



## Industrial Hi-PoE Switch

### Quick Start Guide



# Preface




## Applicable Models

This manual is applicable to the models listed in the following table.

Model	Description
DS-3T0306HP	Industrial 10/100 Mbps Hi-PoE switch
DS-3T0310HP	
DS-3T0506HP	Industrial gigabit Hi-PoE switch
DS-3T0510HP	

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.
 <b>Caution</b>	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Danger</b>	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

# 1 Introduction

## 1.1 Product Introduction

0300HP and 0500HP series switches are industrial 10/100 Mbps and gigabit Hi-PoE switches respectively, providing PoE power supply technology and wider temperature range design on the basis of network access to ensure stable data upload. In addition, 0300HP series switches support long-range transmission, port isolation, and PoE watchdog functions.

## 1.2 Packing List

Please check if the package is damaged first. If the package is intact, unpack it and check whether the accessories provided with the product are available by referring to the packing list. Then, you can continue to install the device.

Table 1-1 Packing List

Accessory	Quantity
Switch	× 1
DIN Rail Mount Clip	× 2
Quick Start Guide	× 1
Regulatory Compliance and Safety Information	× 1

## 1.3 Appearance

Device appearances vary with different models. The actual device prevails.

### Front Panel

0306HP series switches feature one 10/100 Mbps Hi-PoE RJ45 port, three 10/100 Mbps PoE RJ45 ports, one gigabit RJ45 port, and one gigabit SFP fiber optical port.

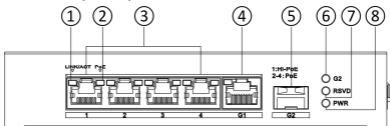


Figure 1-1 0306HP Series

0310HP series switches feature two 10/100 Mbps Hi-PoE RJ45 ports, six 10/100 Mbps PoE RJ45 ports, one gigabit RJ45 port, and one gigabit SFP fiber optical port.

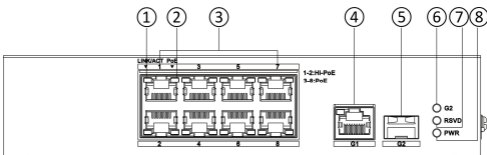


Figure 1-2 0310HP Series

0506HP series switches feature one gigabit Hi-PoE RJ45 port, three gigabit PoE RJ45 ports, and two gigabit SFP fiber optical ports.

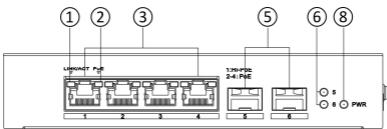


Figure 1-3 0506HP Series

0510HP series switches feature two gigabit Hi-PoE RJ45 ports, six gigabit PoE RJ45 ports, and two gigabit SFP fiber optical ports.

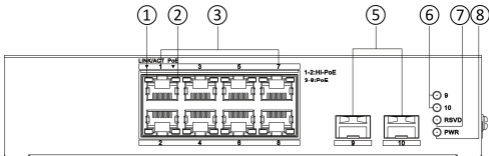


Figure 1-4 0510HP Series

## Side Panel

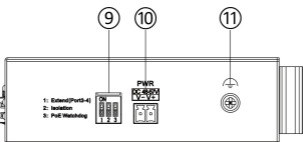


Figure 1-5 0306HP Series

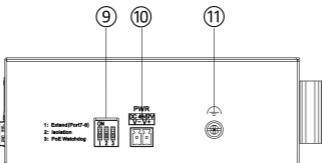


Figure 1-6 0310HP Series

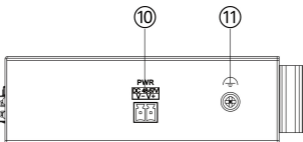


Figure 1-7 0506HP Series

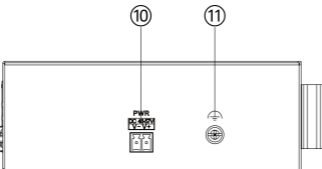


Figure 1-8 0510HP Series

Table 1-2 Port/Indicator Description

No.	Port/Indicator	Description
①	LINK/ACT Indicator	<ul style="list-style-type: none"> <li>● Solid on: The port is connected.</li> <li>● Flashing: The port is transmitting data.</li> </ul>

No.	Port/Indicator	Description
		<ul style="list-style-type: none"> <li>● Unlit: The port is disconnected or connection is abnormal.</li> </ul>
②	PoE Indicator	<ul style="list-style-type: none"> <li>● Solid on: The switch supplies power to a powered device (PD) normally.</li> <li>● Unlit: The switch is disconnected from a PD or power supply is abnormal.</li> </ul>
③	10/100 Mbps PoE RJ45 Port <i>*0306HP&amp;0310HP Series</i> Gigabit PoE RJ45 Port <i>*0506HP&amp;0510HP Series</i>	Used for connection to a PD via a network cable.
④	Gigabit RJ45 Port	Used for connection to another device via a network cable.
⑤	Gigabit SFP Fiber Optical Port	Used for connection to another device via an optical fiber when plugged into with an optical module.
⑥	G2 Port Indicator <i>*0306HP&amp;0310HP Series</i> G5/G6 Port Indicator <i>*0506HP Series</i> G9/G10 Port Indicator <i>*0510HP Series</i>	<ul style="list-style-type: none"> <li>● Solid on: The gigabit SFP fiber optical port is connected.</li> <li>● Flashing: The gigabit SFP fiber optical port is transmitting data.</li> <li>● Unlit: No gigabit SFP fiber optical port connected or connection is abnormal.</li> </ul>
⑦	RSVD Indicator	Unlit: The indicator is reserved.
⑧	PWR Indicator	<ul style="list-style-type: none"> <li>● Solid on: The switch is powered on normally.</li> <li>● Unlit: No power supply is connected or power supply is abnormal.</li> </ul>
⑨	DIP Switch	Three modes are supported: <ul style="list-style-type: none"> <li>● Extend: Port 3 and 4 of 0306HP series switches and ports 7 and 8 of 0310HP series switches support network transmission of up to 300 meters.</li> <li>● Isolation: Data transmission of each port is isolated from each other to improve network security.</li> <li>● PoE Watchdog: Auto-detect and restart cameras that do not respond.</li> </ul>

No.	Port/Indicator	Description
⑩	Power Supply	Use a self-prepared AC power cord or power adapter to connect the switch to a socket.
⑪	Grounding Terminal	Used for connection to the grounding cable to protect the switch from lightning.

### Note

Port 1 of 0306HP and 0506HP series switches as well as ports 1 and 2 of 0310HP and 0510HP series switches are Hi-PoE RJ45 ports, which can be connected to high-power devices.

## 2 Installation

Please select an appropriate installation method according to the actual needs.

### Note

The following figures are for illustration only. The actual device prevails.

#### Before You Start

- Ensure that the desktop or rail is stable and firm enough.
- Keep the room well-ventilated. Leave at least 10 cm of heat dissipation space around the device.

### 2.1 Desktop Placement

Place the device on the desk.

### 2.2 Rail-Mounted Installation

#### Steps

1. Fix the clip to the device.
2. Insert the end of the DIN rail-mounted unit into the notch under the clip.

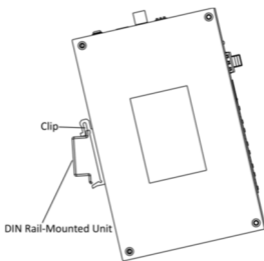


Figure 2-1 Rail-Mounted Installation

3. Press the DIN rail-mounted unit in quickly.
4. Optional: Use screws to fix the DIN rail-mounted unit onto the device.

# 3 Wiring

## 3.1 Connect Grounding Cable

Grounding is used to quickly release overvoltage and overcurrent induced by lightning on the device, and to protect personal safety. Select an appropriate grounding method according to the installation conditions.

### Note

The following figures are for your reference only. The actual device prevails.

#### 3.1.1 With Grounding Bar

If a grounding bar is available at the installation site, follow the steps below.

##### Steps

1. Connect one end of the grounding cable to the binding post on the grounding bar.
2. Connect the other end of the grounding cable to the grounding terminal of the device and tighten the screw.

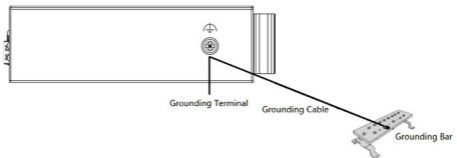


Figure 3-1 Grounding with Grounding Bar

#### 3.1.2 Without Grounding Bar

If there is no grounding bar but the earth is nearby and the grounding body is allowed to be buried, follow the steps below.

##### Steps

1. Bury an angle steel or steel pipe ( $\geq 0.5$  m) into the earth.
2. Weld one end of the grounding cable to the angle steel or steel pipe and embalm the welding point via electroplating or coating.
3. Connect the other end of the grounding cable to the grounding terminal.

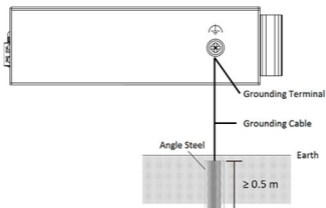


Figure 3-2 Grounding with Angle Steel

## 3.2 Connect RJ45 Port

Use a network cable to connect the device to the RJ45 port of a peer device such as network camera (IPC), network video recorder (NVR), switch, etc.

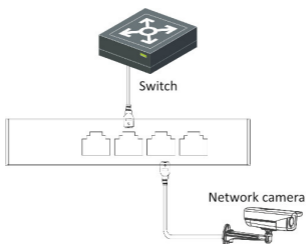


Figure 3-3 RJ45 Port Connection

## 3.3 Connect SFP Optical Module

Connecting an SFP optical module is supported when the device has a fiber optical port.

### Steps

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#### Caution

- Single-mode optical modules need to be paired for use.
  - Do not bend an optical fiber (curvature radius  $\geq 10$  cm) overly.
  - Do not look directly at an optical fiber connector because the laser generated is harmful to eyes.
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1. Connect the two paired SFP optical modules with an optical fiber.
2. Hold the SFP optical module from one side, and smoothly plug it into the device along the SFP port slot until the optical module and the device are closely attached.
3. After powering on the device, check the status of the optical port indicator.
  - If the indicator is lit, the link is connected.
  - If the indicator is unlit, the link is disconnected. Check the line, and make sure that the peer device has been enabled.

## 4 Device Powering-On

Please use a self-prepared AC power cord or power adapter to power on the device.

Before powering on your device, make sure that:

- The operating power supply is compliant with rated input standard.
  - Port cables and grounding cables are correctly connected.
  - If there is outdoor wiring, connect a lightning rod and a lightning arrester to the cable.
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#### Caution

Power cables and network cables cannot be wired together, otherwise the PD or switch ports will be burnt.

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