Industrial Ethernet Switches User Manual

Please read the manual carefully before using

the product and keep it carefully.

1. Product Description

The industrial Ethernet switches provides excellent industrial quality, such as vibration resistance, high/low temperature, dust-proof and surge protection, through the design of fanless heat dissipation circuit, wide range working environment temperature, high protection grade and so on. Moreover, it integrates a variety of rich protocols such as routing, switching and security, which greatly improves the flexibility of networking and enhances the reliability and security of industrial networks. It can also meet the deployment requirements of rail transit, safe city, intelligent transportation, outdoor monitoring and other harsh environments.

2. Indicator Lamp and DIP

Indicator Lamp Meaning Contrast Table 1-1

Indicator Lamp		State	Meaning
P/P1/P2/PS1 /PS2/PWR	Power lamp and power supply under-voltage alarm lamp, under-voltage alarm priority is higher than power lamp	The lamp flashes uniformly in a period of 1s	The power supply of the equipment is lower than the lower limit of the input range of DC10V, indicating an under-voltage alarm
		Indicator lamp off	Power channel is not powered
		Indicator lamp on	Power channel is not powered
O/OPT	Fiber-port lamp and power supply over-voltage alarm lamp, over-voltage alarm priority is higher than fiber port link/act lamp (fiber port lamp some panels are directly marked as digital)	The lamp flashes uniformly in a period of 0.5s	The power supply of the device exceeds the upper limit of the input range of DC58V, indicating an over-pressure alarm
		Indicator lamp off	Fiber port not connected
		Indicator lamp on	Fiber port is connected
		Indicator lamp flash	Fiber port is connected and data is sent and received
A/ALM	Device alarm lamp and data transmission indicator lamp	Indicator lamp on	Device has no alarm
		Indicator lamp on	The device has alarms (Temperature alarm, LFP alarm, Dying-gasp alarm)
		When Console/RS232/RS485 has data to send, this lamp flashes according to the rhythm of data sending and receiving	

N/NMC	Management indicator lamp and data receiving indicator lamp	Indicator lamp off	No embedded module
		Indicator lamp on	Have embedded module and initializing status
		Indicator lamp flash	Have embedded module and initialization completed, into normal working mode When the console/RS232/RS4B5 has data reception, this lamp flashes according to the rhythm of data sending and receiving
RUN	Running indicator lamp	Indicator lamp on	Device works normally
		Indicator lamp off	Device is not running
		Indicator lamp flash	Device software loading
1000Mbps copper port indicator lamp	Green lamp (Active)	Indicator lamp on	Port is connected
		Indicator lamp off	Port not connected
		Indicator lamp flash	Port is connected and data is sent and received
	Yellow lamp (SPD)	Indicator lamp on	1000M is connected
		Indicator lamp off	10/100M is connected
100Mbps copper port indicator lamp	Green lamp (Active)	Indicator lamp on	Port is connected
		Indicator lamp off	Port not connected
		Indicator lamp flash	Port is connected and data is sent and received
	Yellow lamp (SPD)	Indicator lamp on	100M is connected
		Indicator lamp off	10M is connected
Reset/config button	Restore factory setup / restart		Operation method: long press (>20s)

Unmanaged DIP Switch Meaning Contrast Table 1-2

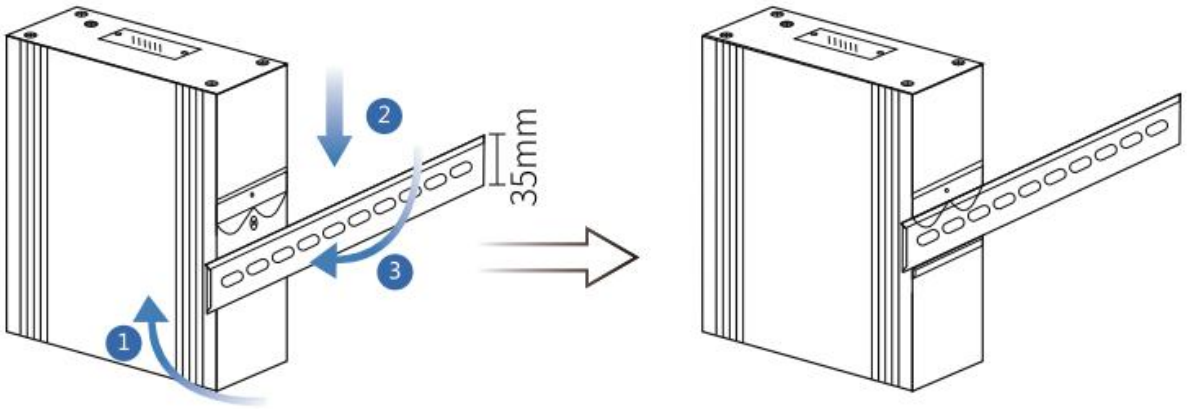
DIP Switch	Function	ON State	OFF State
Bit1(Silk-screen: LFP/(CD))	LFP	Enable remote PD reset function (LFP function is enabled when the device is 1 fiber and 1 cooper switch)	Turn off remote PD restart function (LFP function is turned off when the device is 1 fiber and 1 cooper switch)
	C/D		
Bit2(Silk-screen: LGY)	LEGACY function switch	Support standard and non-standard PD power supply	Only supply power to standard PD, does not support non-standard PD power supply
Bit3(Silk-screen: VLAN}	Port Isolation function	Enable port isolation function	Turn off port isolation function
Bit4(Silk-screen：BSR/RST)	BSR: Storm Control	Enable storm control	Turn off storm control
	RST: Remote PD Reset Every Day function	Reset the remote PD device after 24 hours	Turn off this function

3. Device Installation

Installation description:

Industrial Ethernet switch adapts DIN rail installation.

1. Tilt the device up, make the clasp on the upper end of the device buckle on the DIN rail.
2. Press down the device so that the lower end of the buckle is buckled into the DIN rail.
3. Check that whether the inspection is stable after buckle.



4. PoE Line Sequence Introduction

PoE is a technology that uses Power over Ethernet, the device supports 802.3AF and 802.3AT standards. It is required that the switching power supply should be between DC 48V and DC 58V, PoE connection should be consistent with the network cable connection, and 1,2,3 and 6 cables should be used as both data transmission and PoE power supply.

5. Power Input

Industrial Ethernet switches are dual power backup. When all two power supplies are connected, only one power supply works. When this power fails, it automatically switches to another power supply to achieve redundant protection of the power supply. The meaning of power wiring is shown in Table 1-4.

Power Supply Meaning Contrast Table 1-3

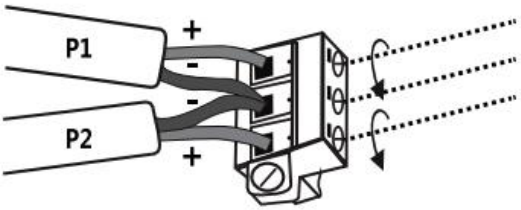
P1+	First circuit power supply positive pole
PI-	First circuit power supply negative pole

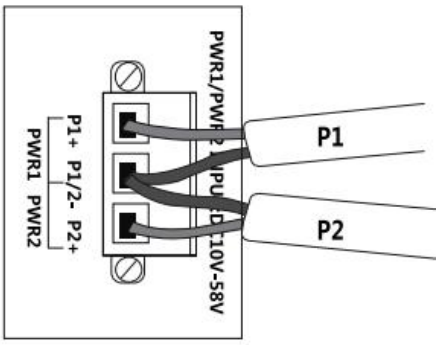
P2+	Second circuit power supply positive pole
P2-	Second circuit power supply negative pole
P1/P2-	First and second circuit share a negative pole
+	Positive pole of power supply
-	Negative pole of power supply

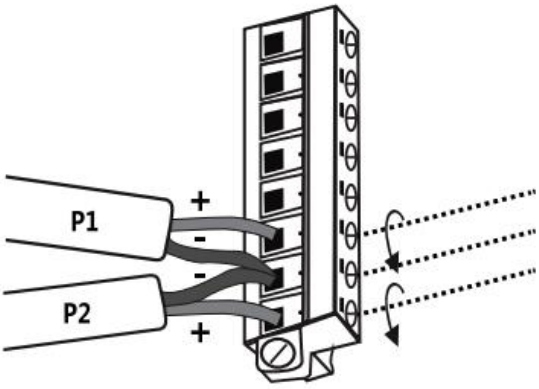
Note： Please connect the positive and negative pole according to the terminal of the Phoenix terminal and input voltage according to the voltage range. (Generally DC10-58V, based on the description of side cover) Only one power supply can work properly.

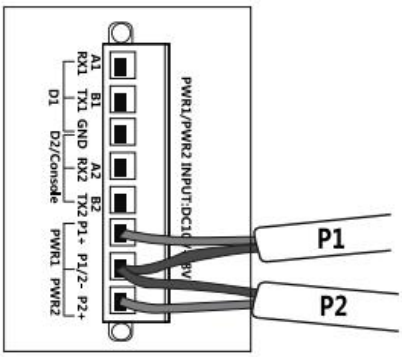
6. Power Installation

Power installation is shown as following diagram (Only for the schematic diagram, not including all panels, the wiring is based on the positive and negative pole):









7. Accessory List

Switches, Phoenix terminal, Certification, Warranty card & Instruction

8. Warranty Card

User Name	
User Address	
ZIP Code	
Contact Department	
Contacts	
Tel	
E-mail	
Product Model	
Serial Number	
Purchase Date	

9. After-sales Service Letter of Commitment

Within seven days from the date of sale, you may choose to repair, replace or return the equipment if the whole machine fails. From the 8th to the 15th day from the date of sale (subject to the purchase invoice and the certificate date of three guarantees (for repair, replace and refund), you may choose to repair or replace the whole machine if there is any performance failure. Our company promises to provide 2 years warranty time (can be added to 5 years according to the contract). The user will bear the cost of replacing the hardware if the hardware warranty period is exceeded, our company will not add other fees.

Other Service Commitments

Within one year from the data of your purchase, the 30 days form the date of the repair of the equipment can not be repaired because our company can not provide the spare parts for maintenance, or the equipment failure can not solve the problem after two repairs. Our company will replace the same type and the same specification for you free of charge. If the engineer cannot solve the problem under unusual circumstances, our service engineer will negotiate with you and return the equipment to our company for repair after receiving your consent. After the repair, the equipment will be sent back to you for free.

Following Circumstance are without Warranty

Failure or damage of equipment (including parts) under the following circumstances are not covered by

warranty.

1. The accessories supplied by other company (like power supply, adapter, etc.) are guaranteed by the manufacturer of this product.
2. The whole machine and parts have exceeded the warranty period.
3. Equipment failure or damage were not caused by repair, alteration or demolition of personnel in our company.
4. Malfunctions caused by accidental or artificial causes include failure or damage caused by improper operation, scratching, handling, moving, knocking, and inputting the appropriate voltage.
5. Failure or damage caused by the use of non genuine or unpublished software. Failures or losses caused by natural disasters, such as force majeure (such as earthquakes and fires).