

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 Indus		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

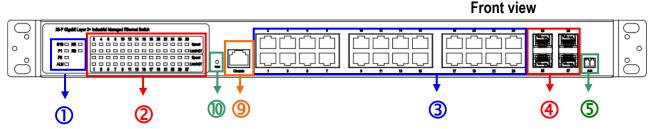
Safety Instructions

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

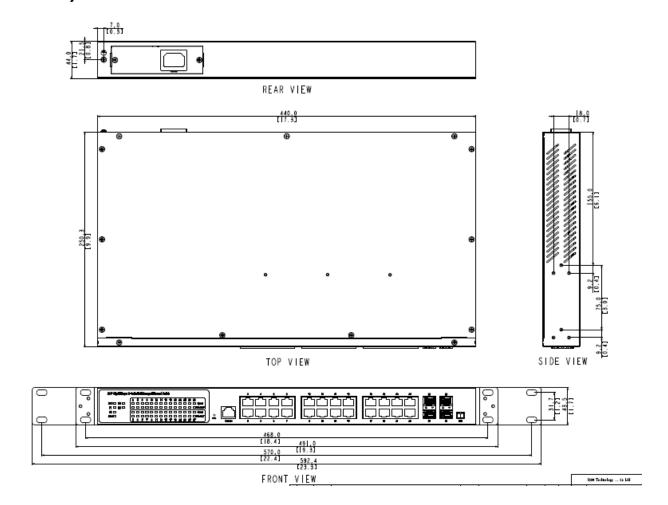


- ① System Status Indicators (LED)
- ② Port Status Indicators (LED)
- ③ Gigabit Copper RJ45 ports
- 4 100/1000BaseSFP slot (Port 25 & 26)1000BaseSFP slot (Port 27 & 28)
- 5 Terminal block for Alarm Relay output
- 6 Grounding screw
- ⑦ DC terminal block (dual input)
- AC supply socket
- ® Reset Button

1



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		

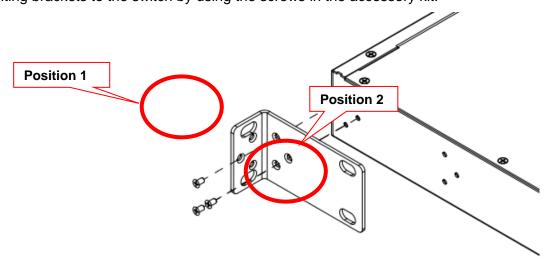
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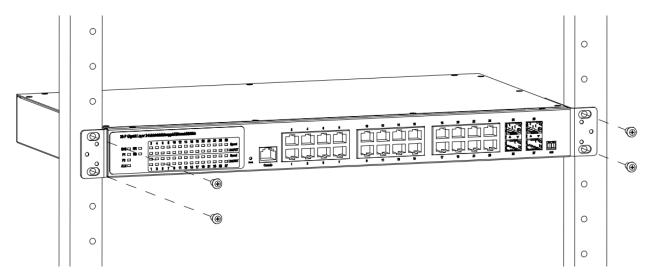
Rack Mounting

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

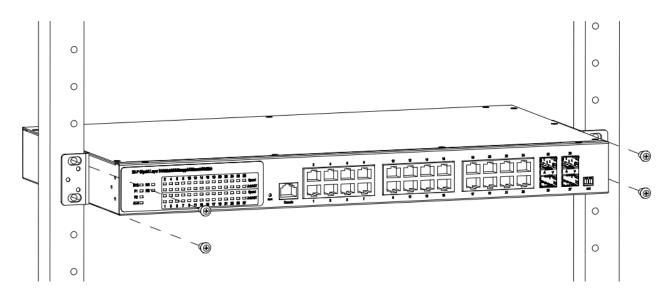
- 1. Obtain the tools required for the mounting hardware.
- 2. Attach the mounting brackets to the switch by using the screws in the accessory kit.



- 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 (±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.

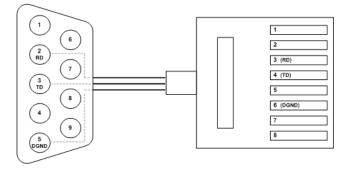
Do not power up the laser product without connecting the laser to the optical fiber and putting the cover in position, as laser outputs will emit infrared laser light at this point.

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

- 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
exit

SYSTEM RESET

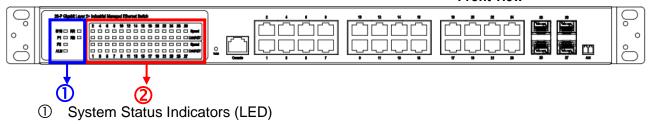
The Reset button is provided to reboot the system without the need to remove power. Under normal circumstances, you will not have to use it. However, or rare occasions, the IS-RG528 series may not respond; then you may need to push the Reset button.

5



LED STATUS INDICATIONS

Front view



- ② Port Status Indicators (LED)

LED Name	Indicator /color	Condition				
1. System Status Indicators						
	On Green	System is working normal				
SYS	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				
	On Red	Alarm event occurs				
Alarm	Off	No alarm				
DD (D' D. I.)	On Green	One of 3 Ring group in Master and Enable mode				
RR (Ring Role)	Off	Ring group not set or disable				
DC (Din a Otatus)	Flash Green	Ring fail happen and detected				
RS (Ring Status)	Off	No ring fail detected				
2. Port Status Indicators						
	On Green	Ethernet link up but no traffic is detected				
Copper port Link/Act (Port 1 to 24)	Flashing Green	Ethernet link up and there is traffic detected				
(1 0.1 1 10 = 1)	Off	Ethernet link down				
Copper port Speed	On Yellow	A 1000Mbps connection is detected				
Port 1 to 24)	Off	No link or a 10 Mbps,100Mbps connection is detected				
	On Green	Ethernet link up				
SFP port Link (Port 25 to 28)	Flashing Green	Ethernet link up and there is traffic detected				
- · /	Off	Ethernet link down				
SFP Speed (100/1000M)	On	SFP port speed 1000Mbps				
(Port 25 to 28)	Off	SFP port speed 100Mbps or link down				