1 Packing List

Please check the following items after unpacking, if any missing, please contact your local dealer.

No.	Items	Quantity
1	Switch	1 pc
2	Accessory	1 pc
3	Quick Installation Guide	1 pc

2 Safety Information

Before performing an operation, read the following operation instructions and precautions to be taken, and follow them to prevent accidents.

2.1 General Requirements

- Only qualified and skilled personnel must install, configure, and unmount the device. The device must not be disassembled.
- When operating the device, obey the local safety regulations. The safety precautions provided in the document are supplementary and shall be in compliance with the local safety regulations.
- When operating the device, in addition to the precautions (please see the notes below), follow the specific safety instructions.
- The installation and maintenance personnel need to understand the basic safety precautions to be taken.
- Do not block the ventilation while the device is running. Keep a minimum distance of 5 cm from the ventilation to the walls or the other objects that block the ventilation.
- Do not operate the device in an area that exceeds the maximum recommended ambient temperature.
- Do not place the device in the environment that has inflammable and explosive air or fog. Do not perform any operation in this environment.

2.2 Electric Safety

- Connect the unit only to DC power source that complies with the safety extra-low voltage (SELV) requirements in IEC62368-1 based safety standards.
- Before touching the device or hand-operating parts, wear a grounded electrostatic discharge (ESD) wrist strap. It can prevent the sensitive components from damage by the static electricity in the human body.

2.3 Optical Safety

- When handling optical fibers, do not stand close to, or look at the optical fiber outlet directly with unaided eyes.
- Cutting and splicing fibers must be performed by the trained personnel only.
- Before cutting or splicing a fiber, ensure the fiber is disconnected from the optical source. After disconnecting the fiber, use protecting caps to protect all the optical connectors.

3 Product Introduction

3.1 Overview

This product is Industrial 4-Port Gigabit PoE++ 4-Port Gigabit PoE+ 2-Port 10G SFP+ 2-Port 1G/2.5G SFP L2 Managed Ethernet Switch.
This switch provides 8 Gigabit Ethernet RJ-45 ports, 2*10G SFP+ ports and 2*1G/2.5G SFP ports. It meets IEEE 802.3af/at/bt standard. All RJ-45 ports support Power-over-Ethernet, 1~4 ports deliver up to 90W (PoE++) power per port, 5~8 ports deliver up to 30W (PoE+) power per port. The switch supports the Q-PoE (Quick PoE) technology, which enables PoE power supply immediately upon switch startup without waiting for switch system software control. The switch supports the P-PoE (Perpetual PoE) technology, which enables PoE power supply without interruption when switch is restarting and restores network quickly.
The switch has extensive L2 management functions, such as 802.1Q VLAN, 802.1p QoS, SNMP, Fast-Ring, ERPS and PoE control. It can be easily managed via a WEB GUI (http/https), CLI (telnet/ssh/console) or SNMP.

3.2 Hardware Introduction

Front Panel

Side Panel
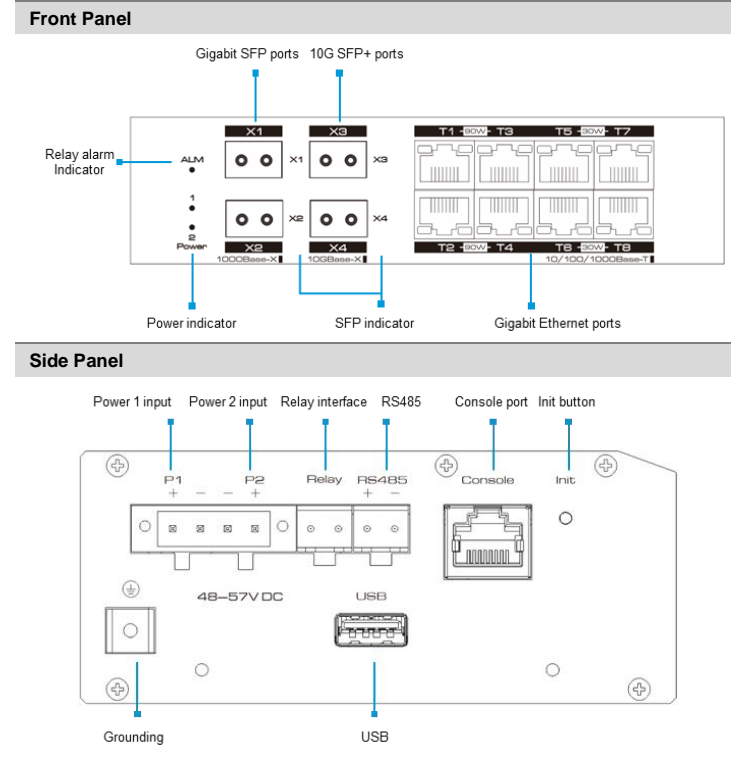
LED Indicators

Indicators		Status	Descriptions
P1,P2	Indicator of Power	Red	Power is on.
		Off	Power is off.
X1~X4	Indicator of SFP	Green	SFP is linked
		Off	SFP is not linked

Console Port

The device contains a RJ-45 interface as the console port for local management interface. For the console port, a standard RJ-45 connector is used. Use a RS-232 cable (Sub-D9 to RJ-45) to connect the console port with the COM port of a PC.

See the default configuration in chapter "6 Factory Settings".

Init Button

The init button has two operating modes.

- By short pressing the button, the switch will be reset and the configuration is as previous setting saved.
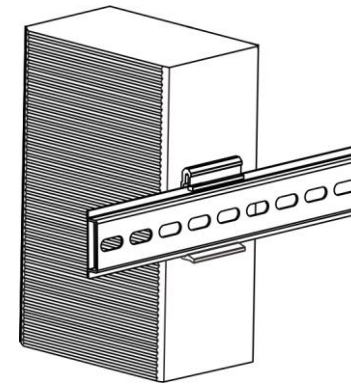- By pressing the button over 5s, the switch will be restored to the original factory default setting.

4 Installations

The switch supports DIN-rail installation.

Dimensions (mm)

Switch

The DIN-rail hanger is fixed on the switch at the factory. Please install the
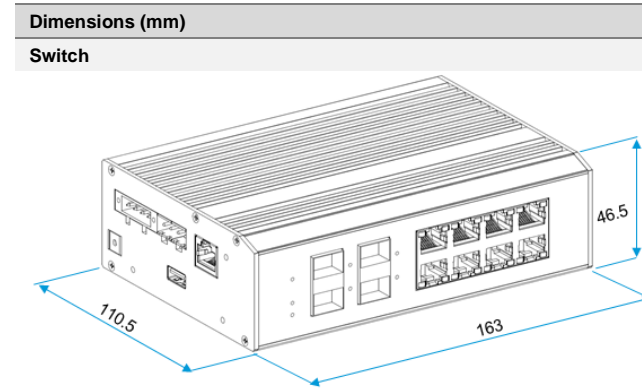
switch to the DIN rail directly.

Install the switch to the DIN rail.

5 Connect the Power Supply

Note:

The equipment is intended to be grounded to comply with emission and immunity requirements. Ensure that the switch functional ground screw is connected to earth ground during normal use.

Use one end of GND cable to connect the M3 grounding connector of the switch, the other end to a ground point. The GND of the switch is shorted to the copper protection ground bar provided by the user. The GND cable used is recommended to be plastic insulating one with copper core, with cross-sectional area greater than 1.5mm².

Ground the switch housing
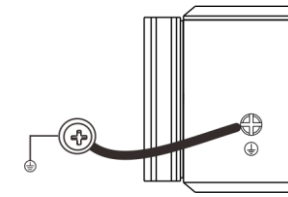
The switch is powered by a 48~57V DC power connection. It supports redundant power supply.

It is possible to connect a second power source using the same voltage with the redundant power supply port. If one source fails, the alternative source takes over the power supply without interruption.

5.1 48~57V DC Supply

The power supply connectors are equipped with 4-pin plug connectors. Please observe the polarity.

Use DC power cable to connect positive/negative wires of DC power separately to the "+" and "-" power terminals, using a screw driver to screwing stably. Connect the main supply to the building's power supply network.

Connect DC power to the DC Power Connector
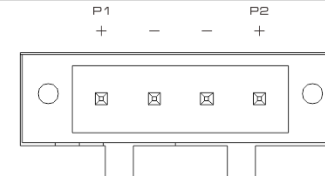
Please observe the following specifications:

Items	Specifications
Wire range	24~12AWG
Solid wire (AWG)	24~12
Stranded wire (AWG)	24~12
Torque	0.4Nm (3.5Lb.in)

5.2 Starting Up

After connection to the power supply, the switch starts automatically and is ready for operation after approx. 90 s.
LED indicators "P1" or "P2" turns green.

Note:

To switch off the device, always disconnect both the main and redundant power supply.

6 Factory Settings

Note:

Please note that the factory settings may change with future firmware versions. For this reason we recommend that you check the release notes for information about any changes to the factory settings before carrying out a firmware update.

The switch starts with its factory settings:

Items	Specifications
Management Interfaces	
Console Port (Sub-D9 to RJ-45)	Enabled Baud rate: 115200 bit/s Flow control: No flow control Parity: No parity check Stop bits: 1 Data bits: 8
SSH	Enabled
Telnet	Enabled
SNMP	Enabled
Web Manager	Enabled
User level	User: admin Password: admin Access privilege: 15 (Full access rights, This user can adjust all settings of the switch.)
IP Configuration	
Default static IP address	192.168.1.200
Default subnet mask	255.255.255.0

7 Access Network Management

After starting up successfully, connect the switch to your local network segment using a suitable cable to access the switch network management system. For details, please refer to one of the following documents:

- Web Configuration Guide

Describes Web network management system configuration instructions.

- CLI Configuration Guide
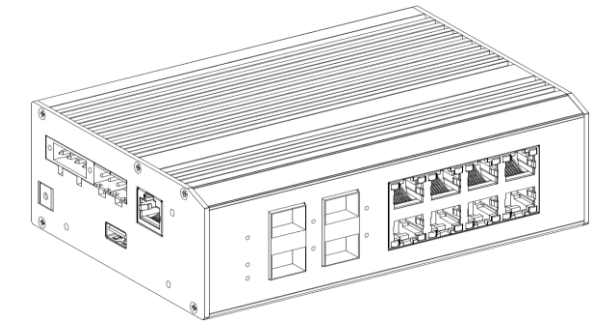
Describes CLI-based configuration instructions.

8 Specifications

Items	Specifications
Hardware Specifications	
Ethernet Ports	4*10/100/1000 Base-T PoE++ RJ-45 4*10/100/1000 Base-T PoE+ RJ-45 2*1G/2.5G or 10G Base-X SFP+ 2*1G/2.5G Base-X SFP
Management Ports	1*RJ-45 Console 1*Relay 1*RS485
Serial Port	RS-485 signal: D+, D- Check bit: None, Even, Odd, Space, Mark Data bit: 5 bit, 6 bit, 7 bit, 8bit Stop bit: 1bit, 1.5 bit, 2 bit Baud rate: 300~115200bps Load capacity: RS-485 port supports 32-point polling environment(128-point could be customized) Direction control: RS-485 adopts automatic data flow control technology
USB Port	USB3.0
Init Button	Short press to restart the switch Long press >5s to initialize the system
Led Indicators	2*Power supply indicators, 1*Alarm indicator, 2* SFP+ port indicators, 2*SFP port indicators
Cable	Cat5 or better
Dimensions (W*D*H)	163mm*110.5mm*46.5mm
Net Weight	0.82kg
Input Voltage	Power 1 (Main): 48~57V DC Power 2 (Backup): 48~57V DC
Power Consumption	≤370W(Full load, include PoE)

Installation	DIN-rail/wall mounted/desktop
Material	Metal shell
Switch Property	
Forwarding Modes	Store and Forward
Switching Capacity	66Gbps/non-blocking
Packet Forwarding Rate	49.1Mpps
MAC Table	16k, supported auto learning
Port Buffer	1Mbit
Jumbo Frame	9kB
PoE	
PoE Power Supply Type	End-span
PoE Standard	IEEE 802.3af/at/bt
PoE Pin Assignment	1~4 ports: 3/6/4/5(+), 1/2/7/8(-); 5~8 ports: 1/2(+), 3/6(-)
PoE Budget	1~4 ports: 90W, 5~8 ports: 30W 360W max for whole switch
Environments	
Surge protection	IEC61000-4-5,Power Port: 4kV; Data Port: 6kV
ESD	IEC61000-4-2,Level 3: Contact Discharge: 6kV, Air Discharge: 8kV
Operating	Temperature: -40°C~75°C Relative Humidity: 5%~95% (Non-condensation)
Storage	Temperature: -40°C~85°C Relative Humidity: 5%~95% (Non-condensation)

Industrial 4-Port Gigabit PoE++ 4-Port Gigabit PoE+ 2-Port 10G SFP+ 2-Port 1G/2.5G SFP L2 Managed Ethernet Switch

Quick Installation Guide