Managed Industrial Ethernet Switch

Hardware Installation Manual

(Please read it carefully before using it)

1 Overview

Industrial Ethernet switches with multiple Fast Ethernet electrical interfaces and multiple Ethernet optical interfaces. Product supports Layer 2 management functions, support VLAN, IGMP, Ring, SNMP and other protocols.

Industrial Ethernet switch with DIN rail and wall mounted in one of the structural design. The switch uses metal as the shell material and realizes the protection level of IP40, and makes detailed and targeted design of vibration, shock, dust and electromagnetic interference in transportation, railway and mine to ensure the stable operation of the network.

2 Product packaging and accessories list

After you open the product package, check that the items in the box conform to the standard configuration:

➤	Industrial Ethernet Switch	1PC
➤	User Manual	1PC
➤	Console cord	1PC
➤	Power cord	1PC
➤	Wall mounting accessories	1PC

3 Product specifications

3.1 Technical parameters

➤ Protocols: IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1d, IEEE 802.1w, IGMP Snooping, Ring, SNMP V1/V2

➤ Flow control:IEEE802.3x flow control, back pressure

➤ Transmission: Storage and forwarding

➤ Throughout rare: 100%@10M, 100M, 1000M

➤ LED, optical port: LINK/ACT,ADD

➤ Wavelength: 850/1310/1550nm

➤ Operating mode: 10M/100M/1000M, Full/half duplex, auto negotiation

3.2 Interface parameters

➤ 100Base-FX: 100Base-FX, SM/MM, Optional SC/FC/LC

➤ 100Base-TX: 10/100Base-T(X), auto negotiation, RJ45 connector

➤ 1000Base-FX: 1000Base-FX, SM/MM, Optional SC/FC/LC

➤ 1000Base-TX: 1000Base-T(X), auto negotiation, RJ45 connector

3.3 LED Indicator

➤ Power LED：P, P1, P2

➤ Connector LED：Link/ACT, Speed (RJ45 Connector)

3.4 Power supply characteristics

➢ Standard power input: 220VAC/DC(85~264VAC)

➢ Optional power input: 24VDC(10~36VDC),

    48VDC(36~72VDC), 110VDC(72~154VDC)

➢ Access terminal: 5.08mm pitch terminal

➢ Overload protection: Support

➢ Reverse protection: Support

➢ Redundant protection: Support

3.5 Technical specification

➢ Operating mode: Full/half duplex, auto negotiation

➢ Physical interface: RJ45

➢ Conversion method: Media conversion, storage forward/

    cut-through

➢ Twisted pair: 100m(adapt standard CAT5,CAT5e network cable)

4 Status indicators and special instructions

Table 1: Description of the front panel components

No	Name	Explanation	Specification
1	P/Pwr	Power Indicator	on: Dual power flashing: Single power off: No power supply
2	Alm	Alarm indicator	On: Alarming Off: no alarming
3	Ru	System running indicator	Flashing: The system is running off: the system is starting
5	Speed	Fast/gigabit port port rate indicator (yellow)	On: 100M/1000M rate Off: No connection or 10M rate
6	Link/Act	Connection/activity indicator	On: connected Flashing: there's Data Off: Not connected
7	Tx	Fast electrical port	100M electrical signals

			forwarding
8	Fx	Fast optical port	100M Optical signal forwarding
9	Gn	Gigabit optical port / electrical port	1000M electrical signals forwarding

5 Transmission distance

Twisted pair: 100m (adapt standard CAT5,CAT5e network cable)
Multi-mode: 1310nm 5km(100M)
    850nm 550m(1000M)
Single mode: 1310nm 40km/60km(100M)
    1550nm 60km/80km(100M)
   1310nm 10km/40km(1000M)
    1550nm 60km/80km(1000M)

6 Working Environment

➢ Environment temperature: -40℃~+85℃

➢ Storage temperature: -40℃~+85℃

➢ Relevant humidity: 0~95%, no condensation

➢ MTBF: >100,000hours

7 Connecting interfaces

7.1 Connect the power connector

Industrial Ethernet switches have 5-pin or 7-pin 5.08mm pitch plug-in terminals for the machine's power input interface.

	P1	P2	P3	P4
DC	V1+	V1-	V2+	V2-
AC	AC1-L	AC1-N	AC2-L	AC2-N

Power Input definitions
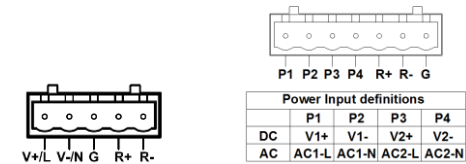
5-pin power input interface   8-pin power input interface

Table 2: Power interface pins are defined as follows:

Pin	Name	Specification
P1	The first group of DC power supplies V1+	DC power supply positive
	The first group of AC power supplies AC-L	AC power line
P2	The first group of DC	DC power supply

	power supplies V1-	negative
	The first group of AC power supplies AC-N	AC power supply null line
G	Ground	Ground
R+/R-	Alarm output	Disconnected: No alarm Closed: Alarm
Console	Console port	RJ45 console port

Note:
- ➤ Before operating the equipment power supply terminal, ensure the power cord is completely disconnected from the external power grid and the equipment is power off.
- ➤ Make sure the ground connection is well connected before the equipment is energized.
- ➤ Switch to provide two sets of voltage input, the factory can choose a group, AC or DC power supply. Two groups can not be used simultaneously.

7.2 Access mode

There are three ways to log in to the switch:

- ➤ Web browser logon
- ➤ Console connection
- ➤ Telnet logon

If the IP address of the current device is unknown, you can connect the console port of the switch to the serial port of the PC to obtain the IP address of the device. Telnet and Web browser login can be realized through Ethernet and the Internet.

7.2.1 Web logon

Enter the IP address in the browser address bar, the login dialog box appears, the user name is "admin", the initial value of the password is "123", the navigation menu appears after login, as shown in the figure:

Industrial Ethernet Switch

User Name _____
Password _____
Login

7.2.2 Console port connection

Use the Window system HyperTerminal or other software that supports serial port connection such as HTT3.3,

through the console port to access the switch.

7.2.3 Telnet Logon

Telnet login requires that the IP address of the PC and the switch be on the same network segment. In the Run dialog box, enter "telnet + IP address", enter the user name and password to log on to the Industrial Ethernet switch.

8 Technical Support

If encounter the problem in the project, please refer to the above troubleshooting. If there is still have question, please contact our service department.