POE Introduction

Power over Ethernet (POE) is a revolutionary technology that extends the already ultra-broad functionality of Ethernet by supplying reliable DC power over the same Category 5/5e twisted-pair cable that currently carries Ethernet data. Modeled after the technology used by the telecommunications industry to supply reliable power to telephones, PoE enables lifeline quality power for IP telephones (VoIP) as well as many other low-power Ethernet network machines, such as wireless access points (WAP) and security cameras.

Features

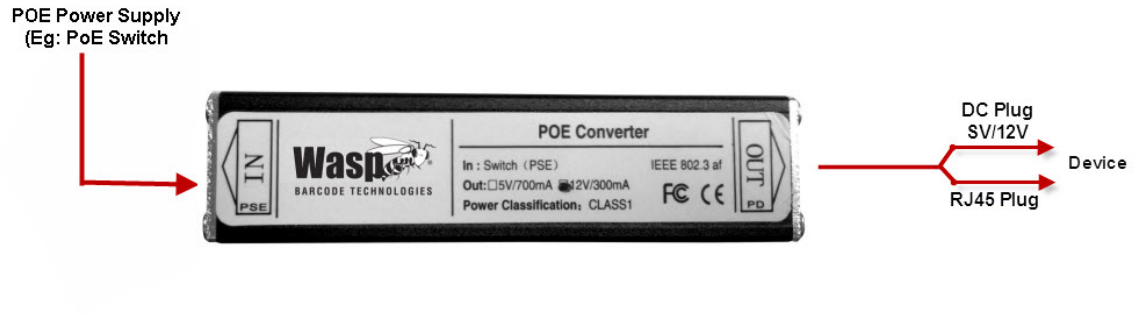
- The Wasp POE Converter is based on IEEE 802.3af standards.
- The device is easy to install, even for those without advanced technical knowledge.
- POE capability helps simplify network installation and configuration by providing a solution for complex networks that do not have enough electricity sockets.
- High-quality components and steady circuits are used in the device to ensure reliability.
- The Wasp POE Converter can be customized for different types of devices with different voltages (5V, 12V, etc.).

Technical Specifications

- Power Classification: Class 1(0.44W – 3.84W)
- Output Voltage: 5V (700mA) / 12V (300mA)
- Output Power: ≤3.5W
- Transform Efficiency: ≥80%
- Operating Temperature: -20°C - +80°C
- Operating Humidity: 10% - 80%RH not condensed
- Standards Compliance: IEEE 802.3af, FCC, CE
- Converter Size: 98MM (L) x 24mm (W) x 25mm (H)

Typical Application

Connect input-end of the POE Converter to POE power supply (PSE, support EndPoint and MidSpan). Connect output-end to a DC power input-end 5V (or 12V) and RJ45 Ethernet interface through special connecting wire. There is no need to configure a special power adapter for this device as it can work normally with the power supplied by the POE system. This capability not only saves cost, but also simplifies wiring and installation. A typical wiring configuration is shown in the graphic below:



Pin Description

Notice: Socket nick is downward. Counting from left to right, there are 8 pins (1 – 8).

Input Definition

Pin#	Name	Description
1	TX+	Data signal and DC Input
2	TX-	
3	RX+	
4	SP+	Spare DC Input
5	SP+	
6	RX-	Data signal and DC input
7	SP-	Spare DC Input
8	SP-	

Output Definition

Pin#	Name	Description
1	TX+	Data signal
2	TX-	
3	RX+	
4	NC	Not connected
5	V-	DC Negative output
6	RX-	Data signal
7	NC	Not connected
8	V+	DC Positive output

Notice

Output-end short circuit or overload of POE Converter may bring unrecoverable damage to the Converter.

In the following three cases, we recommend that you do not use the POE Converter:

1) The device includes an inside battery;
2) The device has GPRS functionality:
3) The device and lock are powered by one adapter.