



Quick Installation Guide GGM INS05RS

1. Overview

GGM INS05RS Unmanaged Industrial Ethernet Switch is specially designed to expand reliable Ethernet connectivity to factory floors and outdoor environments with extreme temperature and climatic conditions. It offers auto-negotiation on all its ports to aggregate devices easily in industrial Ethernet applications. GGM INS05RS is equipped with 5 x 10/100/1000Mbps RJ45 ports enclosed in IP30 housing.

2. Package Checklist

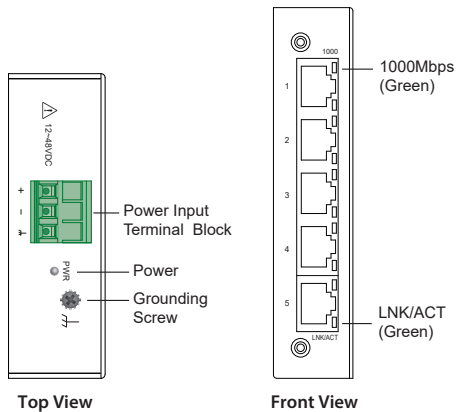
The switch is shipped with the following items*.

If any of these are missing or damaged, please contact your customer service representative for assistance.

- The Switch x 1
- DIN-Rail kit x 1
- Quick Installation Guide x 1

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

Panel view



3. Mounting and Dismounting to DIN-Rail



ATTENTION:

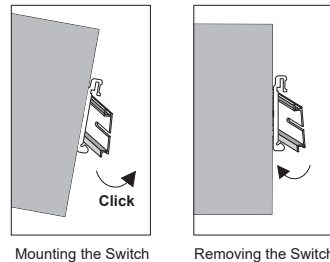
The Switch is an open type device and shall be DIN-Rail mounted or wall mounted (optional) in the cabinet and the ambient temperature should not exceed the operating temperature.

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

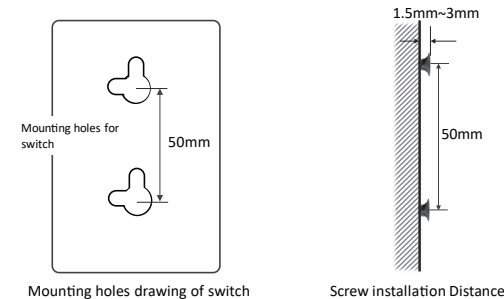
Press the switch from top and pull out the lower edge of the switch and then remove the switch from the DIN-Rail.



Wall-Mounted Mask of the switch

Please install this device by using mounting holes on the wall at the appropriate place.

The wall-mount direction can be straight or horizontal.



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 (- / +) for Primary Power input and check the polarity while connecting.

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



**Caution:**

- Use copper conductors only
- Wiring cable temperature should support at least **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 **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 0.2A 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.

**ATTENTION:**

Please use a power supply from 12~48VDC, the device power shall be supplied by SELV circuit.

5.1.2 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 1-5 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. LED Indicators

PWR (Green)	Illuminated	Primary power on
	Off	Primary power off or failure
1000 (Green)	Illuminated	Link speed at 1000Mbps
	Off	Link speed at 10/100Mbps
LNK/ACT (Green)	Illuminated	Port link-up
	Blinking	Activity (receiving or transmitting data)
	Off	Port disconnected or link failed

7. Environmental limits

Operating Temperature	-40°C~75°C (-40°F~167°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
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 the GIGAMEDIA, 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.