



# ***USER GUIDE***

*POE & Optical Transmission* //  
*PD series---POE splitter*

**ONV**//



# Statement

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## **Packing List**

Please kindly check the following items:

- ▶ 1. A PoE splitter
- ▶ 2. A DC-DC output power line
- ▶ 3. A user guide/certification/warranty card



### **Note**

If any shortage or damage found, please contact us in time.

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# Product Feature

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## Product introduction

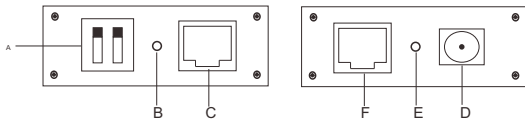
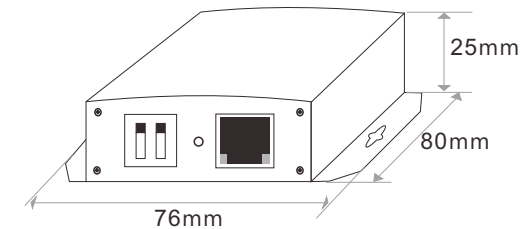
ONV brand PD3101 series PoE splitter completely compliance with the IEEE 802.3 af/ IEEE 802.3at. It can be compatibly used with the PoE power sourcing equipments which compliance with the IEE IEEE 802.3 af/ IEEE 802.3at and also supply 5/12VDC power to the devices without PoE function. PoE( Power over Ethernet) is a technology, which supply DC power to the terminal equipments at the same time that transmit data according to the IP. It can largely decrease the use of outlay power line which reduces the cost and can ensure the stability of your network.

**Note:** ONV PD3101 series PoE splitter can only be suitable to use in the devices linked by Ethernet cables.

## performance characteristic

- ▶ Compliance with the IEEE 802. 3、 I IEEE 802. 3u、 I IEEE 802. 3ab
  - ▶ Transmit the data and power in one network cable
  - ▶ Support dial switch to choose 5V/12VDC
  - ▶ Plug and play, no configuration
  - ▶ Data transmit rate: 10/100Mbps、 10/100/1000Mbps
  - ▶ Powered style compatible with 1/2+、 3/6-( End-span) and 4/5+、 7/8-(Mid-span)
  - ▶ Superb circuit isolation protection and improve the ability of anti-thunder, anti-static and anti-interference
  - ▶ Mean time between failure:30000h
  - ▶ Transmission channel surge protection 1KV, executive standard: I EC61000-4-5
  - ▶ Good appearance, small size and space-save.
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# Mechanical structure and Port description



A.5V/12V DC output dial switch  
B.PoE input status light  
C.PoE input port

D.DC power output port  
E.DC output status light  
F.Ethernet output port

# Product internal design description

Indicator	Status	Description
PoE indicator light: PoE RUN	Green light ON	Activate the PoE function, powered properly
	Green light OFF	Incorrectly link the PoE power supply device
DC indicator light: DC RUN	Green light ON	Output of the DC port is proper
	Green light OFF	No output of DC port

**Note:** Please make sure that the PoE power sourcing equipment linked with the PoE splitter compliance with the I EEE802. 3af/I EEE802. 3at.

**Dial switch:** Dialing this switch can choose to supply 12VDC(dual switch up) or 5VDC(dual switch down) to the Ethernet equipment

**Output voltage:** Please choose the correct output voltage in fear of broking the equipment.

**PoE port:** The PoE port have the PoE function, ie can transmit the data and power spontaneously if the devices are linked correctly. And judge the work status by the front panel indicator lights.

**Ethernet port:** Besides the PoE ports, the other ports are the common self-adjusted RJ45 ports. All the RJ45 ports support AUTO MDI/MDIX, plug and play.

**PoE IN wire:** Use the 5 styles unshielded twisted pair to link the power supply devices and PoE injector.

**Ethernet OUT wire:** Use the 5 styles unshielded twisted pair to link the Ethernet equipments to transmit data.

**DC OUT:** The matched power line links to the power port of the Ethernet equipments to supply the 5V/12VDC power.

# PoE splitter cable installation instruction

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## Installation guide

Please use the assorted equipments to install

## Installation

Make the splitter and the power sourcing equipments/PoE devices combined, then the combination can supply power to the AP, IP camera, IP telephone and the other network equipments in the situation of lacking of power line or far away from the power outlets.

## Please link the PoE splitter correctly in the following steps:

- 1) Using the 5 styles UTP to link with the power sourcing equipment's PoE port (like the PoE Switch) and the the PoE splitter's IN port ;
- 2) Adjusting the power-supplying mode switch on the PoE splitter to choose the suitable output voltage.
- 3) Using 5 styles UTP to link the Ethernet OUT port of the PoE splitter and Ethernet device, then the two devices can transmit the data.
- 4) Using the assorted power line to link DC OUT port of the PoE splitter and the power port of the Ethernet devices.

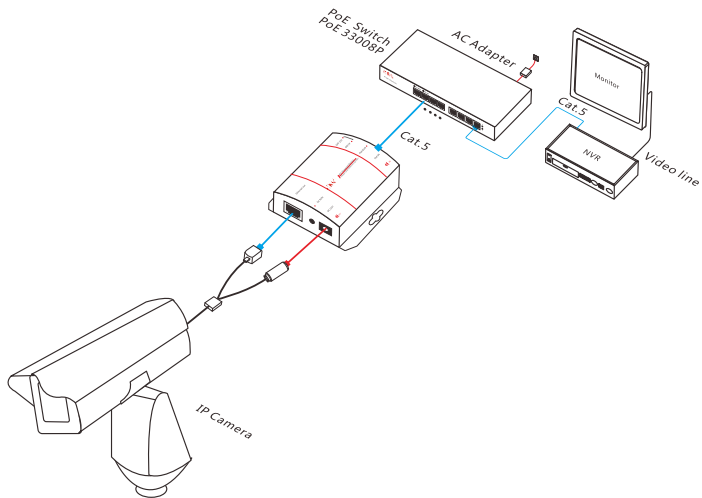
## Attention:

- 1) The power rate of the Ethernet device linked with the PoE splitter can't exceed the maximum rate of the PoE splitter.
- 2) Please make sure to choose the correct output voltage, the unmatched voltage may damage the device.

## Confirm before installation:

1. Whether the power rate of PoE port is suitable with the requisition of input device;
  2. Whether the PoE criterion and the power supply mode is suitable with the powered device( Mid-span/End span)
  3. Whether the output rate of asserted power adapter is suitable with the requisition of switch.
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# Solution diagram



# Product model and parameter description

**PD3101:**PoE splitter, PD, IEEE802.3af,5V/12V,15.4W,support 10/100M

**PD3101-at:** High-power PoE splitter, PD, IEEE802.3at,5V/12V,25.5W,support 10/100M

**PD3101G:** Gigabit PoE splitter, PD, IEEE802.3af,5V/12V,15.4W,support 10/100/1000M

**PD3101G-at:** high-power Gigabit PoE splitter, PD, IEEE802.3at,5V/12V,25.5W,support 10/100/1000M

**Port description:** PoE input: RJ45 port; Ethernet and DC power output: RJ45 port and DC port

**Network medium:** 100BASE-TX: 3、4、5 style UTP( $\leq 100m$ )

**Network protocol:** IEEE 802.3i; IEEE 802.3u; IEEE 802.3x Flow Control; IEEE 802.1af DTE Power via MDI

**The other hardware feature:** 5V/12VDC(dialing switch)

**PoE port:** PoE power supply(15.4W/25.5W)

**PoE criterion:** IEEE 802.3af(port power rate: 15.4W), IEEE 802.3at(port power rate: 25.5W)

**PoE type:** End-span, Mid-span(support simultaneously)

**PoE transferring wire core:** 4/5+、7/8- pair; 1/2+、3/6- pair(simultaneously support)

**Electromagnetic radiation:** CE mark, commercial, FCC Part 15 Class B, RoHS

**Physical format:** 80x76x25mm(length x width x height) 0.15kg

**After-sale service:** 1 year warranty, lifetime maintenance

**Working temperature:** 0 $^{\circ}$ C~40 $^{\circ}$ C

**Store temperature:** -40 $^{\circ}$ C~70 $^{\circ}$ C

**Working humidity:** 10%~90%RH, no congelment

**Store humidity:** 5%~90%RH no congelment



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