GIGAMEDIA

Quick Installation Guide
GGM INS8RG

1. Overview

GGM INS8RG(ver.B) Premium Unmanaged Industrial Ethernet Switch is specially designed to expand reliable Ethernet connectivity to factory floors and outdoor environments with extreme temperature and climatic conditions.
GGM INS8RG(ver.B) is equipped with 8 x 10/100/1000Mbps RJ45 Ports enclosed in an IP30 housing.

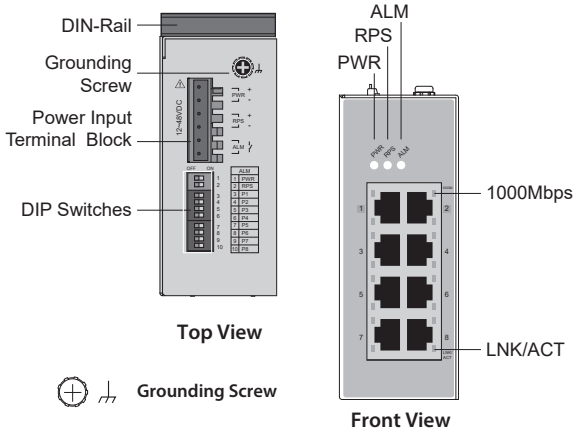
2. Package Checklist

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

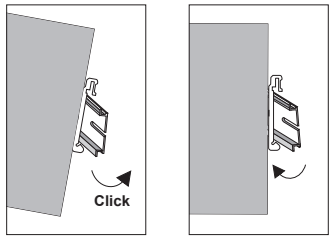
ATTENTION:
The Switch is an open type device and shall be DIN-Rail mounted or wall mounted (optional) in the cabinet and the ambient temperature should not exceed the operating temperature.

Mounting the switch

Place the switch on the DIN rail from above using the slot and 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 the top and pull out the lower edge of the switch, 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:

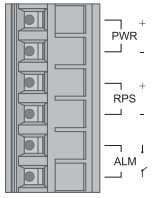
- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
  NOTE: Do not run signal or communications wiring and power wiring through the same wire conduit. To avoid interference, wires 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
- To use wiring cable with rated temperature 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**

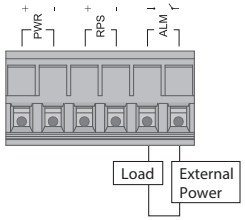
MISE EN GARDE:
- Utilisez uniquement des conducteurs en cuivre
- Utiliser un câble de câblage à température nominale au moins **105˚C**
- Serrer le fil à une valeur de couple de **5lb**
- Le calibre de fil du bornier doit être compris entre **12 et 24 AWG**

To insert the power wire and connect the specified voltage and maximum electric current to the power terminal block, follow the steps below:

- Use a 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, 0.5A maximum the device shall be supplied by SELV circuit.

5.2 Wiring the relay contact (ALM)



Relay rating: 24V, 1A

The switch has one set of relay alarm output. This relay contact uses two contacts of the terminal block on the switch top panel.
The two contacts of the 6-pin 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.

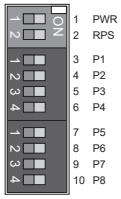
5.3 Cabling RJ45

Connect one end of an Ethernet/RJ45 cable into Ethernet port of the switch and the other end to attached networking device.

- Ports 1-8 of the switch support 10/100/1000Mbps speeds.
- 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



PWR	ON	: Primary power alarm reporting is enabled
	OFF	: Primary power alarm reporting is disabled
RPS	ON	: Redundant power alarm reporting is enabled
	OFF	: Redundant power alarm reporting is disabled
P1	ON	: Port 1 link alarm reporting is enabled
	OFF	: Port 1 link alarm reporting is disabled
P2	ON	: Port 2 link alarm reporting is enabled
	OFF	: Port 2 link alarm reporting is disabled
P3	ON	: Port 3 link alarm reporting is enabled
	OFF	: Port 3 link alarm reporting is disabled
P4	ON	: Port 4 link alarm reporting is enabled
	OFF	: Port 4 link alarm reporting is disabled
P5	ON	: Port 5 link alarm reporting is enabled
	OFF	: Port 5 link alarm reporting is disabled
P6	ON	: Port 6 link alarm reporting is enabled
	OFF	: Port 6 link alarm reporting is disabled
P7	ON	: Port 7 link alarm reporting is enabled
	OFF	: Port 7 link alarm reporting is disabled
P8	ON	: Port 8 link alarm reporting is enabled
	OFF	: Port 8 link alarm reporting is disabled

7. LED Indicators

PWR (Green)	Illuminated	Primary Power on
	Off	Primary power off or failure
RPS (Green)	Illuminated	Redundant Power on
	Off	Redundant Power off or failure
ALM (Red)	Illuminated	Alarm triggered for abnormal power or port link down status
	Off	Normal operation or DIP switch off
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

8. 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 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.

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