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Make network communication more reliable

ICS6420 Series
Layer 3 Industrial Ethernet Switch
Quick Installation Guide

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【Package Checklist】

Please check the integrity of package and accessories while first using the switch.

1. Industrial Ethernet switch
2. DIN-Rail mounting attachment
3. Certification
4. Warranty card

If any of these items are damaged or lost, please contact our company or dealers, we will solve it ASAP.

【Product Overview】

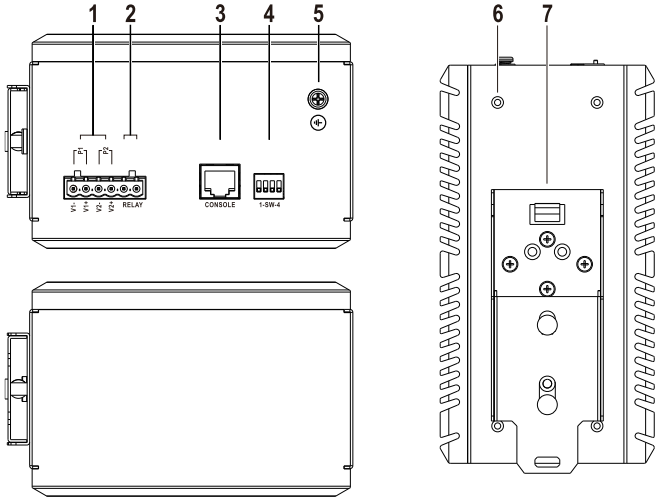
This series are 10Gigabit DIN-Rail layer 3 industrial Ethernet switches. For convenience, the products of this series adopt the following number on the left in this guide, please affirm the number of your product.

Model I. ICS6420-8GT8GS4XS-2P48 (8 Gigabit copper ports + 8 Gigabit SFP slots + 4 10Gigabit SFP slots + 2 12~48VDC power supplies)

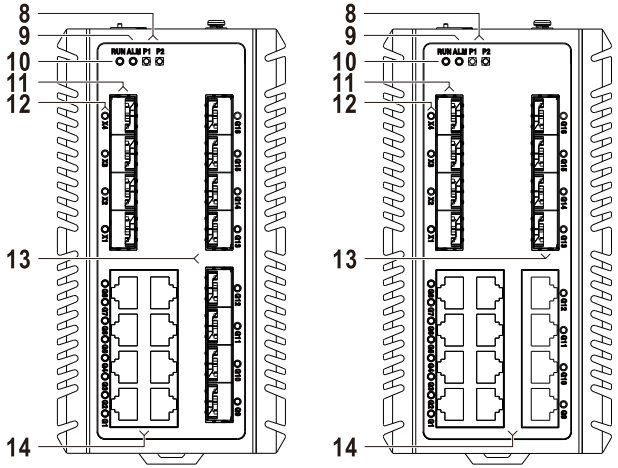
Model II. ICS6420-12GT4GS4XS-2P48 (12 Gigabit copper ports + 4 Gigabit SFP slots + 4 10Gigabit SFP+ slots + 2 12~48VDC power supplies)

【Panel Design】

➢ **Top view, bottom view and rear view**



➢ **Front View**

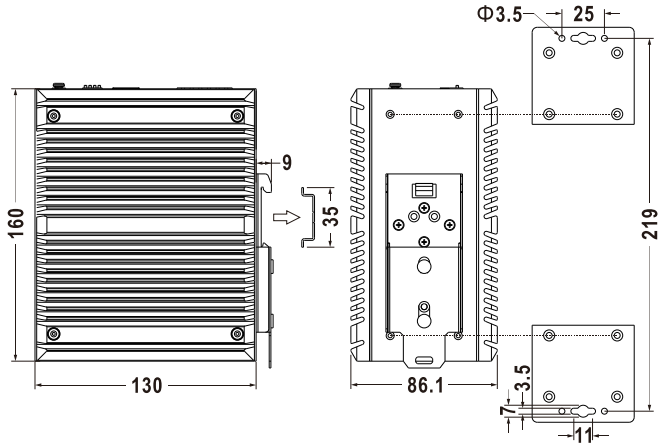


Model I Model II

1. Terminal blocks for power input (P1-P2)
2. Terminal blocks for relay output (RELAY)
3. CONSOLE port
4. DIP switch
5. Grounding screw
6. Wall-mounting location hole
7. DIN-Rail mounting kit
8. Power supply indicator (P1-P2)
9. Alarm indicator (ALM)
10. Running indicator (RUN)
11. 10Gigabit SFP+ slot (X1-X4)
12. Ethernet port indicator (X1-X4, G1-G16)
13. Gigabit SFP slot (G9-G16 or G13-G16)
14. Gigabit Ethernet copper port (G1-G8 or G1-G12)

【Mounting Dimension】

Unit: mm

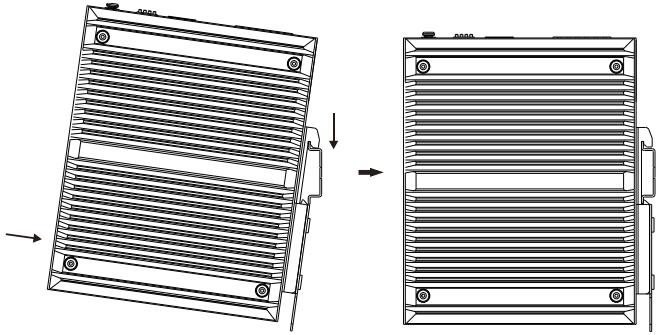


Notice Before Mounting:

- Don't place or install the device in area near water or moist, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before power on, first confirm the supported power supply specification to avoid over-voltage damaging the device.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

【DIN-Rail Mounting】

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps as follows:



Step 1 Check if the DIN-Rail mounting kit is installed firmly.

Step 2 Clip the upper part of the DIN-Rail mounting kit, i.e. the fixed side, into the DIN rail.

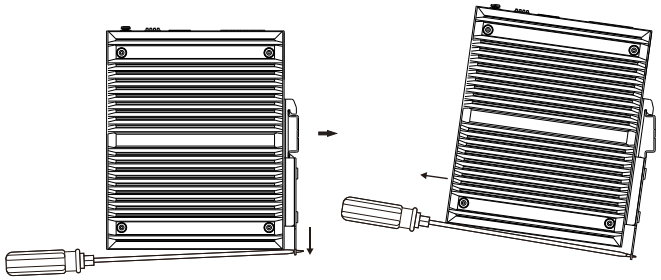
Step 3 Press the lower side of the device and insert the lower part of DIN-Rail mounting kit (the side with spring support) into DIN-Rail.

Tips:

The DIN-Rail spring support is a metal sheet that can move up and down, and there will be a sound after it is clamped in.

Step 4 Check and confirm the product is firmly installed on DIN rail, then mounting ends.

【Disassembling DIN-Rail】



Step 1 Power off the device.

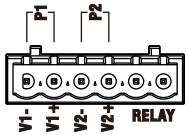
Step 2 Use a slot type screwdriver or other tools to move the DIN rail spring support downward; At the same time, move the lower side of the device outward and move out the lower part of the DIN rail mounting kit.

Step 3 Lift the device upward slightly, move out the upper part of DIN-Rail mounting kit. Disassembling ends.

Notice before powering on:

- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug contact and power on.
- Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.

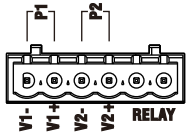
【Power Supply Connection】



This series device provides 6-pin 5.08mm pitch input terminal blocks, including 4 pins power supply terminal blocks on the left side. It provides two independent DC power supply systems of P1 and P2. The power supply is anti-reverse connection.

Voltage range: 12~48VDC.

【Relay Connection】



This series device provides 6-pin 5.08mm pitch input terminal blocks, and the relay occupies the right 2 pins. Relay terminals are a set of normally open contacts of the device alarm relay. They are open circuit in the state of normal non alarm, closed when any alarm information occurs. For example, they are closed when powered off, and send out alarm. The product supports 1 relay alarm information output that can output DC power supply alarm information or network abnormality alarm. It can be connected to alarm light or alarm buzzer or other switching value collecting devices, which can timely inform operators when the alarm occurs.

【DIP Switch Settings】

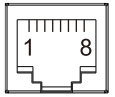
This series provides 4-pin DIP switch for function setting, in



which “ON” is the enabled end. The definitions of DIP switch are as follows:

PIN	1	2-4
Definition	Reboot: set the switch to ON, then set it to OFF after 1-2 seconds, the system will reboot automatically. Restore factory settings: set the switch to ON, then set it to OFF after 5 seconds, the system will automatically restore the factory settings.	Reserved

【Console Port Connection】



This series provides 1 program debugging port based on RS-232 serial port which can conduct device CLI command management after connecting to PC. The interface adopts RJ45 port, the RJ45 pin definition as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

【Checking LED Indicator】

This series provides LED indicators to monitor its operating status, which has simplified the overall troubleshooting process. The function of each LED is described in the table below:

LED	Indicate	Description
P1-P2	ON	Power is connected and running normally
	OFF	Power supply is disconnected or running abnormally
ALM	ON	Power supply or port link has alarm
	OFF	Power supply and port link have no alarm
RUN	ON	The device is powering on or the device is abnormal.
	OFF	The device is powered off or the

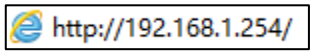
		device is abnormal.
	Blinking	Blinking 1 time per second, the device is running normally.
Link/Act (G1-G16, X1-X4)	ON	Ethernet port has established a valid network connection
	Blinking	Ethernet port is in an active network status
	OFF	Ethernet port has not established valid network connection

【Logging in to WEB Interface】

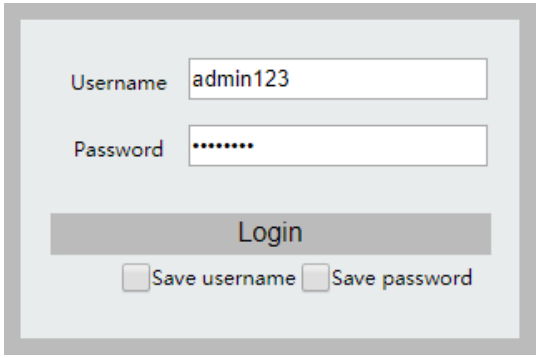
This series supports WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

Step 1 Configure the IP addresses of computer and the device to the same network segment, and the network between them can be mutually accessed

Step 2 Enter device's IP address in the address bar of the computer browser.



Step 3 Enter device's username and password in the login window as shown below.



Step 4 Click "Login" button to login to the WEB interface of the device.

Note:

- The default IP address of the device is "192.168.1.254".
- The default username and password of the device are "admin123".
- If the username or password is lost, user can restore it to factory settings via device DIP switch or management software; all modified configurations will be cleared after restoring to factory settings, so please backup configuration file in advance.
- Please refer to user manual for specific configuration method of logging in to WEB interface and other configurations about network management function.

【Specification】

Panel	
10Gigabit SFP+ slot	1000/10GBase-X self-adaptive SFP+ slot
Gigabit SFP slot	100/1000Base-X self-adaptive SFP+ slot
Gigabit copper port	10/100/1000 Base-T(X) self-adapting RJ45 port, half/full duplex self-adaption or forced working mode, support MDI/ MDI-X self-adaption
Console port	CLI command management port (RS-232), RJ45
Alarm interface	6-PIN 5.08mm pitch terminal blocks, alarm terminal blocks occupies 2 pins, and support 1 relay alarm output, current load capability is 1A@30VDC or 0.3A@125VAC
Indicator	Power supply indicator, run indicator, interface indicator, alarm indicator
Switch Property	
Backplane bandwidth	128G
Packet buffer size	12Mbit
MAC Address Table	16K
Power Supply	
Input power supply	Voltage range: 12~48VDC. Support dual power supply redundancy, anti-reverse connection Support built-in 3.0A overcurrent protection
Access terminal block	6-PIN 5.08mm pitch terminal blocks (power supply occupies 4 pins)
Power Consumption	
No-load	9.6W@12VDC
Full-load	17.76W@12VDC
Working Environment	
Working temperature	-40～75℃
Storage temperature	-40～85℃
Working humidity	5%～95% (no condensation)
Protection grade	IP40 (metal shell)

【Disposal of Waste Electrical and Electronic Equipment (WEEE 2012/19/EU)】

(Applicable in the EU-member states)



The crossed-out wheeled bin symbol on the equipment or its packaging indicates that the product, at the end of its service life, shall not be mixed with unsorted municipal waste but should be collected separately, in accordance with local laws and regulations.

A proper separate collection of end-of-life equipment for the subsequent recycling, treatment and environmentally compatible disposal, will help prevent potential damage to the environment and human health, facilitating the reuse, recycling and/or recovery of its component materials.

Private users should contact their vendor or municipal waste management service and ask for disposal information.

Professional users should contact their suppliers and check the terms of their selling agreement.

This product must not be disposed of with other commercial waste.

Users' cooperation in the correct disposal of this product will contribute to saving valuable resources and protecting the environment.