

28-Port Managed Gigabit Ethernet Switch Quick Installation Guide

This document provides quick installation on IS-RG528 series. It contains:

Models	Description
Industrial Temperature (-40 to 75°C)	
IS-RG528-A	Industrial 24+4 port Gigabit Managed Ethernet Switch, Single AC input, Front Access
IS-RG528-2A	Industrial 24+4 port Gigabit Managed Ethernet Switch, Dual AC inputs, Front Access
IS-RG528-D	Industrial 24+4 port Gigabit Managed Ethernet Switch, Dual DC input terminals, Front Access

Package Checklist

Please verify that the box contains the following items:

Item	Quantity
Rack-mount Ethernet switch	1
Rack-mount bracket	2
Screws (for bracket)	6
DC power terminal block (4-pin) – option for DC models	1
ALM terminal block (2-pin)	1
Quick Installation Guide	1
RJ45 Ethernet port Dust Cover	14
SFP Ethernet port Dust cover	2

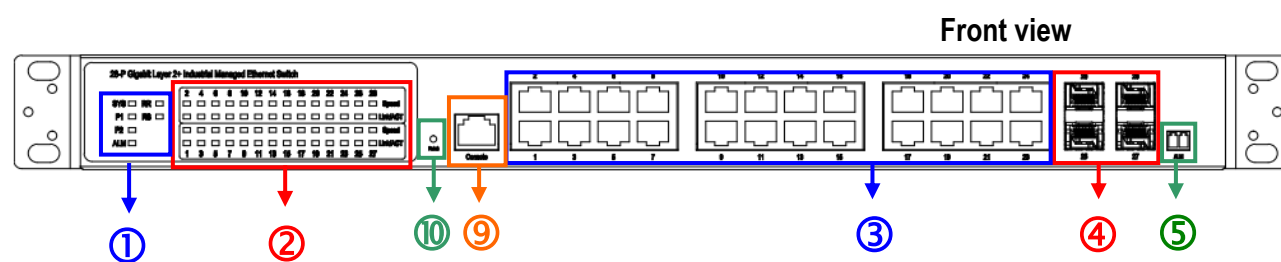
Safety Instructions

When a connector is removed during installation, testing, or servicing, or when an energized fiber is broken, a risk of ocular exposure to optical energy that may be potentially hazardous occurs, depending on the laser output power.

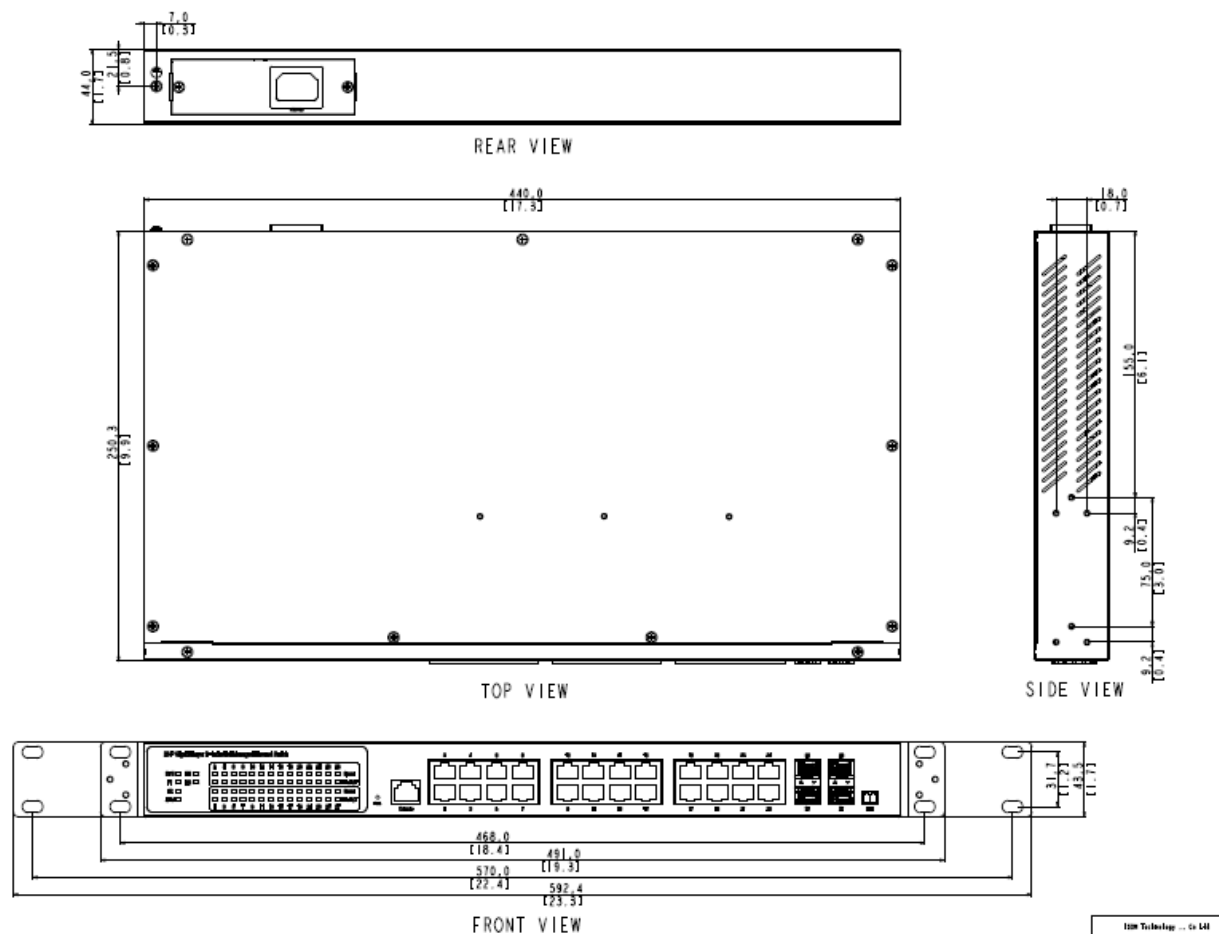
The primary hazards of exposure to laser radiation from an optical-fiber communication system are:

- Damage to the eye by accidental exposure to a beam emitted by a laser source.
- Damage to the eye from viewing a connector attached to a broken fiber or an energized fiber.

Model Layouts



- ① System Status Indicators (LED)
- ② Port Status Indicators (LED)
- ③ Gigabit Copper RJ45 ports
- ④ 100/1000BaseSFP slot (Port 25 & 26)
1000BaseSFP slot (Port 27 & 28)
- ⑤ Terminal block for Alarm Relay output
- ⑥ Grounding screw
- ⑦ DC terminal block (dual input)
- ⑧ AC supply socket
- ⑨ Console port
- ⑩ Reset Button

Dimensions (unit = mm)

Technical Specifications
Ethernet Interface

Ethernet Interface	24 Gigabit Copper ports plus 4 SFP ports, 100FX or 1000BaseF (SX/LX/LH), (Port 27 and Port 28 support 1000BaseF only)
Operating mode	Store and forward, L2 wire-speed/non-blocking switching engine

Copper RJ45 Ports

Speed	10/100/1000 Mbps
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiating	10/100/1000 Mbps speed auto-negotiation; Full and half duplex

SFP (pluggable) Ports

Port types supported	Gigabit fiber multimode, fiber single mode, fiber long-haul single mode 100/1000BaseF (SX/LX/LH)
Fiber port connector	LC typically for fiber (depends on module)

Power

Power input options	DC Redundant Input Terminals & Reverse power protection Single/dual AC inputs DC & AC dual inputs
Input voltage range	DC: 12-58 VDC AC: 100/240 VAC, 50Hz ~ 60Hz
Power Consumption	28 W (Max.)

Environmental and Compliances

Operating temperature range	0 to 60°C or -40 to +75°C (cold startup at -40°C)
Storage temperature range	-40 to +85 °C
Humidity (non-condensing)	5 to 95% RH
Vibration, shock & freefall	Vibration: IEC60068-2-6; Shock: IEC60068-2-27; Free Fall: IEC60068-2-32
Certification compliance	CE/FCC/UL-508
RoHS and WEEE	RoHS (Pb free) and WEEE compliant
MTBF	> 25 years

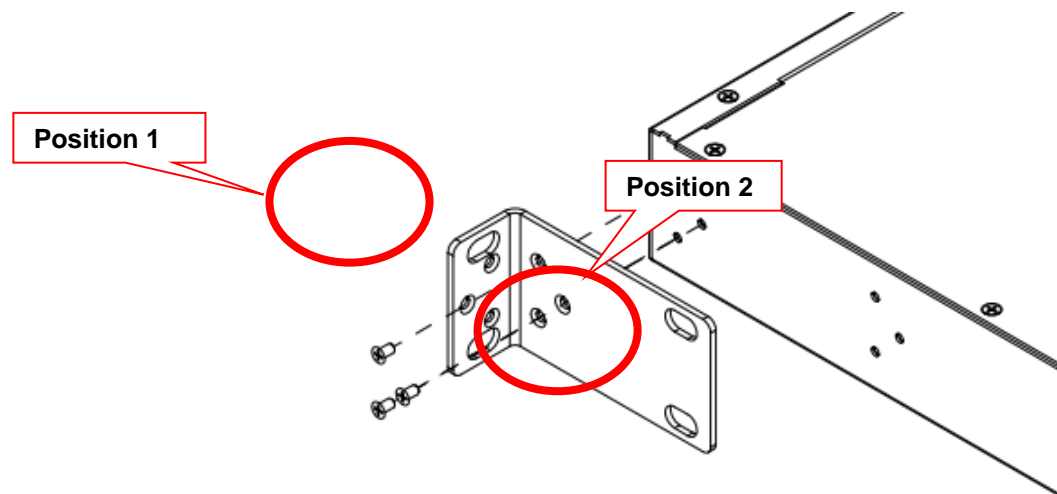
Mechanical

Ingress protection	IP30
Dimensions	440 (W) x 44 (H) x 253 (D) mm
Weight	3.2 kg (Max.)
Installation option	19" rack mounting

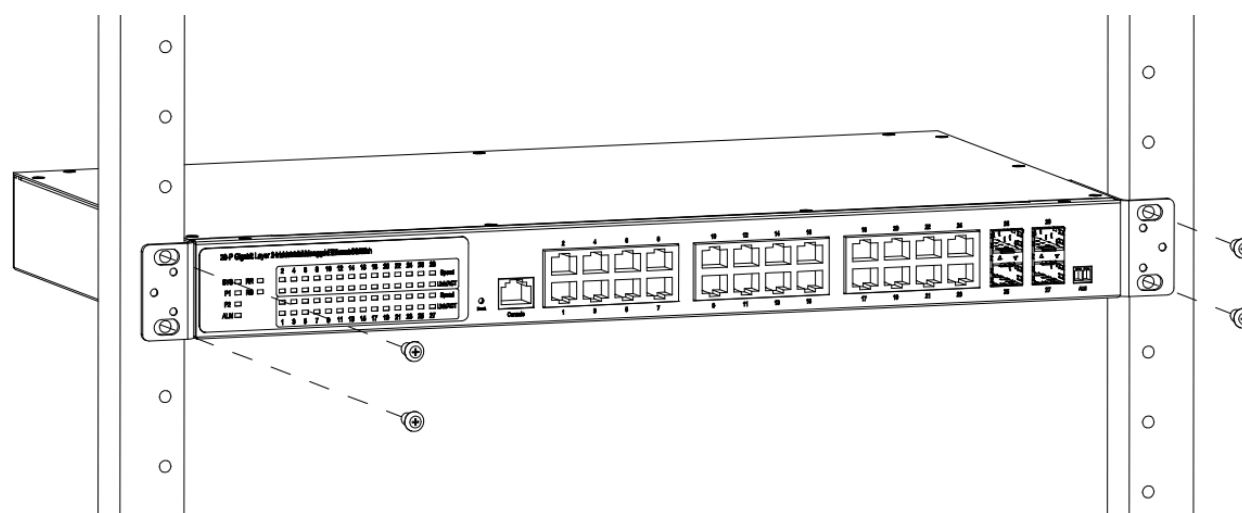
Rack Mounting

When mounting the switch, practice good safety habits. Relay rack mounting normally requires at least two people.

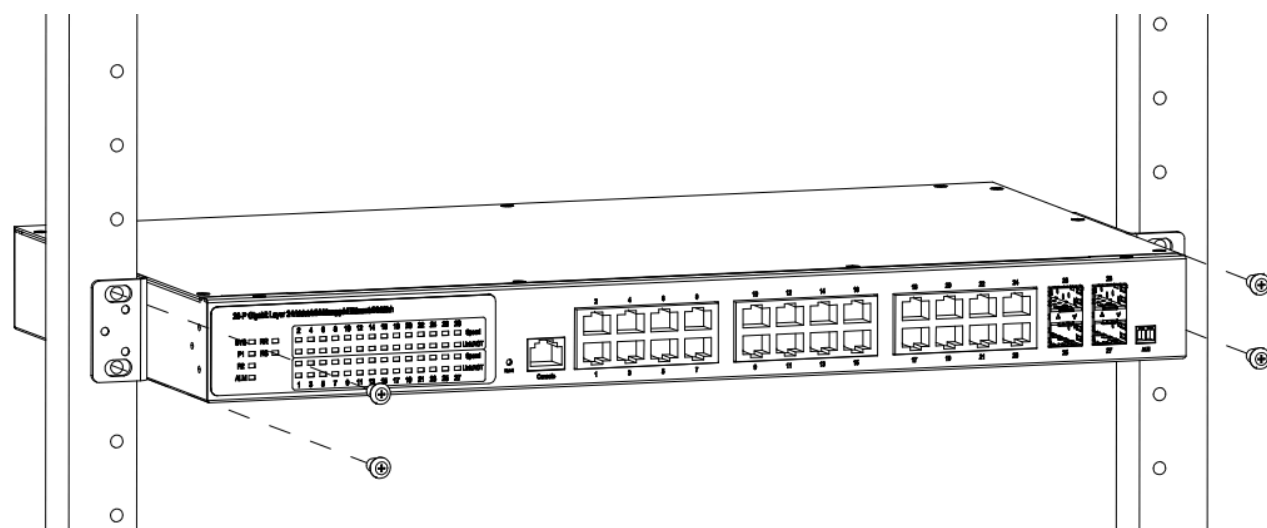
1. Obtain the tools required for the mounting hardware.
2. Attach the mounting brackets to the switch by using the screws in the accessory kit.



3. From the front of the relay rack, position the switch in its relay rack mounting location.
4. Secure the switch in its relay location on both left and right side of mounting bracket.



Mounting Bracket Position 1 for Standard Mount



Mounting Bracket Position 2 for Standard Mount

Ground Connecting

IS-RG528 series must be properly grounded for optimum system performance.

Alarm Relay Connecting

The alarm relay output contacts with current carrying capacity of 30VDC, 1A are a 2P terminal block. The alarm relay contact is “Normal Open”, and it will be closed when detected any power failures.

Power Connecting

DC Power Connection

The switch can be powered from two power supply (input range 12V – 58V). The DC power connector is a 4P terminal block; insert the positive and negative wires into V+ and V- contact on the terminal block and tighten the wire-clamp screws to prevent the wires from being loosened.

After completing chassis installation, please apply power to the fused power distribution panel feeding the chassis.

Note The DC power should be connected to a well-fused power supply.

AC Power Connection

If you use AC power, connect the AC power cord to the AC supply socket on the rear panel, and plug the cord into the external power source. The voltage must be 100 to 240 V ($\pm 10\%$ tolerance).

Warning: Ensure that all power sources to the chassis (power distribution panel) are turned off during the connection.

Ethernet Interface Connecting (RJ45 Ethernet)

IS-RG528 series provides two types of electrical (RJ45) and optical (mini-GBIC) interfaces.

Connecting the Ethernet interface via RJ45:

- To connect to a PC, use a straight-through or a cross-over Ethernet cable,
- To connect the switch to an Ethernet device, use UTP (Unshielded Twisted Pair) or STP (Shielded Twisted Pair) Ethernet cables.

Ethernet Interface Connecting (Fiber, SFP)

For a 1000 Mbps fiber port available, please use the mini-GBIC SFP. These accept plug in fiber transceivers that typically have an LC style connector.

For a 100 Mbps fiber port (port 25 & 26 only) available, please prepare the LC connectors or SC connectors (with the use of an optional SC-to-LC adapter).

They are available with multimode, single mode, long-haul or special-application transceivers.

DANGER: Never attempt to view optical connectors that might be emitting laser energy.

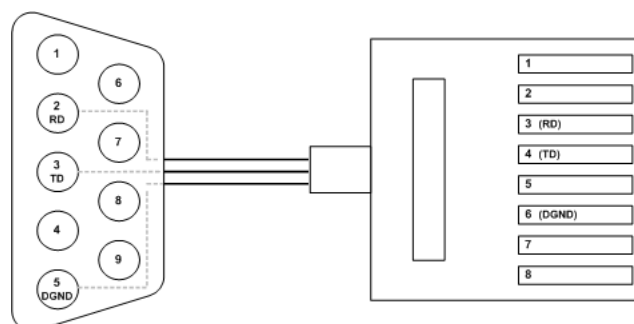
Do not power up the laser product without connecting the laser to the optical fiber and putting the cover in position, as laser outputs will emit infrared laser light at this point.

Console Connection

The Console port is for local management by using a terminal emulator or a computer with terminal emulation software.

- DB9 connector connect to computer COM port
- Baud rate: 115200bps
- 8 data bits, 1 stop bit
- None Priority
- None flow control

To connect the host PC to the console port, a RJ45 (male) connector-to-RS232 DB9 (female) connector cable is required. The RJ45 connector of the cable is connected to the CID port of IS-RG528 series; the DB9 connector of the cable is connected to the PC COM port. The pin assignment of the console cable is shown below:



Connect & Login to IS-RG528 series

1. Connecting to IS-RG528 series Ethernet port (RJ45 Ethernet port).
2. **Factory default IP: 192.168.0.1**
3. Login with default account and password.

Username: admin

Password: admin

CLI Initialization & Configuration (Optional)

1. Connecting to IS-RG528 series Ethernet port (RJ45 Ethernet port).
2. Key-in the command under Telnet: **telnet 192.168.0.1**
3. Login with default account and password.

Username: admin

Password: admin

4. Change the IP with commands listed below:

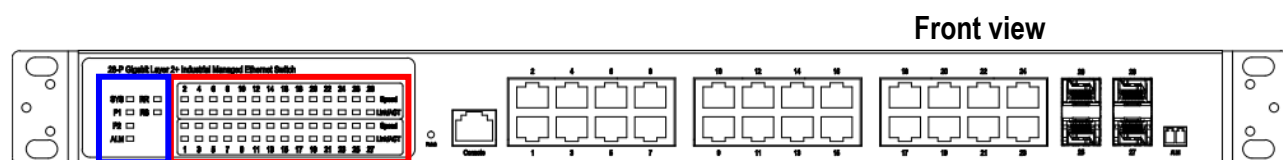
CLI Command:

```
enable
configure
interface vlan 1
ip-address xxx.xxx.xxx.xxx netmask xxx.xxx.xxx.xxx
exit
```

SYSTEM RESET

The Reset button is provided to reboot the system without the need to remove power. Under normal circumstances, you will not have to use it. However, on rare occasions, the IS-RG528 series may not respond; then you may need to push the Reset button.

LED STATUS INDICATIONS



- ① System Status Indicators (LED)
- ② Port Status Indicators (LED)

LED Name	Indicator /color	Condition
1. System Status Indicators		
SYS	On Green	System is working normal
	Flash Green	System booting, or database saving or remote download is in-progress
	Off	System is not working or not have supply power
P1	On Green	P1 power line has power
	Flashing Green	P1 is DC power and only one pair of power is input
	Off	P1 power line disconnect or does not have supply power
P2	On Green	P2 power line has power
	Off	P2 power line disconnect or does not have supply power
Alarm	On Red	Alarm event occurs
	Off	No alarm
RR (Ring Role)	On Green	One of 3 Ring group in Master and Enable mode
	Off	Ring group not set or disable
RS (Ring Status)	Flash Green	Ring fail happen and detected
	Off	No ring fail detected
2. Port Status Indicators		
Copper port Link/Act (Port 1 to 24)	On Green	Ethernet link up but no traffic is detected
	Flashing Green	Ethernet link up and there is traffic detected
	Off	Ethernet link down
Copper port Speed (Port 1 to 24)	On Yellow	A 1000Mbps connection is detected
	Off	No link or a 10 Mbps,100Mbps connection is detected
SFP port Link (Port 25 to 28)	On Green	Ethernet link up
	Flashing Green	Ethernet link up and there is traffic detected
	Off	Ethernet link down
SFP Speed (100/1000M) (Port 25 to 28)	On	SFP port speed 1000Mbps
	Off	SFP port speed 100Mbps or link down