

2.5 Connecting the Switch to Network

Connect to Network

This Managed Industrial PoE Gigabit Ethernet Switch has 4 uplink ports (SFP) and 8 downlink 10/100/1000Mbps RJ-45 ports for you to implement it in your Industrial PoE environment. These 4 SFP ports can be plugged with 100Base-FX or 1000Base-X SFP Fiber transceiver. All RJ-45 ports can be plugged with 10/100/1000Base-T UTP cable. The connection of the fiber port must be matched, i.e. Transmitter to Receiver, and vice versa.

2.6 Installing and Removing SFP Modules

2.6.1 Installing SFP Modules

To connect the fiber transceiver and LC cable, use the following guidelines:

1. Position the SFP transceiver with the handle on top.
2. Locate the triangular marking in the slot and align it with the bottom of the transceiver.
3. Insert the SFP transceiver into the slot until it clicks into place.
4. Make sure the module is seated correctly before sliding the module into the slot. A click sounds when it is locked in place.

Note: If you are attaching fiber optic cables to the transceiver, continue with the following step. Otherwise, repeat the previous steps to install the remaining SFP transceivers in the device.

1. Remove the protective plug from the SFP transceiver.

Note: Do not remove the dust plug from the transceiver if you are not installing the fiber optic cable at this time. The dust plug protects hardware from dust contamination.

2. Insert the fiber cable into the transceiver. The connector snaps into place and locks.
3. Repeat the previous procedures to install any additional SFP transceivers in the switch. The fiber port is now set up.

2.6.2 Removing SFP Modules

To disconnect an LC connector, use the following guidelines:

1. Press down and hold the locking clips on the upper side of the optic cable.
2. Pull the optic cable out to release it from the transceiver.
3. Hold the handle on the transceiver and pull the transceiver out of the slot.

2.7 Connecting the Switch to Console Port

The industrial switch supports a secondary means of management. By connecting the RJ45 to RS232 serial cable between a COM port on your PC (9-pin D-sub female) and the switch's RJ45 (RJ45) port, a wired connection for management can be established.



Operation

A built-in management module of the Managed Industrial PoE Gigabit Ethernet Switch provides users flexible interfaces to configure, control and monitor the system remotely and locally. To know the further information about the operation of this switch, please refer to IPS-3112-PoE++ Network Management User's Manual for the detailed management functions and required installation and operation procedures.

3.1 Network Management

The following is a list of management options available in this Managed Industrial PoE Gigabit Ethernet Switch:

- Local Console Management
- Telnet Management
- SNMP Management
- Web Management

Local Console Management

Users may connect a Terminal or PC running the Terminal Emulation program (such as Putty or Tera Term) with the following serial console port settings, to the Managed Switch console port directly via RS-232 cable to configure , control and monitor the system. This is often referred to as Out-Of-Band management.

Baud rate:	9600
Data bits:	8
Parity:	none
Stop bits:	1
Flow control:	none

Console management is useful when there is no network connection to the Switch, for instance configuring the Managed Switch for the first time.

Telnet Management

Telnet is done through the network. Once there is a network connection to the Managed Switch, users can use Telnet to configure, control and monitor the system. Using the network connection to

manage is often referred to as In-Band-Management.

SNMP Management

SNMP is also In-Band-Management and requires a network connection to the Managed Switch. The Managed Switch private Management Information Bases (MIB) is provided for SNMP-based network management program to configure, control and monitor the system.

Web Management

Web Management is done over the network. Once the Managed Switch is available on the network, you can login and monitor the status of it through a web browser remotely or locally. Local console-type Web management, especially for the first time use of the Managed Switch to set up the needed IP, can also be done through one of the 10/100/1000Base-T 8-pin RJ-45 ports located on the front panel of the Managed Switch. Direct RJ-45 LAN cable connection between a PC and the Managed Switch is required for this management.

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Maintenance

This Managed Industrial PoE Gigabit Ethernet Switch is easy to maintain. The procedures are suggested when you would like to identify faults, perform hardware replacement and do the firmware upgrade.

4.1 Fault Identification

Identifying faults can greatly reduce the time required to find problem and solution. Users may perform local check or remote check to find the problems.

4.1.1 Local Check

Users can perform local check by observing LED indicators status or check system setup and configuration through console connection.

- When the whole system fails to function,
 1. Check Power LED status
 2. Check Power connection
 3. Reset power
- When certain network link fails to function,
 1. Locate the port of the switch
 2. Check LINK/ACT LED of the port
 3. Check Status LED of the port
 4. Check cable connection between the port and the connected device
 5. Reset power
- When local Console fails to function,
 1. Check COM LED status
 2. Check Console port connection
 3. Check Console configuration
 4. Reset power

4.1.2 Remote Check

Users may check the Managed Industrial PoE Gigabit Ethernet Switch through SNMP manager remotely. For detailed procedures, please refer to the Network Management User's Manual.

4.2 Hardware Replacement Procedures



WARNING!

The Managed Switch contains no user-serviceable parts. DO NOT, UNDER ANY CIRCUMSTANCES, open and attempt to repair it.

Failure to observe this warning could result in personal injury or death from electrical shock.

Failure to observe the above warning will immediately void any Warranty.

4.3 Firmware Upgrade

This Managed Industrial PoE Gigabit Ethernet Switch may perform the firmware upgrade when required. The latest firmware can be obtained from your sales representative. For the detailed upgrade procedures, please refer to IPS-3112-PoE++ Network Management User's Manual.



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