Petenet®

Quick Start Guide

10/100Mbps Waterproof PoE Splitter

1 Features

- Compliant with IEEE802.3af standard.
- Supports PoE applications in Fast Ethernet Environments.
- Auto-Sensing Algorithm enables power intake from IEEE802.3af PSE.
- Splits 48VDC power over an RJ45 Ethernet cable into various DC outputs.
- Supports a wide input voltage range of 42VDC to 57VDC.
- Provides a maximum power output of up to 12W.
- Outputs 12VDC/1A.
- Features short-circuit protection.
- Includes a high-efficiency DC/DC converter.
- Equipped with LED indicators for power input status.
- Plug-and-Play functionality.

Important Note: Please ensure that the output voltage is correct.
Using the wrong voltage may damage the device you intend to power.
Always confirm the voltage requirements of your device before connecting.

2 Product Introduction

Power-over-Ethernet (PoE) eliminates the need for running separate DC power cables to devices on a wired LAN. Using a PoE system, installers only need a single Category 5 Ethernet cable to transmit both power and data to each device. This provides greater flexibility in locating network devices and can significantly reduce installation costs in many cases.

PoE systems consist of two main components: the **PSE (Power Sourcing Equipment)** and the **PD (Powered Device)**. According to the IEEE 802.3af/at specification, the PSE is a device that delivers power through an Ethernet cable. The PSE can either be integrated into a network switch (End-span configuration) or function as a separate device placed between the switch and the PD (Mid-span configuration). The PD, which is the endpoint of the link, receives the power. Typical PDs include IP phones, WLAN access points, or other IP devices that require power. Power is transmitted over two of the four twisted wire pairs in a Category-5 cable.

The **PoE Splitter** converts the 48VDC transmitted through the RJ45 Ethernet cable into a 12VDC power output, enabling devices to utilize the power effectively. It supports PoE applications in Gigabit Ethernet environments and complies with IEEE 802.3af power classification standards. The module supports both PSE Alternative A and Alternative B connections, with a maximum power output of 12W. Its wide input voltage range (42VDC to 57VDC) and minimal external component requirements (e.g., a single output decoupling capacitor) make it a compact and efficient solution for PoE deployments.

Power+Data In:
Connect to the PoE Switch or Injector

Voltage Switch:
DC Output Vlotage 12V
10/100Mbps Ethernet

3 Specification

Item	Description
Ports	1 x 10/100 RJ45 PoE Port (Data + Power IN) 1 x 10/100M RJ45 LAN Port (Only DATA) 1 x DC Jack (DC OUT)
Network Media	10Mbps: Cat3,4,5 Unshielded Cable 100Mbps:Cat5,5E Unshielded Cable
Pass Through Data Rates	10/100Mbps
Power Output	12VDC/1A
Input Power Requirements	DC Input Voltage: 42 to 57 Vac
Indicators	Power
Connectors	Shielded RJ-45, EIA 568A and 568B
Dimensions	Length 240mm(Containing wire) * width 26mm * height 30mm
Environmental Conditions	Operating Ambient Temperature: 0 to 40° C Operating Humidity: Max 90%, Non-condensing Storage Temperature: -20 to 70° C Storage Humidity: Max 95%, Non-condensing
Regulatory Compliance	IEEE 802.3af (PoE) IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet)

4 Application

- Use the PoE Splitter in combination with a PoE Switch or PoE Injector to extend your network into areas without power lines or electrical outlets. This setup allows you to deploy devices such as access points (APs), IP cameras, IP phones, and more.