



**HIKVISION**

**DS-3E0105P-E/M Switch**

**User Manual**

**UD.6L0103D0392A01**

## **User Manual**

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### **About this Manual**

This Manual is applicable to DS-3E0105P-E/M.

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 in the company website (<http://overseas.hikvision.com/en/>).

Please use this user manual under the guidance of professionals.

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## Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warning” and “Caution”.

**Warning:** Serious injury or death may occur if any of the warning is neglected.

**Caution:** Injury or equipment damage may occur if any of the caution is neglected.

	
<b>Warning</b> Follow these safeguards to prevent serious injury or death.	<b>Caution</b> Follow these precautions to prevent potential injury or material damage.



### Warning

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Refer to technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 100-240 V AC or 12 V DC according to the IEC60950-1 standard. Refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Make sure that the plug is firmly connected to the power socket.

If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then contact the service center.

## **Preventive and Cautionary Tips**

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Unit is designed for indoor use only.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a subrack or shelf.
- Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact dealer.

The figures in the manual are for reference only.

This manual is applicable to DS-3E0105P-E/M.

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# Chapter 1 Product Overview

## 1.1 Overview

Hikvision DS-3E0105P-E/M is an unmanaged PoE switch providing 5 \* 10/100 Mbps RJ45 ports. Ports 1-4 can power up devices compliant with IEEE 802.3af PoE (a maximum of 15.4 W of each port) standard. The power output totals 35 W. In EXTEND ON mode, ports 1-4 support up to 250 meters of data transmission and power supply.

## 1.2 Packing List

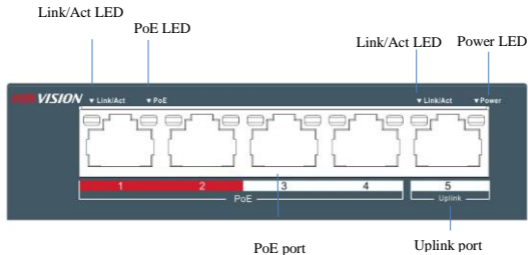
- PoE switch \* 1
- Power adapter \* 1
- User Manual \* 1

If any item is missing, or damaged, please keep the original package and contact the local reseller or distributor immediately.

## 1.3 Appearance

### Front Panel

See the following figure.



## LED Indicators

Specific description of the LED indicators is shown as follows:

LED	State	Description
Power	Solid on	The switch is connected to a power supply properly.
	Off	The switch is connected to a power supply improperly or not connected to a power supply.
PoE (on the upper right corner of ports 1-4)	Solid on	The port is supplying power to the device connected to it properly.
	Off	The port is not supplying power or not connected to a powered device.
Link/Act (on the upper left corner of ports 1-5)	Solid on	The port is connected properly.
	Blinking	Data is being transmitted over the port.
	Off	The port is connected improperly or not connected to a device.



## RJ45 Port

DS-3E0105P-E/M provides 5 \* 10/100 Mbps auto-negotiation RJ45 ports. Ports 1-4 are downlink ports compliant with IEEE 802.3af, and port 5 is the uplink port.



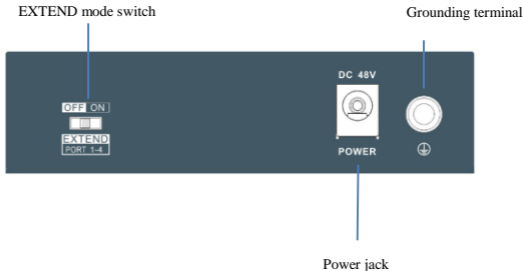
### Note

Ports 1-2 have high priorities. Devices used for transmission of important data or playbacks of videos are recommended to connect to these ports.

Power supply priority function of PoE ports safeguards your PoE switch in overload situation. When the total power output of all powered devices exceeds 35 W, ports with lower priority (port1 > port2 > port3 > port4) will have power of devices connected cut off to ensure no more than 35 W power output.

For example, ports 1, 2 and 4 are supplying power properly with a total power output 26.2 W. If port 3 is connected to a 9 W device, port 4 stops supplying power to the device connected to it.

## Rear Panel



## EXTEND Mode Switch

State	Description
EXTEND OFF	The switch works in this mode by default. Port 1 to 4 offer a data rate of as high as 100 Mbps.
EXTEND ON	Ports 1 to 4 offer a data rate of 10 Mbps with a transmission distance up to 250 meters.



### Note

For better performance of EXTEND ON mode, you are recommended to use Cat 5e Ethernet cable or better and set WAN speed of the peer device to auto negotiation.

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## Power Jack

The power jack is used to connect the switch to a power supply using the included power adapter.

## Grounding Terminal

It is used to connect to a grounding cable for lightning protection. For details, see section [2.3 Grounding](#).

# Chapter 2 Device Installation

## 2.1 Installation Notes

Follow the notes below to avoid device damages or personal injuries caused by misoperation.

### Safety Alert

- Wear ESD gloves before installation, and do not power on the switch before finishing installation.
- Use the included power adapter to power up the switch.
- Make sure that the input voltage matches the value specified on the label of the switch.
- Place the switch in a well-ventilated and dry environment.
- Do not remove the housing of the switch.
- Disconnect the switch from the power supply before cleaning it. Do not scrub the switch with any liquid.
- Place the switch away from powerline, electric lamp, and power system.



### Note

There is a void sticker covering one of the screws on the housing of the switch. Do not remove the sticker without permission of the local agent. Otherwise you shall be responsible for any damage.

---

## Environmental Requirements

### Temperature and Humidity

For the temperature and humidity requirements, see [Appendix Technical Specifications](#).

### **Anti-static Precautions**

Electrostatic adsorption occurs if dust falls onto the switch, which may cause poor metal contact that disables the switch to work properly. To prevent this problem, pay attention to the following:

- Keep the air in the ambient environment clean. Regularly perform dedusting.
- Make sure that the switch is grounded properly.

### **Lightning Protection**

In thunderstorm weather, a sudden current caused by lightning stroke may damage the switch.

To protect the switch against lightning stroke or strong current:

- Make sure that the device, and workbench where the switch is mounted and receptacle in the wall are all properly grounded.
- Connect the cables to the switch properly to avoid generating internal lightning induction.
- If outdoor cabling is required, it is advisable to deploy a signal lightning arrester.

### **Mounting Requirements**

Follow the instructions below.

- The desktop is stable and sturdy enough.
- Place the switch in a clean, dry and well-ventilated environment. Keep at least 10 cm gap on all sides for cooling.
- Do not place any heavy or big object on the switch.
- Keep at least 1.5 cm vertical distances between each device while installing it in stack.

## **2.2 Installation**

Place the switch right side up on a large and stable desktop.

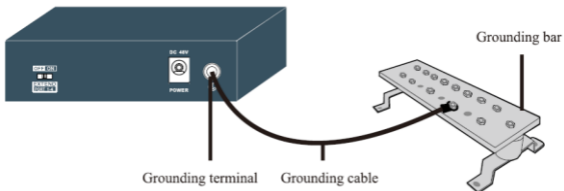
## **2.3 Grounding**

Grounding is not only a measure to release the overvoltage and overcurrent caused by lightning as soon as possible, but also for personal safety. Select the proper method to ground your switch according to the installation environment.

## With the grounding bar

**Step 1:** Connect one end of the grounding cable to the binding post on the grounding bar.

**Step 2:** Connect the other end of the grounding cable to the grounding terminal and fasten the screw.



### Note

Connect the grounding cable to the grounding system in the equipment room. Do not connect it to a fire main or lightning rod.

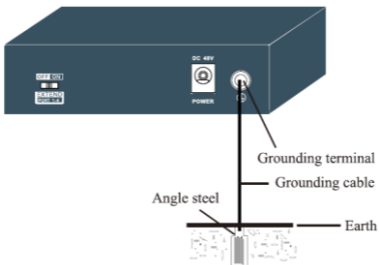
## Without the grounding bar

If there is no grounding bar but the grounding body can be buried, follow steps below:

**Step 1:** Bury a 0.5 m or longer angle steel or steel pipe into the earth.

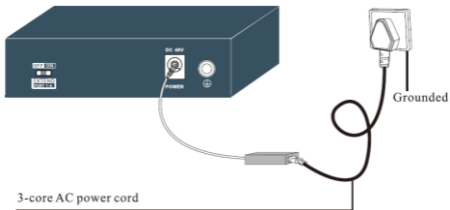
**Step 2:** Weld one end of the grounding cable to the angle steel or steel pipe and protect the welding point against corrosion (electroplating or coating).

**Step 3:** Connect the other end of the grounding cable to the grounding terminal.



If both ground bar and the environment for burying the grounding body are not available, use the protecting earth (PE) wire.

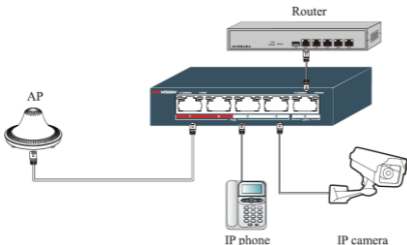
Make sure that the switch adopts 3-core cable with the PE wire, and the PE wire of the AC power supply has been well grounded in the power distribution room or at the side of the AC power supply transformer.



# Chapter 3 Physical Connection

## RJ45 Port Connection

Connect the RJ45 ports of the switch to the RJ45 ports of peer devices. Port 5 is the uplink port and the others are downlink ports compliant with IEEE 802.3af.



### Note

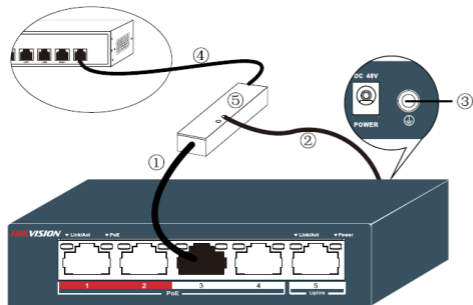
In EXTEND OFF mode, you are recommended to set the bit rate of the connected IP camera less than 4 Mbps if the data rate of the network adapter of the monitoring computer is 100 Mbps.

The switch supports Auto MDI/MDIX. You can use straight-through cable or crossover cable to connect the switch to the peer device.

## Checking

Before powering up the switch, check the switch as follows.

- The power supply should accord with the rated input standard.
- Port cables and grounding cable are correctly connected.
- If an outdoor cable is required, connect a lightning protector to the cable before you connect the cable to the port.



- ① Ethernet cable    ② Grounding cable    ③ Grounding terminal    ④ Outdoor cable  
⑤ Lightning protector

## Power Supply

Use the included power adapter to power up the switch.



# Appendix Technical

## Specifications

Port	Number of port	5 * 10/100Mbps RJ45 port
	High-priority port	Port 1-2
	Lightning-protection ranking	6 kV for common mode
Working mode		EXTEND OFF and EXTEND ON
Performance	Store-and-forward	Supported
	MAC address table	1 K
	Switching capacity	1 Gbps
PoE	PoE standard	IEEE 802.3af
	Power cable	8-core
	PoE port	Port 1-4
	Maximum port output	15.4 W
	Maximum total output	35 W
Power supply	Power input and output	Input: 100~240 V AC, 50/60 Hz Output: 48 V DC, 0.8 A
	Maximum total output	38 W
	Lightning-protection	3 kV for common mode; 2 kV for differential

	ranking	mode
Dimensions (L * W * H)		100 mm * 100 mm * 26 mm
Environment		Operating Temperature: 0°C ~ 40°C Operating Humidity:(10 ~ 90) %RH, non-condensing Storage Temperature: -40°C ~ 70°C Storage Humidity: (5 ~ 90) %RH, non-condensing
Network Standard		IEEE 802.3, IEEE802.3u, IEEE 802.3x and IEEE802.3af

**CE Mark Warning**

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

CAN ICES-3 (A) /NMB-3 (A)

**FCC Statement**

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.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Caution!**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.



Caution:

Adapter Model: BN017-A38048E

Manufacturer: SHENZHEN HEWEISHUN NETWORK TECHNOLOGY CO., LTD.

Input: 100-240 V AC, 50/60 Hz, 1.0 A

Output: 48 V DC, 0.8 A

 DC Voltage



RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.