

FNS100 series USER MANUAL

Industrial Ethernet Switch

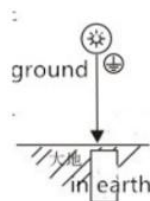
1. Product Introduction

This industrial Ethernet switch supports dual power inputs, wide operating temperature range (-40°C to 75°C), and IP40 protection level, meeting the strict requirements of industrial control environments.

2. Hardware Installation

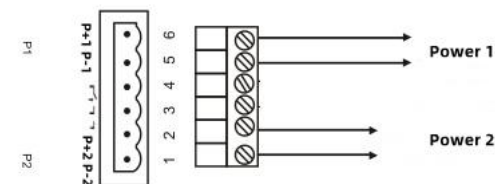
2.1 Grounding

Fix the grounding wire to the grounding screw on the switch and ensure that the grounding system is reliably connected.



2.2 Power Connection

Insert the power cord into the designated position of the 6-core terminal block and insert the terminal block into the standard power input port (the first power supply P1 corresponds to the inputs P+1 and P-1, and the second power supply P2 corresponds to the inputs P+2 and P-2). The switch supports a standard available voltage range of 12VDC to 52VDC (POE version: 48VDC to 57VDC).



2.3 Relay Alarm Connection (optional function)

The relay alarm terminal is a 2-core terminal in the 6-core terminal block, which provides power failure alarm output. When both power supplies are connected normally, the alarm behaves as "open circuit"; when one of the power supplies fails, the alarm behaves as "short circuit".

2.4 Installation

DIN-Rail Installation: Hook the upper card slot on the back of the switch onto the upper hook of the DIN rail, and then press the switch downwards towards the lower hook of the DIN rail until it clicks into place.

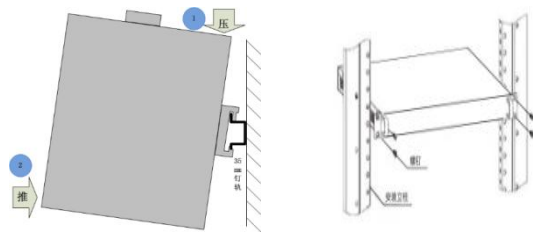
Rack Mount Installation: Mount the product with the mounting ears onto a standard 19-inch rack, and connect the corresponding power ports.

Packages Included

- ✓ Industrial switch 1pc
- ✓ QIG 1pc
- ✓ Guarantee card 1pc

If any item is found missing or damaged, please contact the company's customer service center.

Insert the Ethernet cable into the Ethernet port, and the corresponding indicator should light up.

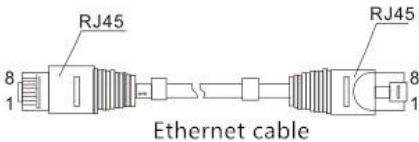


3.Interface Definitions.

10/100/1000Base-TX Ethernet Interface:

This series of switches provides 10/100/1000Base-TX ports with MDI/MDI-X auto recognition for cable connections. Ethernet devices can be connected to other Ethernet terminal devices via Ethernet ports on the switch using Ethernet cables (straight-through or crossover). Please use Category 5e shielded twisted pair cables. The pin definitions of the Ethernet ports are shown in the figure below.

The RJ45 port supports automatic MDI/MDI-X operation, which can be used to connect PCs or servers with straight cables, and other switches or hubs. In a straight cable (MDI), pins 1, 2, 3, 4, 5, 6, 7, and 8 correspond to connections. For



the MDI-X port of a switch or hub, a crossover cable is used, with the following pin connections: 1-3, 2-6, 3-1, 6-2, 4-7, 5+8, 7-4, and 8-5. The pin definitions for 10Base-T/100Base-T (X) are shown in the table below:
Note: 'TX±' stands for Transmit Data ±, 'RX±' stands for Receive Data ±, '-' means unused.

Pin No.	MDI signal	MDI-X signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
6	RX-	TX-
4、5、7、8	-	-

4. LED Display Light

Indicator light	State	Meaning
Power	red light	Power supply is normal
	No red light	Power failure or not powered
RJ45 indicator light	Steady yellow light	Network connection is normal
	Flashing yellow light	Link communication is normal
	Green light	PoE power supply for port is normal
	Green and yellow lights off	Port is not connected

5.Installation Guide

5.1 Precautions for installation

To avoid damage to the device and harm to individuals caused by improper use, please follow the precautions below:

- ⓈTo avoid damage to the device caused by falling, place the device on a stable surface.
- ⓈWhen supplying power to the device, pay attention to the voltage range and polarity of the power supply to avoid damaging the device due to incorrect operations.
- ⓈTo reduce the risk of electric shock, ensure that the device is well grounded in the working environment.

6.Login for Managed Series

This series of products provides 1 route of console debugging port based on the serial port for management system program. The command line can be accessed through a standard Cisco cable. For specific parameters, please refer to the device label description.



Console port: Baud rate 115200
Web: IP address: 192.168.10.12
Username: admin
Password: admin or system