



# ***USER GUIDE***

*POE & Optical Transmission* //

*PD series---POE splitter*

**ONV**//



# Statement

---

**Copyright @ 2002-2013 Optical Network Video Technologies (Shenzhen) Co., Ltd**  
**All Rights Reserved**

This document contains proprietary information that is protected by copyright. No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written permission of Optical Network Video Technologies (Shenzhen) Co., Ltd.

**ONV**<sup>®</sup> is the registered trademark of Optical Network Video Technologies (Shenzhen) Co., Ltd. The information and product specifications within this document are subject to change at any time, without notice and without obligation to notify any person of such change.

## Packing List

Please kindly check the following items:

- 1. A PoE splitter
- 2. One DC power cable
- 3. A user guide/certification/warranty card

## Note

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

---

# Product Feature

---

## Product introduction

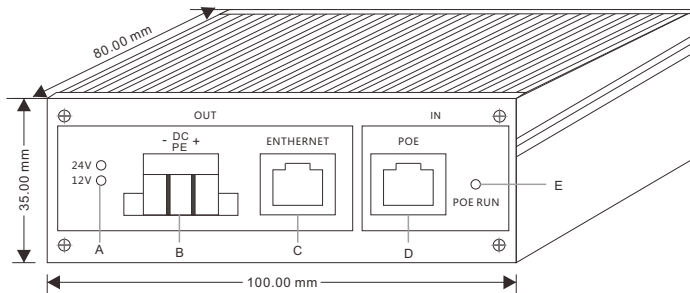
ONV brand PD3401 series PoE splitter is a new product developed for high power network devices that the total power is above IEEE802.3AT standard. It must be used with the specialized high power PoE powered devices and also supply 12V (default) or 24V DC power to the devices without PoE function. PoE (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 PD3401 series PoE splitter can only be suitable to use in the devices linked by Ethernet cables.

## performance characteristic

- Compatible with IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3af, IEEE802.3at standard
  - Transmit the data and power in one network cable
  - Default output voltage is DC12V, DC24V optional
  - Plug and play, no configuration
  - Data transmit rate: 10/100Mbps、10/100/1000Mbps
  - 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 2KV, executive standard: IEC61000-4-5
  - Good appearance, small size and space-save.
-

# Mechanical strcuture and Port description



A.12V/24V DC Output Status Light  
B.DC Output  
C.Enthernet Output Port

D.PoE Input Port  
E.PoE Input Status Light

# 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	The power output of the DC port is normal and shows the current working voltage
	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 IEEE802.3af/IEEE802.3at.

**DC Indicator:** Shows the status of the current working voltage and working state

**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. There is a must to equip with high power injector or high power PoE switch so that to achieve the high power output

**DC OUT:** The matched power line links to the power port of the Ethernet equipments to supply the 12V/ 24V DC power.

# PoE splitter cable installation instruction

---

## 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) Before connecting to devices, please make sure whether the working voltage status of the PoE splitter accord with the input devices
- 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.

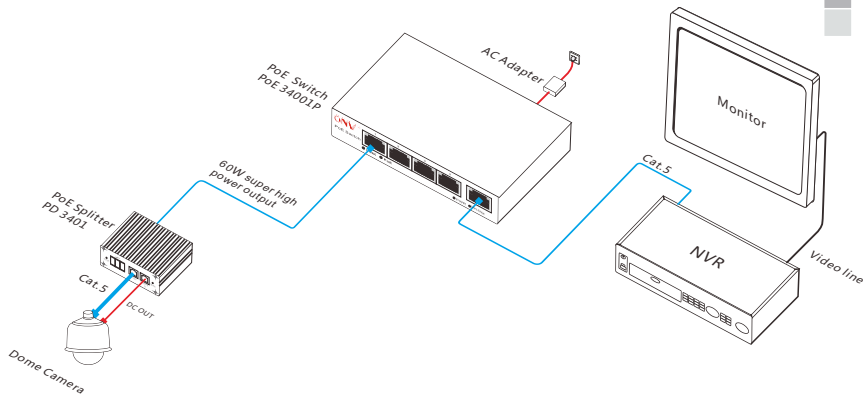
## Attention:

- 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.
  3. Whether the output rate of asserted power adapter is suitable with the requisition of switch.
-

# Solution diagram



# Product model and parameter description

**PD3401:**PoE splitter, PD, IEEE802.3at, 12V/24V, 60W, support 10/100/1000Mbps

**PD3401G:** Gigabit PoE splitter, PD, IEEE802.3at, 12V/24V, 60W, support 10/100/1000Mbps

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

**Network medium:** 100BASE-TX: 3、4、5 classes UTP( $\leq 100$  meters); 1000BASE-TX:

5 classes or more UTP ( $\leq 100$  meters)

**Network protocol:** IEEE 802.3i; IEEE 802.3u; IEEE 802.3x Flow Control; IEEE802.3ab;  
IEEE802.3af/at DTE Power via MDI

**The other hardware feature:** Constant 12V or 24V output

**PoE port:** PoE power (Power  $\geq 90W$  for power supply port)

**PoE Standard:** The maximum output power for PoE is 60W, can be backward compatible with IEEE802.3af/at

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

**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 congealment

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



Tel : 0755-33376606

Fax : 0755-33376608

Mail : onv@onv.com.cn

ADD : Room 1003, Block D, Tairan building, Chegongmiao, Futian district, Shenzhen, China.

Factory : Floor 5, A building, SenYuTai S&T park, Longhua road, BaoAn district, Shenzhen, China.

[www.onvcom.com](http://www.onvcom.com)