



IPS-5112
IPS-5112-8BT
8 x 1000/100/10Base-T RJ-45
4 x 10/1GBase-X SFP+
Managed Industrial PoE Switch

User's Guide

Version: 1.0

Revision History

Version	Date	Changes
1.0	2026/9/8	First release.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

CE Mark Warning

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About this manual

In this user's guide, it will not only clearly introduce CTS IPS-5112 and IPS-5112-8BT Managed Industrial PoE Switch but tell you how to install this Switch with detailed instructions.

Organization of the Manual

- Chapter 1 "Introduction" describes the features of the Managed Industrial PoE Switch
- Chapter 2 "Installing the Managed Industrial PoE Switch"
- Chapter 3 "Operation"
- Chapter 4 "Maintenance"

1

Introduction

CTS's Managed Industrial Switch is designed to meet the emerging FTTX & Metro Ethernet requirements at the industrial environment. When massive fiber ports need to be deployed, this managed switch series provide the best performance and price ratio.

1.1 Overview of the IPS-5112 and IPS-5112-8BT

The IPS-5112 and IPS-5112-8BT are Managed Industrial PoE Switches, each featuring 8 x 10/100/1000Base-T PoE RJ-45 ports and 4 x 10/1GBase-X SFP+ slots on the front panel. The IPS-5112 supports up to 30W PoE output per port (IEEE 802.3af/at), while the IPS-5112-8BT extends this to 90W per port with IEEE 802.3bt support, making it ideal for high-power devices such as PTZ cameras and Wi-Fi 6 access points. Both models are designed to address the growing demands of Gigabit Ethernet deployments in industrial PoE applications that require a wide operating temperature range (−40°C to 75°C). These Managed Industrial PoE Switches deliver high performance with a non-blocking switching fabric of 96 Gbps and store-and-forward switching capability, along with advanced features such as QoS, VLAN, Spanning Tree, LACP, and Fast Ring redundancy.

LED indicators on the front panel allow users to effortlessly monitor power status, system health, ring redundancy state, and per-port link, activity, speed, and PoE status. The built-in management module enables users to configure, control, and monitor the system locally via console or remotely via an SNMP-based management system, HTTPS web GUI, or SSH CLI.

In harsh environments, the IPS-5112 and IPS-5112-8BT provide a reliable solution for delivering power and data over Ethernet to connected devices. With dual DC power inputs, users can maintain network continuity even in the event of an unexpected power source failure. Both models can also be deployed as stand-alone switches and are easily mounted on a DIN rail at industrial sites.

1.2 Key Features

■ Interface

Fiber Port

- 4 x 10/1GBase-X SFP+

RJ-45 Port

- 8 x 1000/100/10Base-T RJ-45 with IEEE 802.3af/at/bt PoE injector (**IPS-5112-8BT**)
- 8 x 1000/100/10Base-T RJ-45 with IEEE 802.3af/at PoE injector (**IPS-5112**)

Console Port

- 1 x RS-232 to RJ-45 Serial Port

Terminal Block

- 1 x Digital Output (Alarm Relay)
Relay output with current carrying capacity of 1A @ 24 VDC

Standards

- IEEE 802.3ae 10GBase-R
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X
- IEEE 802.3u 100Base-TX
- IEEE 802.3 10Base-T
- IEEE 802.3x Flow Control
- IEEE 802.3ad LACP
- IEEE 802.1ab LLDP
- IEEE 802.1p Priority
- IEEE 802.1q Tag VLAN
- IEEE 802.1d STP
- IEEE 802.1w RSTP
- IEEE 802.1x Port-Based Network Access Control
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet +
- IEEE 802.3bt Power over Ethernet ++ (**IPS-5112-8BT Only**)
- ITU-T G.8032 Ethernet Ring Protection Switching *

■ H/W Specification

- MAC Address Table: 16K
- Non-Blocking Switching Fabric: 96Gbps
- Throughput @ 64Bytes: 71.4Mpps
- Packet Buffer: 1.5 MB
- Jumbo Frame: 12 KB
- Store and Forward Switching Mechanism
- Auto-Cross Over for MDI/MDIX in TP Ports
- Auto-Negotiation in TP Ports
- Full/Half Duplex Mode Operation

■ LED

- P1, P2, STA, ALM, Ring, Ring Master, COM, Link/Act/Speed, PoE

■ Forward/Filter Rate

- 10G Port: 14.88 Mpps (14,880,952 pps)
- 1G Port: 1.488 Mpps (1,488,095 pps)

- 100M Port: 0.1488 Mpps (148,810 pps)
- 10M Port: 0.01488 Mpps (14,881 pps)

■ Power over Ethernet

- Total PoE Power Budget: 300W (IPS-5112-8BT), 240W (IPS-5112)
- Max. PoE output (per port): 90W (IPS-5112-8BT), 30W (IPS-5112)

■ Layer 2 Switch Features

Port Management

- State, Description, Media Type, Port Type, Speed, Duplex and Flow Control

Network Redundancy

- STP (Spanning Tree Protocol)
- RSTP (Rapid Spanning Tree Protocol)
- MSTP (Multiple Spanning Tree Protocol)
- Fast Ring v2/Chain Redundancy Protocols
- Static Port Trunking / Dynamic LACP Trunk
 - Up to 6 Aggregation Groups, Max 8 Ports per Group
- ERPS *

VLAN

- IEEE 802.1q VLAN
- VLAN ID: 4094 IDs
- VLAN Concurrent Groups: 4K VLAN Groups
- Port-Based VLAN
- VLAN Translation
- Q-in-Q Double tag with Configurable Ether Type
- Selective Q-in-Q

QoS

- QoS based on 802.1p CoS and DSCP
- Scheduling Algorithm
 - Weighted Round Robin (WRR)
 - Strict Priority Queuing (SPQ)
- QoS Priority Queues: 8 Queues
- 802.1p P-bit & DSCP Remarking
- Port-Based Rate Limit (Ingress/Egress)

Multicast

- IGMP Snooping v1/v2/v3
- MLD Snooping v1/v2
- IGMP/MLD Fast Leave and Querier
- IGMP/MLD Snooping Group: 512/128 Groups
- IP Multicast Filter with Segment and Profile
- Static Multicast Group
- Multicast VLAN Registration (MVR)

IPv6 Feature

- IPv6 Over Ethernet (RFC 2464)
- IPv6 Addressing Architecture (RFC 4291)
- IPv6 Dual Stack (RFC 4213)
- ICMPv6 (RFC 4884)
- Path MTU Discovery for IPv6 (RFC 1981)
- Neighbour Discovery (RFC 4861)
- DHCPv6 Client

Layer 2 Protocol Tunnelling

- CDP, LLDP, STP, VTP, LACP, PAgP, UDLD

Introduction

Access Control List

- Physical Port, Ether Type, MAC Address, VID, ToS/Traffic Class, Protocol Type, L4 Port and IP Address
- ACL Entries (IPv4: 64 Entries; IPv6: 32 Entries)

■ **Security**

- 802.1x RADIUS Authentication
 - 802.1x Port Base Access Control
 - 802.1x MAC Authentication Bypass (MAB)
 - RADIUS-Assigned VLAN with Fallback Support
- RADIUS/TACACS+ Authentication for login username/password
- DHCP Snooping and DHCP Server Trust Port
- DHCP Snooping Relay Agent
 - DHCPv4 Option 82 with Configurable circuit and Remote ID
 - DHCPv6 Option 37/18 with Configurable interface and Remote ID
- IP Source Binding
- IP Source Guard
- Port Isolation
- Port Link Flap
- Port Linkup Delay
- Storm Control (Unknown Unicast/Multicast, Broadcast)
- MAC Limiter
- Loop Detection

■ **LED**

- P1, P2, STA, ALM, Ring, Ring Master, COM, Link/Act/Speed, PoE

■ **Security**

- Web: HTTP/HTTPS (TLS 1.3)
- CLI: Console/Telnet/SSH v2
- SNMP: v1, v2c, v3 (Traps supported)
- SNTP with Daylight Saving Time
- Layer 2 Control Protocol Filter
- LLDP

Upgrade/Restore

- Firmware Upgrade/Downgrade
 - HTTP/HTTPS/FTP/TFTP
 - DHCP Auto-provision via DHCPv4 Option 60/43 & DHCPv6 Option 16/17
- Configuration Upload/Backup
 - HTTP/HTTPS/FTP/TFTP
 - DHCP Auto-provision via DHCPv4 Option 60/43 & DHCPv6 Option 16/17
- Auto configure backup
 - FTP/TFTP

■ **PoE Management**

- Configurable total PoE budget
- System/per port PoE off/on by schedule/manually
- PoE Usage Alarm Threshold
- PoE Inline Mode Auto, Fix, Force
- PoE Priority Critical/High/Low
- PoE Consumption History

■ Maintenance**Diagnostics**

- Port Mirror
- ICMP Ping, Traceroute
- Event Log
- Port Link Flap Log
- Syslog
- SFP SFF-8472 DDMI Monitor
 - Temp/Voltage/TX Bias/TX Power/RX Power
- CPU Temperature/Utilization
- Memory Statistics
- System Voltage
- Digital Output
 - Event Trigger (Power 1/2 Down, Port Down)
- Cable Diagnostic

■ Power Requirement

- Dual DC Input: 48~57 VDC ** (4-pin removable terminal block)

Power Consumption

IPS-5112-8BT: full-load $\leq$ 315W (1075 BTU/h)

IPS-5112: full-load $\leq$ 255W (870 BTU/h)

■ Environmental Condition

- Operation: -40°C ~ 75°C
- Storage: -40°C ~ 85°C
- Humidity: 5% ~ 90%, Non-condensing

■ Dimension & Weight

- Size: 85.5 x 110 x 135 mm (W x D x H)
- Weight: 1.54 Kg
- Housing: Aluminium, IP30

■ Standards and Certifications**CE/FCC Class A**

- Safety: EN/IEC 62368-1
- EMC: EN 55032 / EN 55035

UKCA/RCM**RoHS 2.0**

* Coming soon

** > 50VDC for 802.3at PoE+ and > 52VDC for 802.3bt PoE++ output recommended

1.3 Appearance

1.3.1 Front and Rear Panels

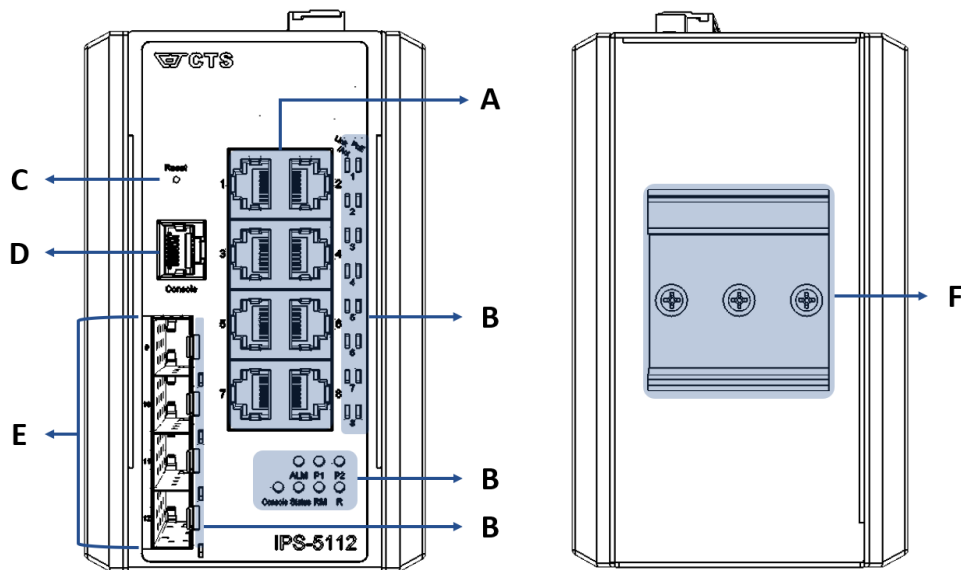


Figure 1-1. Front and Rear Panels of IPS-5112 Series

The interfaces on the front and rear panels of the Managed Industrial PoE Switch are described below:

A. 8 x 1000/100/10Base-T RJ-45 Ports (Ports 1-8)

- 8 x 1000/100/10Base-T RJ-45 with IEEE 802.3af/at PoE injector, up to 30W PoE output (IPS-5112), or
- 8 x 1000/100/10Base-T RJ-45 with IEEE 802.3af/at/bt PoE injector, up to 90W PoE output (IPS-5112-8BT)

B. LEDs :

- Includes Power LEDs of P1 and P2, STA Status LED, ALM LED, COM LED, RM LED, Ring LED, Link/Act LEDs of 1~12 ports and PoE LEDs of 1~8 ports. For more details on LEDs description, please refer to [Section 1.4 LED Definitions](#).

C. Reset Button :

- Press the reset button for 5~10 seconds, then release it to restart the system.
- Press the reset button for more than 10 seconds, then release it to reset the Managed Switch. The settings will be back to the factory defaults and restart the system.

D. Console Port (RJ-45 to RS-232) :

- An asynchronous serial console port supports the RS-232 electrical specification. The console port can be used to manage the device, and the serial console port settings should be configured as 9600, 8, n, 1.

E. 4 x 10G/1GBase-X SFP+ Ports (Ports 9-12)

F. Din-Rail Metal Spring (For more information, please refer to [Section 2.3.1](#))

1.3.2 Top Panel

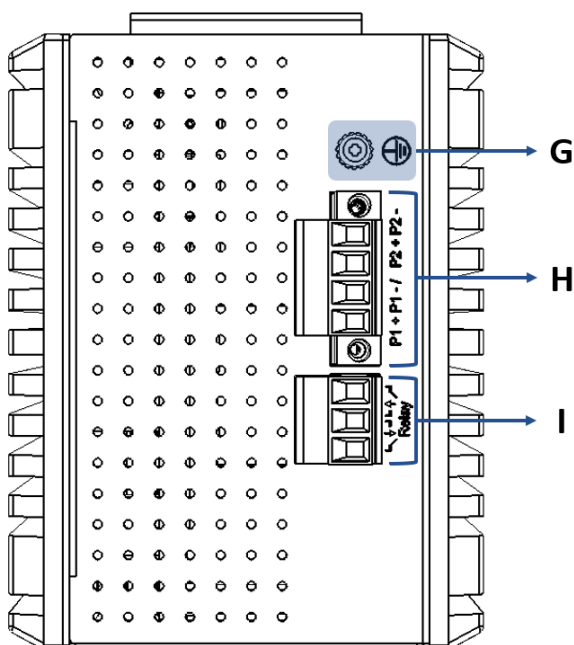


Figure 1-2. Top Panel of IPS-5112 Series

The interfaces on the top panel of the Managed Industrial PoE Switch are described below:

- G. Ground Screw** (For more information, please refer to [Section 2.3.2](#))
- H. Terminal Block for Power Supply** (For more information, please refer to [Section 2.4](#))
- I. Digital Output for Relay Alarm** (For more information, please refer to [Section 2.4](#))

1.4 LED Definitions

The real-time operational status can be monitored through a set of LED indicators located on the front panel.

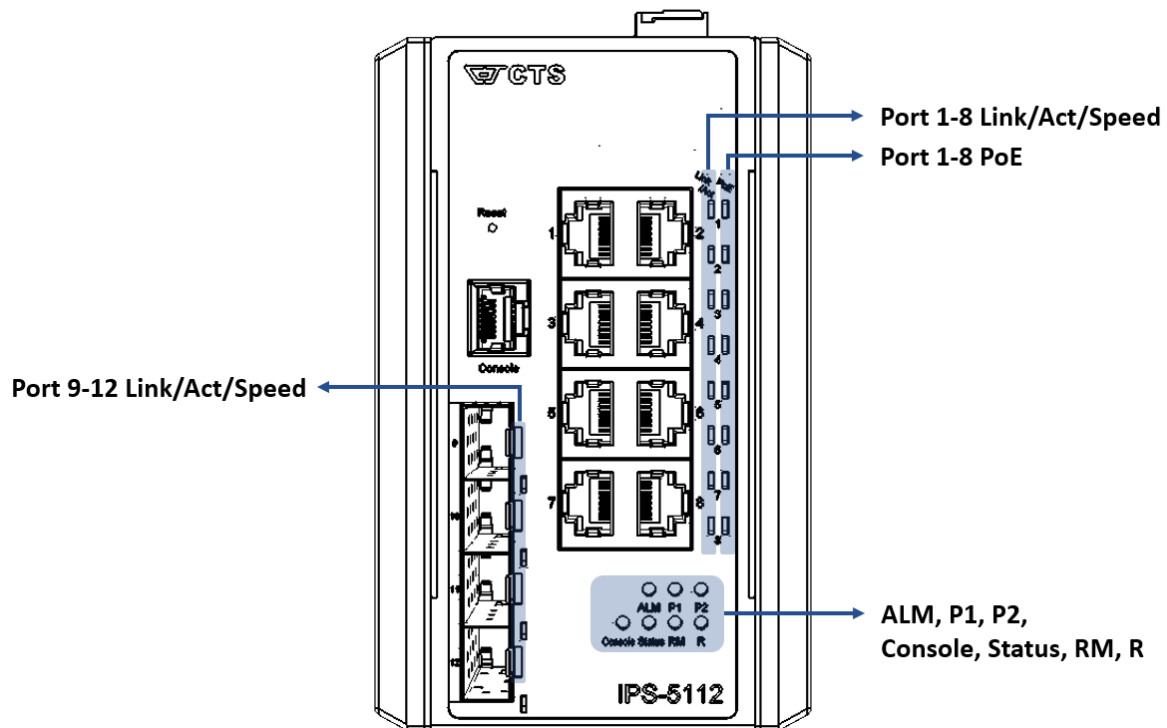


Figure 1-3. LEDs of IPS-5112 Series

LED	Color	Operation
P1 (Power 1)	OFF	Device is powered down or works abnormally.
	Green	Lit when this power is in normal operation.
P2 (Power 2)	OFF	Device is powered down or works abnormally.
	Green	Lit when this power is in normal operation.
Status (System Status)	Green	Lit when the system is working normally.
	Orange	Lit when the device is currently booting up. *Press the reset button for more than 5 seconds until the STA LED lights up in orange, then release it to restart the system. Blinks when the device is resetting to default settings. *Press the reset button for more than 10 seconds, then release it to reset the system. The system will restart with default settings.
ALM (Alarm)	OFF	All power supplies (single or redundant) are functioning normally.
	Red	One of the redundant power supplies has failed / is down.

R (Fast Redundancy)	OFF	All groups are disabled.
	Green	Lit when all Ring port of the enabled fast redundancy group(s) are functioning normally, with no connection failure.
		Blinks when the Ring port of another device in the enabled fast redundancy group(s) experiences a connection failure.
	Orange	Blinks when the Ring port of this device in the enabled fast redundancy group(s) experiences a connection failure.
RM (Ring Master, Chain Head/Tail)	OFF	This device and all of its port in enabled fast redundancy group(s) are set to the following options: 1. Ring Protocol, Role: Slave 2. Chain Protocol, Port Role: Member
	Green	Lit when this device or any of its port in enabled fast redundancy group(s) is set to the following options: 1. Ring Protocol, Role: Master 2. Chain Protocol, Port Role: Head/Tail
COM	OFF	Either the console port is not activated or no session exists.
	Green	Lit when the console port is activated and the session exists.
Link/ACT/Speed (1~8 Ports)	OFF	No connection exists.
	Orange	Lit when 10/100Mbps link is established.
		Blinking when the port is receiving or transmitting data at the speed of 10/100Mbps.
	Green	Lit when 1000Mbps link is established.
		Quick blinking when the port is receiving or transmitting data at the speed of 1000Mbps. Slowly blinking every second when a loop is detected while Loop Detection is enabled
Link/ACT/Speed (9~12 Ports)	OFF	No connection exists.
	Green	Lit when 1Gbps link is established.
		Blinking when the port is receiving or transmitting data at the speed of 1Gbps.
	Blue	Lit when 10Gbps link is established.
		Quick blinking when the port is receiving or transmitting data at the speed of 10Gbps. Slowly blinking every second when a loop is detected while Loop Detection is enabled

Introduction

PoE * (1~8 Ports)	OFF	The connected device is not a PoE Powered Device, or the port is not delivering power.
	Green	Lit when the port is delivering power under the following conditions. (1) Auto mode: a single PD of class 0~4 is detected. (2) Force mode: the output is $\leq 30W$. (3) Fixed mode: the output is $\leq 30W$.
		Blinks when the port has output issue in one of the above conditions, such as: over per port budget, over total PoE budget, etc.
	Orange	Lit when the port is delivering power under the following conditions. (1) Auto mode: a single PD of class 5~8, or dual PDs, is detected. (2) Force mode: the output is $> 30W$. (3) Fixed mode: the output is $> 30W$.
		Blinks when the port has output issue in one of the above conditions, such as: over per port budget, over total PoE budget, etc.

** The orange PoE LED is only shown on the IPS-5112-8BT, as the IPS-5112 supports up to 30W output only.*

1.5 Cable Specifications

The following table contains various cable specifications for the Managed Industrial PoE Switch. Please make sure that you use the proper cable when connecting the Switch.

Cable Type	Description
10Base-T	UTP Category 3, 4, 5 (100 meters max.) EIA/TIA- 568 150-ohm STP (100 meters max.)
100Base-TX	UTP Cat. 5 (100 meters max.) EIA/TIA-568 150-ohm STP (100 meters max.)
1000Base-T	UTP Cat. 5e (100 meters max.) UTP Cat. 5 (100 meters max.) EIA/TIA-568B 150-ohm STP (100 meters max.)
1000BASE-SX	Multi-mode fiber module (550m)
1000BASE-LX	Single-mode fiber module (10km)
1000BASE-LH	Single-mode fiber module (30km/50km)
1000BASE-ZX	Single-mode fiber module (80km)
SFP Transceiver	SFP Transceiver for 1000BASE-SX Multi-mode fiber module (550m) SFP Transceiver for 1000BASE-LX Single-mode fiber module (10km) SFP Transceiver for 1000BASE-LH Single-mode fiber module (30km/50km) SFP Transceiver for 1000BASE-ZX Single-mode fiber module (80km)
10GBASE-SR	Multi-mode fiber module (26m or 400m)
10GBASE-LR	Single-mode fiber module (10km)
10GBASE-ER	Single-mode fiber module (40km)
10GBASE-LRM	Multi-mode fiber module (220m)

Installation

To properly install the Managed Industrial PoE Switch, please follow the procedures listed below. These procedures will be respectively described in detail in the following sections.

- Installation Requirements
- Checking the Package Contents
- Installing the Managed Industrial PoE Switch
- Grounding the Managed Industrial PoE Switch
- Powering on the Managed Industrial PoE Switch
- Connecting the Managed Industrial PoE Switch to the Network
- Installing and Removing SFP/SFP+ Modules
- Connecting the Switch to Console Port

2.1 Installation Requirements



ATTENTION

Be sure to power off before installing or wiring your Managed Industrial PoE Switch.

Be sure to calculate the maximum possible current in each power wire and common wire. If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

Be sure to read and follow important guidelines as below:

- Do not run signal or communications wiring and power wiring through the same wire conduit. Wires with different signal characteristics should be routed separately to avoid interference.
- It is recommended that wiring which shares similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separate and label the wiring to all devices in the system if necessary.

Basic installation requirements:

- Environmental conditions
 - Proper ventilation
 - Proper isolation to electrical noise, radio, etc.
- Required SFP+/SFP transceiver

2.2 Checking the Package Contents

Unpack the package carefully and check the package contents. The standard package should contain the following items:

- Managed Industrial PoE Switch x 1
- Quick Guide x 1
- Safety Instruction x 1
- DIN-Rail mounting bracket x 1 (locked on the Switch)

Note: If any of the above items is found missing or damaged, please contact your local sales representative for support or replacement.

2.3 Installing the Managed Industrial PoE Switch



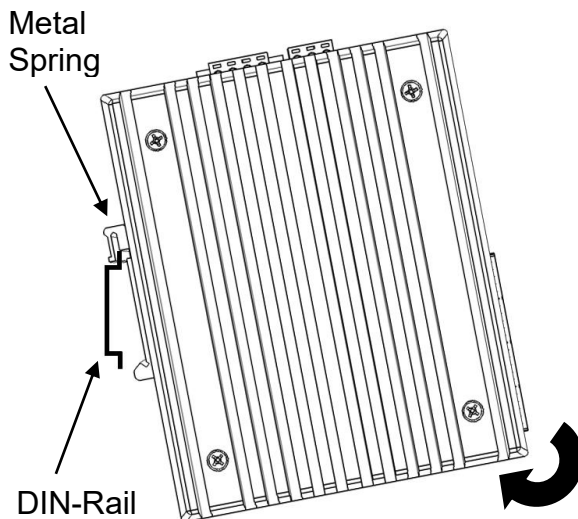
ATTENTION

This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

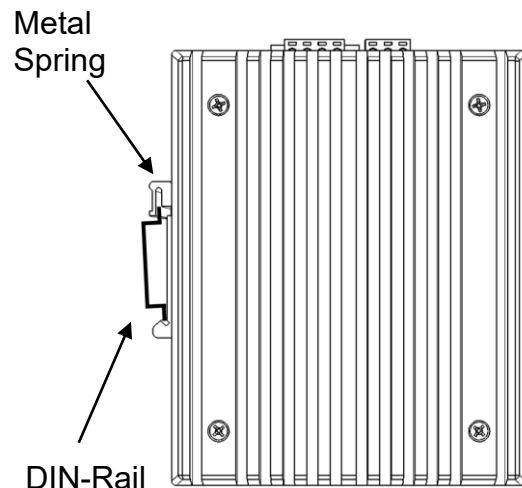
2.3.1 DIN-Rail Installation

Just follow the steps below to complete the DIN-Rail installation for your IPS-5112-8BT or IPS-5112 if needed.

STEP 1 : Insert the top of the DIN-Rail into the slot just below the metal spring



STEP 2 : The DIN-Rail attachment unit will be snapped into place as shown



2.3.2 Grounding the Managed Industrial PoE Switch

Grounding helps to limit the effects of noise due to electromagnetic interference (EMI). Be sure to install the ground connection from the ground screw to the grounding surface before connecting devices.

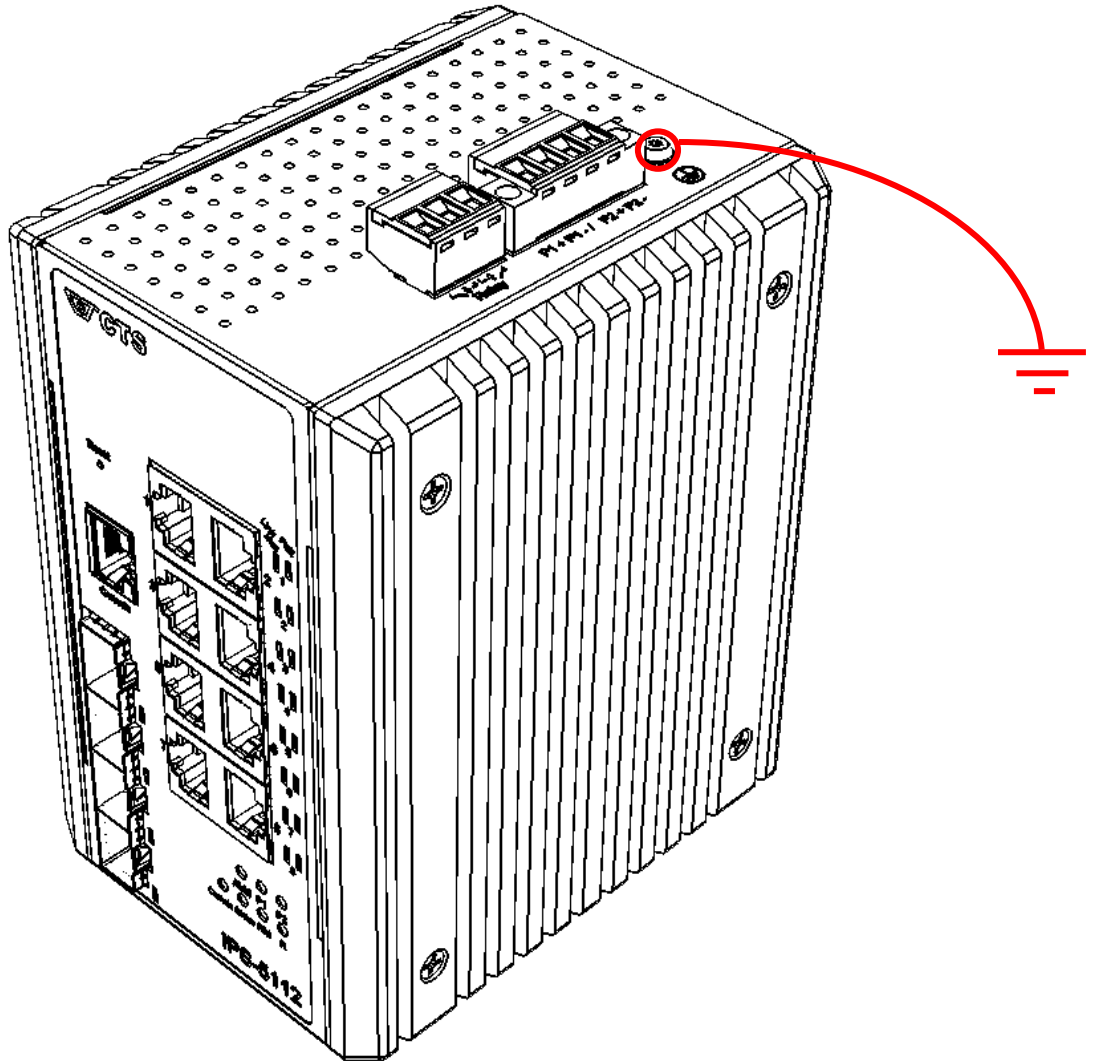


Figure 2-1 Grounding Wiring for IPS-5112 Series

2.4 Powering the Managed Industrial PoE Switch

The IPS-5112 series can be powered with DC power ranging from 48 to 57 VDC through the terminal block. The terminal block is located on the upper panel of the switch. Before powering on the Managed Industrial PoE Switch, please ensure that network cables and power cables are securely connected.



ATTENTION

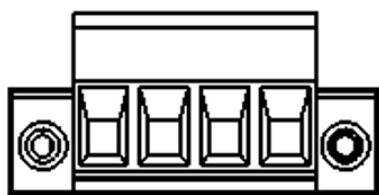
Before connecting the Managed Industrial PoE Switch to the DC power inputs, make sure the DC power source voltage is stable.

Wiring of the Terminal Block for Power Supply/Digital Output for Relay Alarm

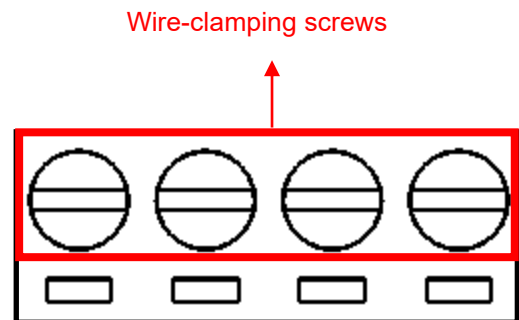
- **P1 and P2 (Power Inputs):** Two sets of power inputs are located on the terminal block. For power redundancy, connect P1 and P2 to separate power sources. The redundant power input will take over seamlessly when one power source is down to protect your device or network from the loss of power.

Power Input Configuration:

Loosen the wire-clamping screws by using a flat-head screwdriver to insert the positive and negative wires of 14 AWG at least we suggest into the “+” and “-” contacts on the terminal block respectively. P1 and P2 allow the power input that ranges from 48~57 VDC. Tighten the wire-clamping screws to fix wires of 14 AWG by using a flat-head screwdriver.



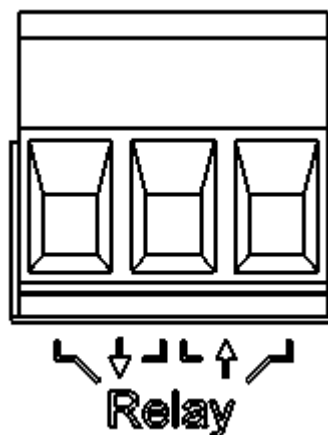
P1 + P1 - / P2 + P2 -



■ **Digital Output for Relay Alarm Configuration:**

The relay alarm has 3 contacts on the terminal block, used to connect alarm devices such as speakers or LEDs to alert users when a redundant power failure occurs. The relay alarm capacity is 1A/24VDC.

By default, the right contact is normal open, the left contact is normal closed, and the middle contact is shared by both the N/O (Normal Open) and N/C (Normal Closed) alarm devices. (See Fig. 2-2.).



Loosen/tighten the wire-clamping screws to insert/fix alarm-device wires by using a flat-head screwdriver as described above.

Note: *If there is no power redundancy, the relay alarm is not available.*

2.5 Connecting the Switch to Network

Connect to Network

This Managed Industrial PoE Switch has 4 1/10Gbps SFP slots and 8 10/100/1000Mbps RJ-45 ports for you to implement it in your Industrial PoE environment. These 4 SFP+ ports can be plugged with 1000Base-X SFP Fiber transceiver or 10GBase-R 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/SFP+ Modules

2.6.1 Installing SFP/SFP+ Modules

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

1. Position the SFP/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/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/SFP+ transceivers in the device.

1. Remove the protective plug from the SFP/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/SFP+ transceivers in the switch. The fiber port is now set up.

2.6.2 Removing SFP/SFP+ Modules

To disconnect an LC/SC 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 RJ-45 to RS232 serial cable between a COM port on your PC (9-pin D-sub female) and the switch's RJ-45 (RJ-45) port, a wired connection for management can be established.



Operation

A built-in management module of the Managed Industrial PoE 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 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 on this Managed Industrial PoE Switch, the Managed Industrial PoE Switch will be refer to as "the network device" below:

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

Local Console Management

Users can establish a connection between a Terminal or PC running a Terminal Emulator program (such as Putty or Tera Term) and the network device by utilizing the RS-232 cable directly on the serial console port. This connection allows for system configuration, control, and monitoring. Commonly known as Out-Of-Band management, console management proves valuable in situations where there is no network connection to the network device, especially during the initial configuration of the network device.

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

Telnet Management

Upon establishing a network connection to the network device, users have the capability to employ Telnet for system configuration, control, and monitoring. This method of management via the network is commonly known as In-Band Management.

SNMP Management

SNMP, being another form of In-Band Management, necessitates a network connection to the network device. The private Management Information Bases (MIB) specific to the network device are made available for SNMP-based network management programs, enabling the configuration, control, and monitoring of the system.

Web Management

Upon the network device being accessible on the network, users can log in and remotely or locally monitor its status through a web browser. For local web management, particularly during the initial setup of the network device to configure the necessary IP, users can also utilize the RJ-45 ports situated on the front panel. To facilitate this management, a direct RJ-45 LAN cable connection between a PC and the network device are necessary.

Maintenance

This Managed Industrial PoE 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
 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 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 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 the Network Management User's Manual.



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