



# ICS5400TSN-12GT12GS4XS Series Layer 3 TSN Industrial Ethernet Switch Quick Installation Guide

## 【Package Checklist】

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

1. Industrial Ethernet switch
2. Mounting lug ×2
3. Power line ×2 (only for AC device)
4. Certificate
5. Warranty card

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

## 【Product Overview】

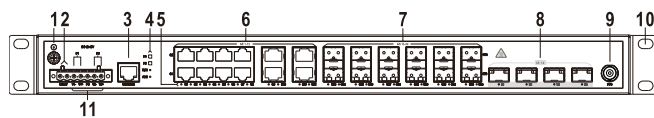
This series product is 28-port Gigabit /10Gigabit layer 3 TSN industrial Ethernet switch, and models are:

Model I. ICS5400TSN-12GT12GS4XS-2LV-N (12 Gigabit copper ports + 12 Gigabit SFP slots + 4 10G SFP+ slots, 12~48VDC redundant power supply)

Model II. ICS5400TSN-12GT12GS4XS-2HV-N (12 Gigabit copper ports + 12 Gigabit SFP slots + 4 10G SFP+ slots, 90~264VAC redundant power supply)

## 【Panel Design】

### ➤ Front view



Model I



Model II

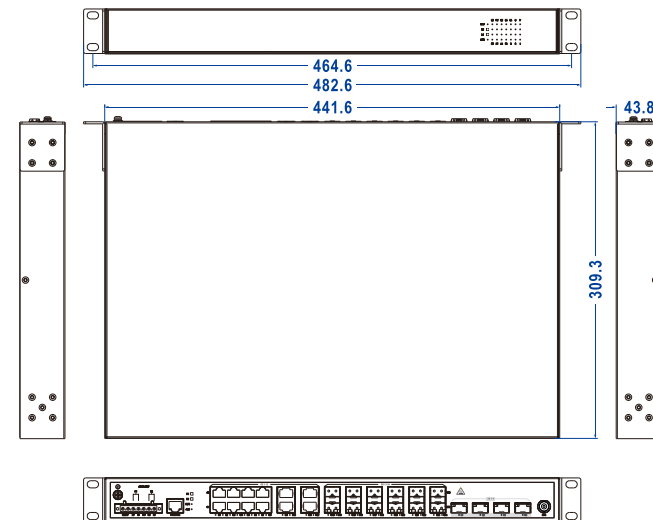
### ➤ Rear view



1. Grounding screw
2. Terminal blocks for relay alarm output (RELAY)
3. CONSOLE port
4. System indicators, from top to bottom in turn they are:
  - Power supply P1 indicator (P1)
  - Power supply P2 indicator (P2)
  - Running indicator (RUN)
  - Alarm indicator (ALM)
5. Ethernet port indicator (G1-G24, X1-X4)
6. 10/100/1000Base-T(X) Gigabit copper port (GE 1-12)
7. 100/1000Base-X Gigabit SFP slot (GS 13-24)
8. 1G/2.5G/10GBase-X 10Gigabit SFP+ slot (XS 1-4)
9. PPS Interface
10. Lugs
11. Terminal blocks for DC (12~48VDC) power input (P1-P2)
12. Terminal blocks for AC (90~264VAC) power input (P1-P2)
13. Ethernet port indicator(1-28)
14. System indicators, from top to bottom in turn they are:
  - Running indicator (RUN)
  - Power supply P1 indicator (P1)
  - Power supply P2 indicator (P2)
  - Alarm indicator (ALM)

## 【Mounting Dimension】

The physical dimensions of this series of products are the same, unit: mm.



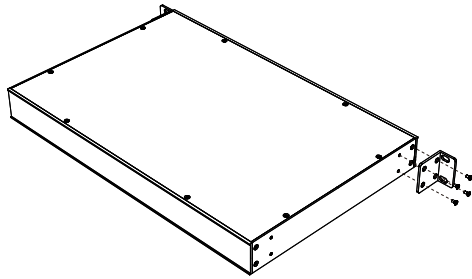
## Notice Before Mounting:

- Don't place or install the device in area near water or moisture, keep the relative humidity of the device surrounding between 5%~95% without condensation.
- Before powering on the device, check the power specifications supported by the device to prevent device damage due to overvoltage.
- The device surface temperature is high after running; please don't directly contact to avoid scalding.

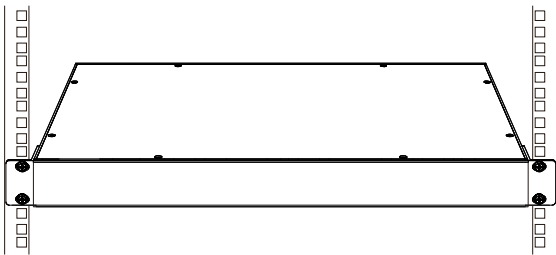
## 【Install Rack-Mounted Device】

This product adopts rack-mounting, mounting steps as below:

- Step 1 Select the device mounting position and ensure enough mounting size is reserved.
- Step 2 Adopt 4 bolts to install the mounting lugs in the device position as figure below.



Step 3 Place the device in the rack; adopt 4 bolts to fix two sides mounting lugs in the rack.



Step 4 Check and confirm the product is mounted firmly on the rack, then mounting ends.

### 【Disassembling Device】

Step 1 Power off the device.

Step 2 Adopt screw driver to loosen the 4 bolts fixed on the mounting lugs in the rack.

Step 3 Shift out the device from rack, disassembling ends.



### Notice Before Powering on:

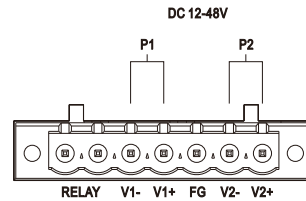
- Power ON operation: First insert the power supply terminal block into the device power supply interface, and then plug the power supply plug and power on.
- Power OFF operation: First, remove the power plug, then remove the wiring section of terminal block. Please pay attention to the above operation sequence.
- Please be aware of the power input range supported by the device before powering on. Use the recommended voltage of the device to avoid device

damage.

### 【Power Supply Connection】

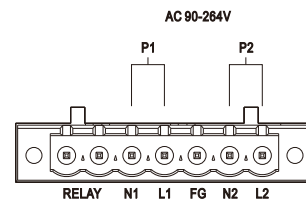
Provide 7-pin 5.08mm pitch power supply terminal blocks and power supply occupies the right 5 pins. It supports two independent power supply systems, P1 and P2. The power input supports 1 power supply alone or 2 power supply at the same time; When two power supply input at the same time, it supports redundant backup of power supply. If one power supply fails, the device can still work normally without interruption. The device power input of this series is divided into DC and AC products, as shown below.

#### ➤ DC device:



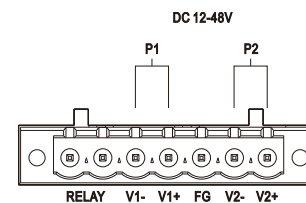
Model I supports DC power input, the power supply supports anti-reverse connection, the device won't be damaged after reverse connection, but the device cannot be powered on. The definitions of power pin are shown in the left figure, and the power input range is 12~48VDC.

#### ➤ AC device



Model II supports AC power supply input. The definitions of power pin are shown in the left figure, and the power input range is 90~264VAC.

### 【Relay Connection】



Provide 7-pin 5.08mm pitch terminal block, support 1 relay alarm output, the RELAY occupies the left 2 pins. The relay terminal is a group of normally closed contacts, which is closed in power off state. After powered on, the relay is open circuit in normal non-alarm state by

default, closed when any alarm information occurs. For example: the relay supports the output of power supply alarm 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.

### 【PPS Port Connection】



Provide 1 PPS interface, adopt BNC female port, which can be used for PPS clock signal input or output.

### 【Console Port Connection】



Provide 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, and the RJ45 pin definitions are as follows:

Pin No.	2	3	5
Definition	TXD	RXD	GND

### 【Checking LED Indicator】

Provide LED indicators to monitor the device working status with a comprehensive simplified troubleshooting; the function of each LED is described in the table as below:

LED	Indicate	Description
P1	ON	Power supply is running normally
	OFF	Power supply is disconnected or running abnormally
P2	ON	Power supply is running normally
	OFF	Power supply is disconnected or running abnormally
RUN	ON	System operation is abnormal
	Blinking	The system is running normally
	OFF	The system is not running or running abnormally
ALM	ON	Power supply or port link has

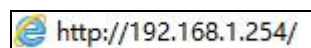
LED	Indicate	Description
		alarm
	OFF	Power supply, port link without alarm
1- 28 or G1-G24, X1-X4	ON	The Ethernet port has established a valid network connection.
	Blinking	The Ethernet port is in a network communication status
	OFF	The Ethernet port has not established a valid network connection.

### 【Logging in to WEB Interface】

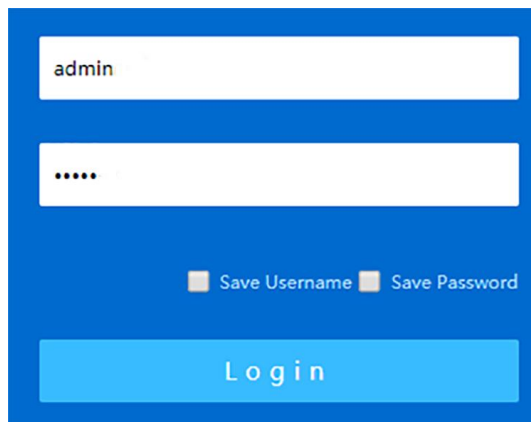
Support WEB management and configuration. Computer can access the device via Ethernet interface. The way of logging in to device's configuration interface via IE browser is shown as below:

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 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	
Gigabit copper port	10/100/1000Base-T(X) self-adaption or forced mode, RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning
Gigabit SFP	100/1000Base-X self-adaption or forced mode, SFP slot

10Gigabit SFP+	1G/2.5G//10G Base-X self-adaption or forced mode, SFP+ slot
Console port	CLI command management port (RS-232), RJ45
Alarm port	Support 1 relay alarm output, using 7-pin 5.08mm pitch terminal blocks (the relay occupies the left 2 pins), and the current load capacity is 1A@30VDC or 0.3A@125VAC
PPS	Support one PPS input/output, adopt BNC Female, and can be connected to clock source
Indicator	Power indicator, alarm indicator, running indicator, interface indicator
Switch Property	
Backplane bandwidth	128G
Cache size	32Mbit
MAC address table	32K
Power Supply	
Model I	12~48VDC, dual power supply redundancy, anti-reverse connection
Model II	90~264VAC, dual power supply redundancy
Access terminal block	Adopt 7-pin 5.08mm pitch terminal blocks (power supply occupies the right 5 pins)
Power Consumption	
Model II	No-load: 18.24W@220VAC Full-load: 33.1W@220VAC
Working Environment	
Working temperature	-40~60°C
Storage temperature	-40~85°C

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.