

# FPOE-PD80

4Pair Force Power Gigabit PoE++ Splitter



## User's Guide

### FCC Certifications

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.

### CE Mark Warning

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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## Unpacking Information

Thank you for purchasing our PoE series products. Before installation, please check that your package contains the following items.

**Open the shipping cartons of the splitter and carefully unpack its contents. The carton should contain the following items:**

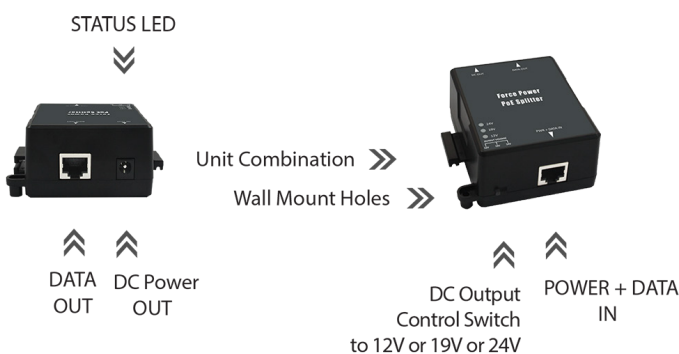
**1.FPOE-PD80 Main Unit x 1**

**2. Inside diameter 2.1 (PHY) mm DC to DC cable x 1**

**3.Warranty Card x 1**

**4.Quick Installation Guide x 1**

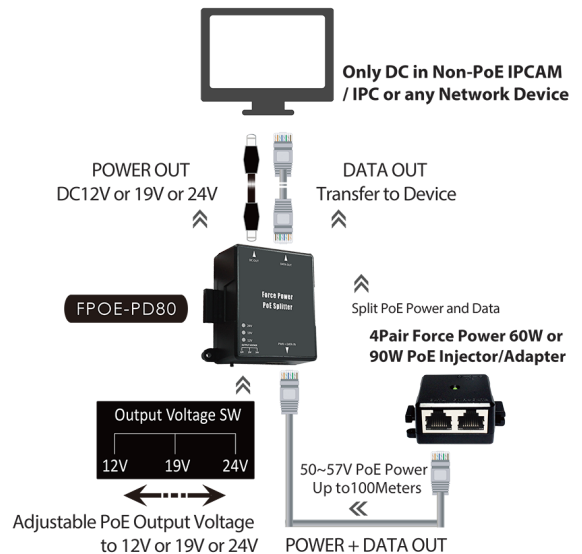
## Hardware Overview



## Introduction

**FPOE-PD80 4Pair Force Power Gigabit PoE++ Splitter** delivers Power over Ethernet to remote devices. **Supports IEEE 802.3af/at standard and compatible with IEEE 802.3bt Power level.** It provides PoE 50-57V Ethernet power + data input to separate to only DC/Power output up to 80Watt and only Ethernet/Data output. **And DC output voltage switchable to 12V or 19V and 24V.** This Force High-Power splitter allows a non-compliant device to upgrade to PoE, it is used to deploy remote non-PoE device with no nearby AC outlets such as latest WiFi 6 generation 802.11ax WiFi AP, PoE IP Speed Dome PTZ CAM, industrial PC and remote digital signage display..etc.

## Product Application



## Force Power PoE Splitter for split Power & Data

### Highlight Features

- Complying with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3af, IEEE 802.3at standard and compatible with IEEE 802.3bt Power level
- Supports 10/100/1000Mbps Gigabit Ethernet
- It can use to connect non-PoE compliant devices to an PoE injector or PoE switch
- Supports Output Voltage hot switching for 12VDC/19VDC/24VDC three range adjustable
- Max Power Output after split power & data : 80Watt(24V) - 75Watt(19V) and 50Watt(12V)
- Supports Ethernet PoE to Separate to only DC/Power and only Ethernet/Data.
- Bundle accessories for inside diameter 2.1 mm(PHY) to 2.1 (PHY) mm DC cable
- LED indicators for DC output voltage display of 12V/19V/24V
- Supports desktop or wall mounting installation and multiple units combination for easy to bundles organize the Ethernet cables

## Installation

### Before Installation

If the device is generally DC-receiving and does not support the POE function, the FPOE-PD80 can easily be used to accept POE source power and apply it separately from DC output power.

The FPOE-PD80 separates the power out and provides three kinds of DC power output through its DIP switch and its voltage and current shown as below:

### DIP Switch :

- 12 VDC / 4.17A (Max)
- 19 VDC / 3.94A (Max)
- 24 VDC / 3.33A (Max)



**Caution:** Please ensure the output voltage is correct for remote device. Otherwise it will damage your remote device.

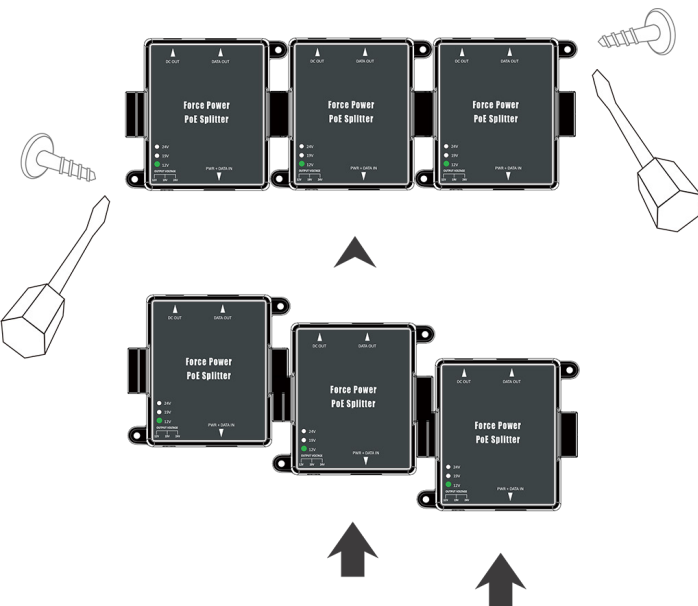
### Cables Installation

FPOE-PD80 provides a POE-powered solution for non-PoE devices. The setup of the splitter can be performed using the following steps:

- Connect from "DATA OUT" of FPOE-PD80 to the RJ-45 port of the remote device.
- Make sure first power source that the POWER+DATA in Port of the splitter is fully connected to the PoE source-powered PoE Injector or PoE Switch.
- Connect the correct DC plug from "DC OUT" of FPOE-PD80 to the DC port of remote device. (Use a DC cable to connect devices that are to be powered by DC)
- Power on the remote device and the LED for voltage status indicator on FPOE-PD80 will remains on.

## Units Combination

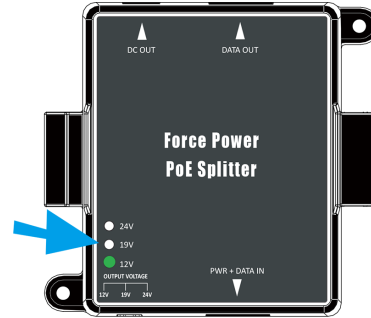
This device can be locked on the wall, **(Does not have screw attachment , you must prepare it yourself)** or it can be combined with multiple units for easy to bundles organize the Ethernet cables.



## LED Indicator :

Output power switching (12VDC / 19VDC / 24VDC)

LED indicators for Power function enable



LED Definition	
	● DC 12V output: 12V Light on
	● DC 19V output: 19V Light on
	● DC 24V output: 24V Light on

### Notice: Cable and Current-Resistance Loss

DC 24V @ 100Meter : 12.50% with Cat.6 Cable

DC 19V @ 100Meter : 13.33% with Cat.6 Cable

DC 12V @ 100Meter : 14.00% with Cat.6 Cable

## Product Specifications

Standards & Hardware Specifications	
<b>Standard</b>	IEEE802.3/3u 10BASE-T/100BASE-TX IEEE 802.3ab 1000BASE-T IEEE802.3af Power over Ethernet (PoE) IEEE802.3at Power over Ethernet (PoE+) Compatible to IEEE 802.3bt Power Level (PoE++)
<b>Network Media</b>	10/100BASE-T/TX : UTP Cat. 5 or up 1000BASE-T: UTP Cat. 5 or up
<b>Data Transfer Rate</b>	10/100/1000Mbps (Half-duplex), 20/200/2000Mbps (Full-duplex)
<b>Data PIN</b>	PIN 1/2, 3/6 & 4/5, 7/8
<b>Power PIN</b>	End-span (Type-A): PIN 1/2,3/6 ; Mid-span (Type-B): PIN 4/5,7/8
<b>Ethernet Connector</b>	RJ-45 x1 for Power + Data input RJ-45 x1 for Data output
<b>ESD Protection</b>	Over Voltage protection & Short Circuit Protection
Environmental & Mechanical Characteristics	
<b>Max Power Output</b>	80Watt(DC 24V Output), 75Watt(DC 19V Output) 50Watt(DC 12V Output)
<b>Power Interface</b>	DC-Jack
<b>Power Requirement</b>	50~57V PoE Power Source
<b>PoE Input Voltage</b>	50V~57V
<b>DC Output Control Range</b>	12V/19V/24V three range adjustable by DIP switch
<b>DC Output Current</b>	24V/3.33A , 19V/3.94A, 12V/4.17A
<b>LED Indicators</b>	DC Output LED x3 : 12V or 19V or 24V
<b>Operating Temperature</b>	0° to 55° C
<b>Storage Temperature</b>	-40° to 70° C
<b>Operating Humidity</b>	10% to 90% non-condensing
<b>Storage Humidity</b>	5% to 90% non-condensing
<b>Dimension</b>	84.5 x 80 x 39.5mm ( W x D x H )
<b>Unit Weight</b>	99.8g
<b>Case of Materials</b>	ABS
<b>Production Location</b>	TW Only
<b>Certification</b>	FCC, CE, RoHS-compliant