

# **100 Mbps PoE Switch**

**Quick Start Guide** 

# Legal Information

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The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<u>https://</u><u>www.hikvision.com/</u>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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# **Regulatory Information**

#### **FCC Information**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: 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 the instruction manual, 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 his own expense.

### **FCC Conditions**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

### **EU Conformity Statement**



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/ 30/EU, the RoHS Directive 2011/65/EU.





2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: <u>http://www.recyclethis.info</u>.

2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: <u>http://</u> <u>www.recyclethis.info</u>.

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

# Preface

## **Applicable Models**

This manual is applicable to DS-3E1XXXP series switches.

## **Symbol Conventions**

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

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

## Safety Instruction

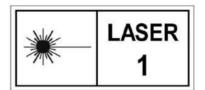


- This is a class A product and may cause radio interference in which case the user may be required to take adequate measures.
- Ensure that your devices powered via the PoE port have their shells protected and fire-proofed, because the switches are not compliant with the Limited Power Source (LPS) standard.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- The socket-outlet shall be installed near the device and shall be easily accessible.
- The device must be connected to an earthed mains socket-outlet.
- Install the device according to the instructions in this manual.
- *f* indicates hazardous live and the external wiring connected to the terminals requires installation by an instructed person.
- Keep body parts away from fan blades. Disconnect the power source during servicing.
- Never place the device in an unstable location. The device may fall, causing serious personal injury or death.
- This device is not suitable for use in locations where children are likely to be present.

- CAUTION: Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas. Dispose of used batteries according to the instructions.

# Caution

- CAUTION: Double pole/Neutral fusing. After operation of the fuse, parts of the device that remain energized might represent a hazard during servicing.
- The device has been designed, when required, modified for connection to an IT power distribution system.
- This device is suitable for mounting on concrete or other non-combustible surface only.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc. The openings shall never be blocked by placing the device on a bed, sofa, rug or other similar surface.
- No naked flame sources, such as lighted candles, should be placed on the device.
- The device shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the device.
- Burned fingers when handling the cover area of the device. Wait one-half hour after switching off before handling the parts.
- CLASS 1 LASER PRODUCT



# **Chapter 1 Introduction**

## **1.1 Product Introduction**

DS-3E1XXXP series switches (hereinafter referred to as "the device") are layer 2 PoE switches, providing advanced PoE power supply technology on the basis of high-performance access. The switches support client management, network topology management, link aggregation, port management and so on. The switches are suitable for small-scale LAN device access.

## 1.2 Packing List

	DS-3E1X05/09P Series	DS-3E1318/26P Series
Switch	× 1	×1
Power Adapter	× 1	-
AC Power Cord	× 1	× 1
Screw	-	× 4
L-Shaped Bracket	-	× 2
Quick Start Guide	× 1	× 1

## **1.3 Appearance**

Different models of devices may have different appearances. The following pictures are only for illustration.

### **Front Panel**

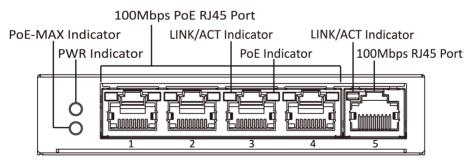


Figure 1-1 DS-3E1105P Series

## iNote

The front panel of DS-3E1309P switch is similar to that of DS-3E1105P, with differences on 8 100Mbps PoE RJ45 ports, and that No.9 port is gigabit RJ45 port.

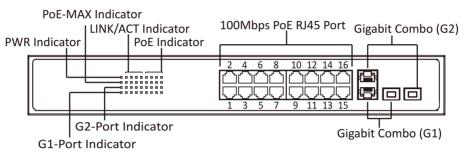
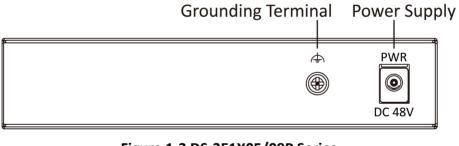


Figure 1-2 DS-3E1318P Series

## iNote

The front panel of DS-3E1326P switch is similar to that of DS-3E1318P, with differences on 24 100Mbps PoE RJ45 ports, 24 LINK/ACT, and 24 PoE indicators.

### **Rear Panel**



#### Figure 1-3 DS-3E1X05/09P Series

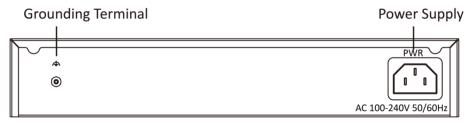


Figure 1-4 DS-3E1318/26P Series

## Port/Indicator Description

Indicator/Port	Description
PoE-MAX Indicator	<ul> <li>Solid /Flashing: The output power of the switch will reach the upper limit. The power supply may be abnormal if more devices are connected.</li> <li>Unlit: The switch provides power supply to PD normally.</li> </ul>
PWR Indicator	<ul> <li>Solid: The switch is powered on normally.</li> <li>Unlit: No power supply connected or power supply is abnormal.</li> </ul>
LINK/ACT Indicator	<ul> <li>Solid: The port is connected.</li> <li>Flashing: The port is transmitting data.</li> <li>Unlit: The port is disconnected or connection is abnormal.</li> </ul>
PoE Indicator	<ul> <li>Solid: The switch provides power supply to PD normally.</li> <li>Unlit: The switch is disconnected to PD, or provides power supply to PD abnormally.</li> </ul>
G1/G2 Port Indicator	<ul> <li>Solid: 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>
100Mbps PoE RJ45 Port	Used for PD devices connection via network cables.
100Mbps RJ45 Port	Used for other devices connection via network cables.
Gigabit Combo	<ul> <li>When connected to a network cable, the combo is a RJ45 port. When plugged into with an optical module and connected to an optical fiber, the combo functions as a fiber optic port.</li> <li>When connected to both the network cable and optical fiber at the same time, the port works as a fiber optic port.</li> </ul>
Grounding Terminal	Used for connecting to the grounding cable to protect the switch from lightning.
Power Supply	Use the attached power cord to connect the switch to socket.

# **Chapter 2 Installation**

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

#### **Before You Start**

- Ensure that the desktop or rack is stable and firm enough.
- Keep the room well-ventilated. Keep at least 10 cm distance around the device for heat dissipation.
- Keep at least 1.5 cm vertical distance between two adjacent devices for rack-mount installation.

## 2.1 Desk-Mounted Installation

Place the device on the desk.

## 2.2 Wall-Mounted Installation

#### Steps

- 1. Check the distance between the two hanging holes on the rear cover of the device.
- 2. Insert two M4 screws into the wall.

## iNote

- Please prepare two M4 screws.
- Ensure that the distance between the two screws equals that between the two hanging holes.
- Set aside at least 4 mm screws outside the wall.
- 3. Align the hanging holes with screws, and hang the device on the screws.

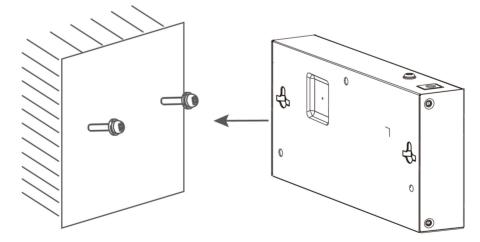


Figure 2-1 Wall-Mounted Installation

## 2.3 Rack-Mounted Installation

#### Steps

- **1.** Check the grounding and stability of the rack.
- **2.** Use the attached screws to fix the two L-shaped brackets to the sides of the switch.

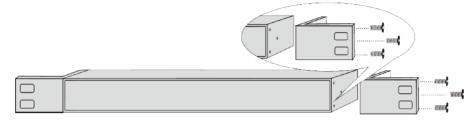


Figure 2-2 Fix L-Shaped Brackets

**3.** Place your switch on the rack, fix it to the rack with self-prepared screws to stably install your switch.

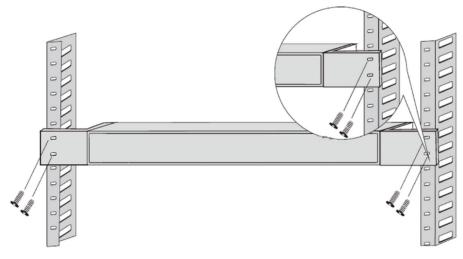


Figure 2-3 Fix to the Rack

# **Chapter 3 Grounding**

## **3.1** Connecting the Grounding Cable

Grounding is used to quickly release overvoltage and overcurrent induced by lightening for switch, and to protect personal safety. Select the appropriate grounding method according to your needs.

### 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 fix the screw.

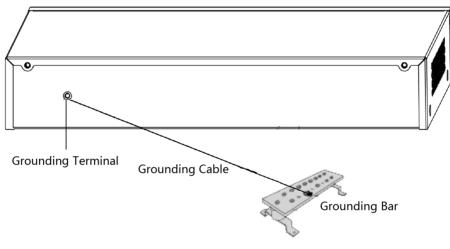


Figure 3-1 Grounding with Grounding Bar

### 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 mud land.
- 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.

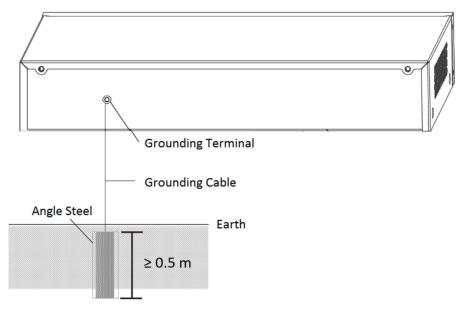


Figure 3-2 Grounding with Angle Steel

## 3.2 Connecting RJ45 Port

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

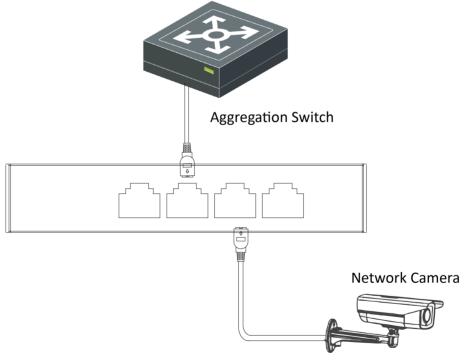


Figure 3-3 RJ45 Port Connection

## **3.3 Connecting SFP Optical Module**

Connecting SFP optical module is supported when the device has a fiber optic port or a combo.

When connected to a network cable, the combo is a RJ45 port. When plugged into with an optical module and connected to an optical fiber, the combo functions as a fiber optic port.

When connected to both the network cable and optical fiber at the same time, the port works as a fiber optic port.

### Steps

## Caution

- Single-Mode optical module needs to be paired.
- Do not bend fiber optic (curvature radius ≥ 10 cm) overly.
- Do not look directly at fiber optic connector because the laser is harmful to eyes.

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 with the SFP port slot until the optical module and the device are closely attached.
- **3.** After powering on the device, check the status of LINK/ACT 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 peer devices have been started.

# **Chapter 4 Powering on the Device**

Please use the attached power cord in package to power on the device.

Before powering your switch, 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 cabling, connect a lightning rod and lightening arrester to the cable.

# 

PoE power supply line and strong wire cannot be wired together, otherwise PD equipment or switch ports will be burnt.

# **Chapter 5 Device Management**

The device can be configured and managed through iVMS-4200 software, mainly including network parameter configuration, port configuration, link aggregation configuration, network topology display and so on.

### **i**Note

- This chapter will briefly introduce the device management through iVMS-4200 software. For other functions, please refer to *User Manual of iVMS-4200 Software*.
- All pictures in this manual are for illustration only, and the specific interface is subject to the actual interface.

### **5.1 Activating Devices**

For the inactive devices, you are required to create a password to activate them before they can be added to the software and work properly.

#### **Before You Start**

Make sure the device to be activated is connected to the network and is in the same subnet with the PC running the client.

#### Steps

## iNote

This function should be supported by the device.

- 1. Enter the Device Management page.
- 2. Click Device tab on the top of the right panel.
- **3.** Click **Online Device** to show the online device area at the bottom of the page.

The searched online devices are displayed in the list.

4. Check the device status (shown on Security Level column) and select an inactive device.



Figure 5-1 Online Inactive Device

- 5. Click Activate to open the Activation dialog.
- **6.** Create a password in the password field, and confirm the password.

# 

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

7. Click OK to activate the device.

## **5.2 Adding Devices**

The client provides various device adding modes including IP/domain, IP segment, cloud P2P, ISUP protocol, and HiDDNS. The client also supports importing multiple devices in a batch when there are large amount of devices to be added. The section only introduces one mode, namely, adding a detected online device.

#### Steps

- 1. Enter the Device Management module.
- 2. Click Device tab on the top of the right panel.
- 3. Click Online Device to show the online device area.

The searched online devices are displayed in the list.

**4.** Select an online device in the **Online Device** area, and click **Add** to open the device adding window.

## **i**Note

For the inactive device, you need to create the password for it before you can add the device properly. For detailed steps, refer to *Activating Devices*.

#### 5. Enter the required information.

#### Name

Enter a descriptive name for the device.

#### **IP Address**

Enter the device's IP address. The IP address of the device is obtained automatically in this adding mode.

#### Port

You can customize the port number. The port number of the device is obtained automatically in this adding mode.

#### **User Name**

By default, the user name is **admin**.

### Password

Enter the device password.

## 

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

- **6.** Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
- 7. Click Add.

# **Chapter 6 Get More Information**

### iVMS-4200 Management

Scan the QR code below for iVMS-4200 software operations.



### **Hik-ProConnect Management**

Go to <u>http://hik-proconnect.com</u> or scan the QR code below for Hik-ProConnect operations.

Hik-ProConnect for Installers



**Hik-Connect for Users** 



