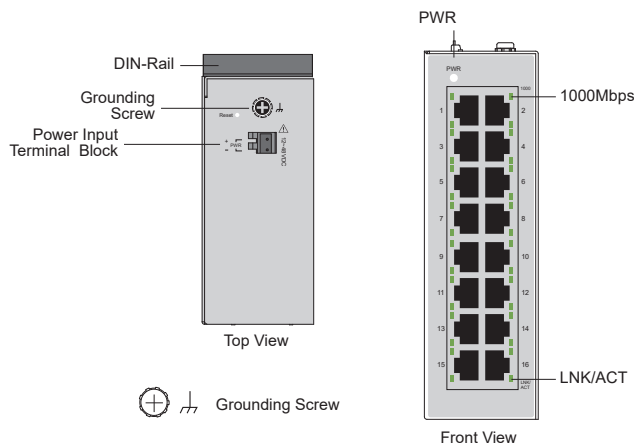
2. Package Checklist

MS1-U16G is shipped with the following items*. If any of these are missing or damaged, please contact your customer service representative for assistance.

- MS1-U16G 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 MS1-U16G is an open type device and MS1-U16G shall be DIN-Rail mounted or wall mounted (optional) in cabinet or enclosure and the ambient temperature should not exceed 167°F (75°C).



CAUTION:

HOT surface do not touch. Wear protective equipment before coming into contact.



MISE EN GARDE

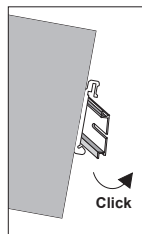
Surface chaude, ne pas toucher. Portez un équipement de protection avant d'entrer en contact.

Mounting the switch

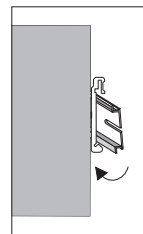
Place the MS1-U16G on the DIN rail from above using the slot, push the front of the switch toward the mounting surface until it snaps into place with a click sound.

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 airflow.

4. Grounding the switch MS1-U16G

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.

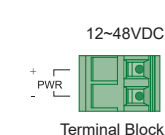
Please read and follow these guidelines:

- 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

You can use "PWR" for power input.

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



Caution:

- Use copper conductors only
- To use wiring cable with rated temperature at least **221°F (105°C)**
- Tighten the wire to a torque value **4,5lb.in**
- The wire gauge for the terminal block should range between **12~24 AWG**



MISE EN GARDE:

- Utilisez uniquement des conducteurs en cuivre
- Utiliser un câble de câblage à température nominale au moins **221°F (105°C)**
- Serrer le fil à une valeur de couple de **4,5lb.in**
- Le calibre de fil du bornier doit être compris entre **12 et 24 AWG**



For more information contact Maple Systems at:

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Tel.: (425) 745 3229

To insert power wire and connect the 12~48VDC at a maximum of 1.5A DC power to the power terminal block, follow the steps below:

- Use flat-head screw driver to loosen the wire-clamp screws
- Insert the negative/positive DC wires into the PWR-/PWR+ terminals, respectively
- Tighten the wire-clamp screws to prevent the wires from loosening



ATTENTION:

Please use a power supply from 12~48VDC, the device power shall be supplied by 61010-2-201 R/C power with SELV, Limited energy output.

5.2 Cabling RJ45

Connect one end of an Ethernet/RJ45 cable into Ethernet port of MS1-U16G and other end to attached networking device.

- Ports 1-16 of the switch support Fast Ethernet as well as Gigabit Ethernet (10/100/1000Base-T Ports)
- All the RJ45 ports on the MS1-U16G support auto negotiation and auto MDI/MDI-X to eliminate the need for crossover cabling.

*Category 5e cable or above should be used.

6. LED Indicators

PWR (Green)	Illuminated	Power is supplied to switch
	Off	Power off or failure
1000 (Green)	Illuminated	Port is operating in 1000Mbps speed
	Off	Port is operating in 10/100Mbps speed
LNK/ACT (Green)	Illuminated	Ethernet link up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed

7. Environmental limits

Operating Temperature	-40°F~-167°F (-40°C~75°C)
Storage Temperature	-40°F~-185°F (-40°C~85°C)
Altitude	Up to 2000m
Ambient relative humidity	5 to 95% (non condensing)
UL61010	Indoor use and pollution degree 2

NOTE:

- The highest degree of temperature operation certified by UL is -40°F~-167°F (-40°C~75°C).
- Two switches must be installed at least 5cm apart.



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 5cm of space at the left and right of the unit for ventilation.

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