

# PD101G Series Gigabit Unmanaged POE Splitters User manual

# 3onedata

Shenzhen 3onedata Technology Co.,Ltd

Tel:+86-755-26702668 Fax: +86-755-26703485 www.3onedata.com

#### [Introduction]

PD101G Series are Cost-efficient single-port IEEE 802.3af/at compliant PoE splitter, High-reliability performanc, Work with IEEE 802.3af/at compliant PoE switch or PSE Injector, Can get separated data and power output from standard PoE cable and supply data and power separately for devices that not support PoE power.

PD101G Series Provides three different DC output: 5V/9V/12V, which enables it works with different kinds of end devices,Improves network flexibility and expansibility by solving the connection problem between PoE power supply and PoE-unsupported devices,Can be widely used in wireless city projects and Security Surveillance Industry.

# **[Packing List]**

Please check the packaging and accessories by your first using.

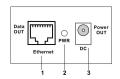
- POE Splitters × 1
- DC Power Cord x1
- User's Guide × 1
- Certificate of quality x 1
- Warranty card x 1

#### **Features**

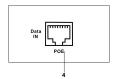
- Compatible with IEEE802.3at(30W) or IEEE802.3af(15.4W), can supply power to PDs under the two standards
- The "PoE data in" port supports a voltage range of 36-57V, can auto-response to the power supply from PSE power module
- Supports 3 different DC output modes: 5V/9V/12V, can easily get devices that not support PoE power connected with PoE network devices
- Comes with 4 different types of DC plugs, can easily handle with different connections
- Supports Circuit Isolation Protection, provides good protection for the PDs

# **Panel Layout**

#### Front panel

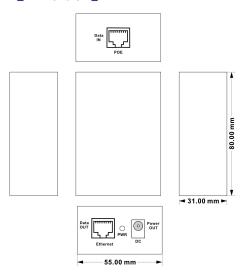


#### **Back panel**



- 1. Ethernet Data port
- 2. Power Indicator
- 3. DC power input socket
- 4.POE port

#### [Dimension]



# **[Power Input]**



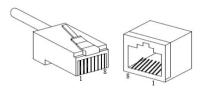
PD101G Series provide DC power input, voltage input is, DC power adapter specification is internal size 2.1mm, external size 5.5mm.

#### [Communication Connector]

PD101G Series provide 1\*10/100/1000M POE ports, 1\*10/100/1000M ports.

#### 10/100/1000BaseT(X) Ethernet port

10Base-T/100Base-TX/1000 Base-TX Ethernet port use in front panel, It is RJ45 port, the PIN define of RJ45 is as follows: connection adopt UTP or STP, the distance is no more than 100m, 1000Mbps use cat5e, 100Mbps use cat5, 100Mbps use cat3,4, 5.



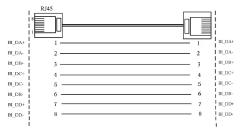
RJ45 port support MDI/MDI-X self-adaption. In (MDI), PIN1, 2, 3, 4, 5, 6, 7, 8 connect corresponding, in (MDI-X) PIN1 $\rightarrow$ 3, 2 $\rightarrow$ 6, 3 $\rightarrow$ 1, 6 $\rightarrow$ 2, 4 $\rightarrow$ 7, 5 $\rightarrow$ 8, 7 $\rightarrow$ 4, 8 $\rightarrow$ 5. In MDI/MDI-X, 1000 Base-TX PIN define is as follows:

PIN	MDI	MDI-X
1	BI_DA+/TX+	BI_DB+/RX+
2	BI_DA-/TX-	BI_DB-/RX-
3	BI_DB+/RX+	BI_DA+/TX+
4	BI_DC+/—	BI_DD+/
5	BI_DC-/—	BI_DD-/-
6	BI_DB-/RX-	BI_DA-/TX-
7	BI_DD+/-	BI_DC+/—
8	BI_DD-/-	BI_DC-/—

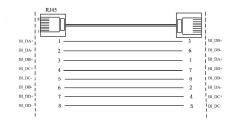


Note: "TX±" Transmit Data±, "RX±" Receive Data±, "—" Not Use.

#### MDI (straight-through cable):



#### MDI-X (Cross over cable)



MDI/MDI-X auto connection makes PD101G series easy to use for customers without considering the type of network cable.

#### **LED Indicator**

PD101G Series indictor light on the front panel, the function of each LED is described in the table as below.

	System Indication LED		
	LED	State	Description
ı		ON	Power is being supplied to
	PWR		power input PWR input
		OFF	Power is not being supplied
			to power input PWR input

### [Installation]

#### **Operation Cautions**

- Don't stock the device in damp environment or near water, to avoid water or moisture penetrating into the inner device.
- Don't put the device on a unstable box or desk, the device will get damaged from falling.
- 3) Please check and make sure the operation voltage is

- meet the voltage standard marked on the device surface before the next steps.
- 4) Please use a grounded three-hole power socket in the rack or desk mounting, to mitigate damage caused by electro-static discharge or lightning stoke.
- Keep the device far from heat sources, strong power radio transmitters and radar transmitters.
- 6) Similar with other electrical products, the semiconductor chip in device will get damaged when open and shut off the power frequently. Please restart the device 3~5 seconds(or longer) after the power is shut off.
- Please pull out the power plug before cleaning the device. Don't wipe the device with wet cloth or clean the device with liquid.
- 8) To guarantee a long operation life, the device can only be used in indoor and in ventilated & dry environment. And to get a good heat dissipation, please reserve a space over 10CM around the device.

#### **POESplitter Operation Instruction**

- Connect "Power+Data" port on POE splitter with a RJ45 cable, which connected with far-end POE switch or POE injector on the other end. When one of the three voltage LED indicator(5V/9V/12V) is on, the connection is successful.
- Please choose right voltage state according to your POE PDs, the default voltage state is 5V, you can slide the switch to change to 9V or 12V.
- OUT" port on the POE splitter, and connect the other end to the POE PDs with right plugs (4 types universal plugs for your option).
- 4) Please connect one end of provided RJ 45 cable to the "Data OUT" port of POE splitter, and connect the other end to the data in port of POE PDs.

Note: Please choose correct Splitter voltage output state according to the voltage requirement of your PDs, or the PDs will get damaged. The default voltage output is 5V.

# **[Specification]**

Technology:

POE Standard: IEEE802.3af/at

Ports:

Fixed ports: 2\*10/100/1000M Base-T Ports(including one POE

ports)

POE Pin-out: 1/2(+), 3/6(-); Customized 4/5(+),7/8(-)

**Exchange Properties:** 

Physic Medium:

10/100Base-TX: UTP category 3/4/5 cables( Maximum 100m)

1000Base-T: UTP Category 5 cable( Maximum 100m)

Network Cable Deployment: Support Auto-MDIX function, can automatically identify straight forward cable and cross-over cable

Negotiation Pattern: Support port auto-negotiation function( automatically negotiate transmission rate and Duplex

modes)

**Indicator light:** 

LED Indicator: Power indicator( green light)

Power:

Max Output Power(single port): 15.4W or 30W

Input Power Supply: DC 48V/0.3A

Output Voltage:

PD101G-12V-15W:5V/2A;9V/1.1A;12V/1A

PD101G-12V-30W:5V/4.5A;9V/2.3A;12V/2A

DC Plugs: 5.5\*2.1mm (outer diameter\*inner diam

eter)

**Working Environment:** 

Operation Temperature: -20~50°C

Storage Temperature: -40~70°C

Operation Humidity:10%~90%(non-condensing)

Storage Humidity:5%~90%(non-condensing)

**Mechanical Properties:** 

Weight: 145g

Dimensions (L×W×H) :80\*55\*31mm

Warranty:

Warranty time: 3 years