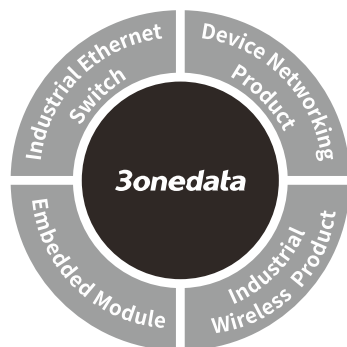


TNS5500D Series Managed Wall-mounted Industrial Ethernet Switch Quick Installation Guide



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【Package Checklist】

Please check whether the package and accessories are intact while using the switch for the first time.

1. Industrial Ethernet switch
2. CD
3. Quick installation guide
4. Certification
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】

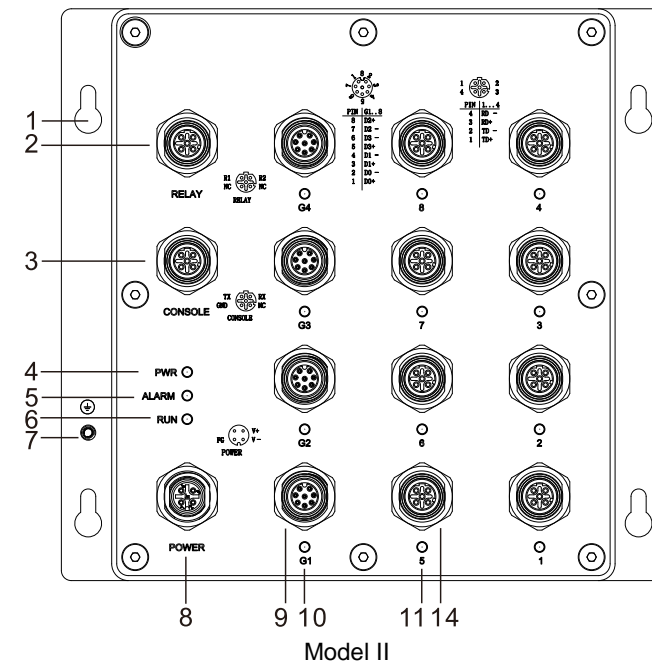
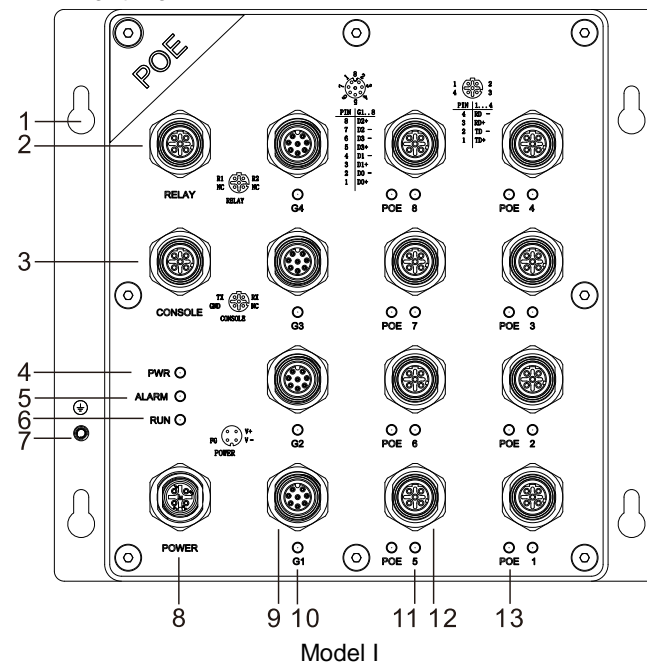
The series of product is 100M/Gigabit layer 2 managed Wall-mounted industrial Ethernet switch designed for rail transit industry. Modules as follows:

Model I TNS5500D-4GT-8POE (4 Gigabit copper ports + 8 100M PoE copper ports)

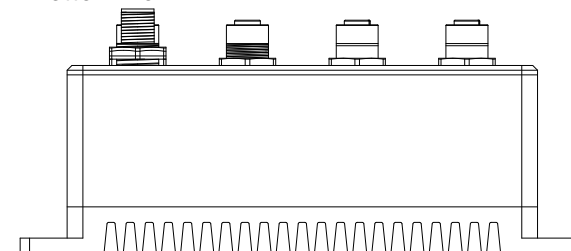
Model II TNS5500D-4GT-8T (4 Gigabit copper ports + 8 100M copper ports)

【Panel Design】

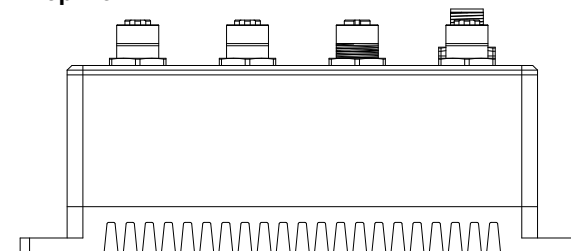
➤ Front view



➤ Bottom view

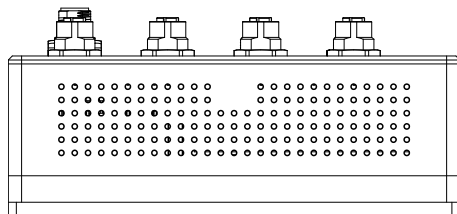


➤ Top view

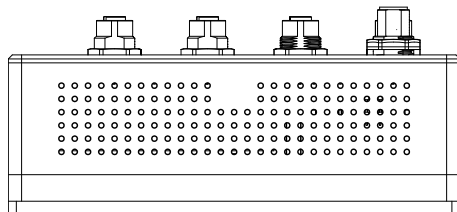


➤ Left view





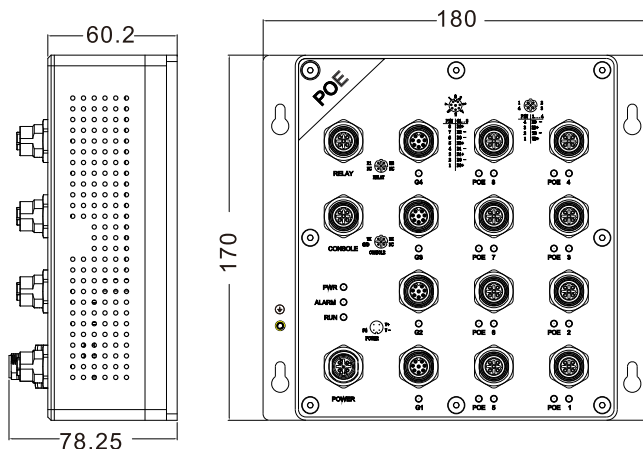
➤ Right view



1. Hanger
2. Relay alarm output terminal block
3. Console port
4. Indicator of power supply input status PWR
5. Relay alarm indicator ALARM
6. Indicator of device running status RUN
7. Grounding screw
8. Power input terminal block
9. 10/100/1000Base-T(X) Gigabit copper port
10. Gigabit copper port connection indicator
11. 100M copper port connection indicator
12. 10/100Base-T(X) 100M POE copper port
13. POE indicator
14. 10/100Base-T(X) 100M copper port

【Mounting Dimension】

Unit: mm

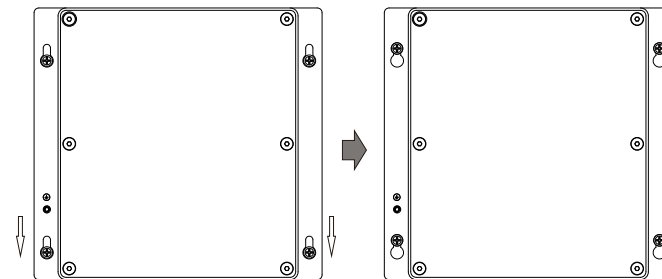


Attention before mounting:

- 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.

【Wall-mounting the Device】

- Step 1 Put the device on the wall it will be mounted as reference or to refer to its mounting dimension, and mark the locations of the 4 expansion screws.
- Step 2 Mount the screws on the wall and reserve 7mm void.
- Step 3 Hang the device on the 4 expansion screws and slide it down, then tighten the screws, mounting ends.



【Disassembling the Device】

- Step 1 Device powers off
- Step 2 Unscrew the screws on the wall about 7mm.
- Step 3 Lift the device then take it out, disassembling ends.

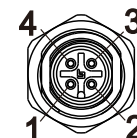


Note:

- Power ON operation: first connect power line to the connection terminal of device power supply, then power on.
- Power OFF operation: first unpin the power plug, then remove the power line, please note the operation order above.

【Power Supply Connection】

➤ DC power supply

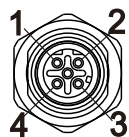


The series devices provide 1 power supply input. The interface adopts M12 A-Coded 4-pin needle (male) connector, which could be connected to M12 A-Coded 4-pin slot (female). Power supply range: 110VDC (70-160VDC).

The pin definitions of M12 (Male) are as follows:

No.	1	2	3	4
Definition	FG	V-	V+	NC
Description	Ground	Power input negative	Power input positive	reserved

【Relay Connection】



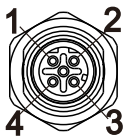
This device provides 1 M12 D-Coded 4-Pin slot (female) for relay output. R1 and R2 is a pair of normally open contacts of device alarm relay. They are open circuit in normal non alarm state, closed when any alarm information occurs.

Such as: it's closed when power off, and send out alarm. This series switches support 1 channel relay alarm information output, support DC power alarm information or network abnormal alarm output, it can be connected to alerting lamp, alarm buzzer, or other switching value collecting devices for timely warning operating staffs when alarm information occurs.

The pin definitions of relay are as follows:

No.	1	2	3	4
Definition	R1	R2	NC	NC

【Console Port Connection】



This device provides 1 program debugging port based on RS232, which could be connected to PC for device CLI command management. The interface adopts M12 D-Coded 4-pin slot (female). The pin definitions of M12 are as follows:

No.	1	2	3	4
Definition	TX	RX	NC	GND
Description	RS-232 sending signal	RS-232 receiving signal	Reserved	Ground

【Communication Interface Connection】

➤ M12 100M Copper Port

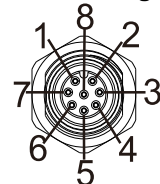


This device provides 8 10/100Base-T(X) ports. The interface type is M12 D-Coded 4-pin slot (female). The pin definitions of M12 are as follows:

No.	Definition	Description
1	TD+	100M Ethernet transmitted signal Positive
2	TD-	100M Ethernet transmitted

		signal Negative
3	RD+	100M Ethernet received signal positive
4	RD-	100M Ethernet received signal negative

➤ M12 Gigabit Copper Port



This device provides 4 10/100/1000Base-T(X) interfaces. The interface type is M12 A-Coded 8-Pin slot (female) and its pin definitions are as follow:

No.	Definition	Description
1	D0+ (DA+)	The first group of bi-directional data of Gigabit Ethernet positive
2	D0- (DA-)	The first group of bi-directional data of Gigabit Ethernet negative
3	D1+ (DB+)	The second group of bi-directional data of Gigabit Ethernet positive
4	D1- (DB-)	The second group of bi-directional data of Gigabit Ethernet negative
5	D3+ (DD+)	The fourth group of bi-directional data of Gigabit Ethernet positive
6	D3- (DD-)	The fourth group of bi-directional data of Gigabit Ethernet negative
7	D2- (DC-)	The third group of bi-directional data of Gigabit Ethernet negative
8	D2+ (DC+)	The third group of bi-directional data of Gigabit

		Ethernet positive
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【Checking LED Indicator】

This device provides LED indicators for monitoring the work status of the device, which has simplified the troubleshooting process comprehensively. The function of each LED is described in the table as below:

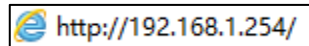
LED	Status	Description
PWR	ON	PWR is connected and running normally
	OFF	PWR is disconnected and running abnormally.
ALARM	ON	Power supply, port link alarm
	OFF	Power supply, port link without alarm
RUN	ON	The device is powered on or the device is abnormal.
	OFF	The device is powered off or the device is abnormal.
	Blinking	Blink 1 time/s, system is running well.
Link/Act (1-8/G1-G4)	ON	Ethernet port connection is active.
	Blinking	Data transmitted
	OFF	Ethernet port connection is inactive.
POE(1-8)	ON	POE port is powering other devices.
	OFF	POE port is not powering other devices.

【Logging in to WEB Interface】

This device 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 "OK" 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 is "admin".
- 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	
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100M M12	10/100Base-T(X), M12 (Female), 4-Pin D-Coded, automatic flow control, full/half duplex mode, MDI/MDI-X automatic detection; Optional PoE output.
Gigabit M12	10/100/1000Base-T(X), M12(Female), 8-Pin A-Coded automatic flow control, full/half duplex mode, MDI/MDI-X automatic detection; support Bypass function
PoE	PoE power supply pin:1, 2 are negative;3, 4 are positive
Console port	CLI command management port, M12 D-coded port
Alarm interface	1 relay alarm information output, M12 D-coded port
Indicator	Power indicator, run indicator, interface indicator, alarm indicator POE indicator (only for PoE product)
Exchange attributes	
Backplane bandwidth	12.8G
Packet buffer size	3Mbit
MAC table size	8K
Power supply	
Input power supply	110VDC (70-160VDC) M12 A-coded port
Consumption	
Model I	No-load:26.73W @110VDC Full-load:54.23W @110VDC
Model II	No-load:14.30W @110VDC Full-load:14.85W @110VDC
Working environment	
Working temperature	-40~75℃
Storage temperature	-40~75℃
Working humidity	5%~95%(no condensation)

Protection grade	IP30 (metal shell)
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