GE
Security

SP-PoE Splitter User Manual

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Intended use Use this product only for the purpose it was designed for; refer to the data sheet and user documentation for details. For the latest product information, contact your local supplier or visit us online at www.gesecurity.com.

FCC compliance This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Regulatory information

N4131

Manufacturer

GE Security, Inc.

HQ and regulatory responsibility:
GE Security, Inc., 8985 Town Center Parkway,
Bradenton, FL 34202, USA

EU authorized manufacturing representative:
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European Union directives

2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

Contact information

For contact information see our Web site: www.gesecurity.com.

For contact information see our Web site: www.gesecurity.eu.

Content

Chapter 1
Overview

The GE Security SP-PoE is an **IEEE 802.3af Power over Etherne**t device that splits the 48VDC power input over an Ethernet cable into separate **5V and 12V DC power outputs**.

Package Contents

Your SP-PoE Splitter carton should contain the following items:

- The Power over Ethernet Splitter x 1
- User's Manual x 1
- 15cm UTP straight network cable x1
- DC Plug cable x 2

If any item is missing or damaged, please consult the dealer from whom you purchased you SP-PoE Splitter module.

Introduction

The GE Security SP-PoE is an **IEEE 802.3af Power over Etherne**t device that splits the 48VDC power input over an Ethernet cable into separate **5V and 12V DC power outputs**. The SP-PoE works with IEEE 802.3af power source equipment (PSE). This frees device deployment from restrictions due to power outlet locations and eliminate the costs for additional AC wiring and reduces the installation time.

When the PSE inserts DC Voltage into the CAT 5 cable, it allows the cable between the PSE and SP-PoE to transfer data and power simultaneously. The maximum distance between the PSE and SP-PoE is 100M.

Product Features

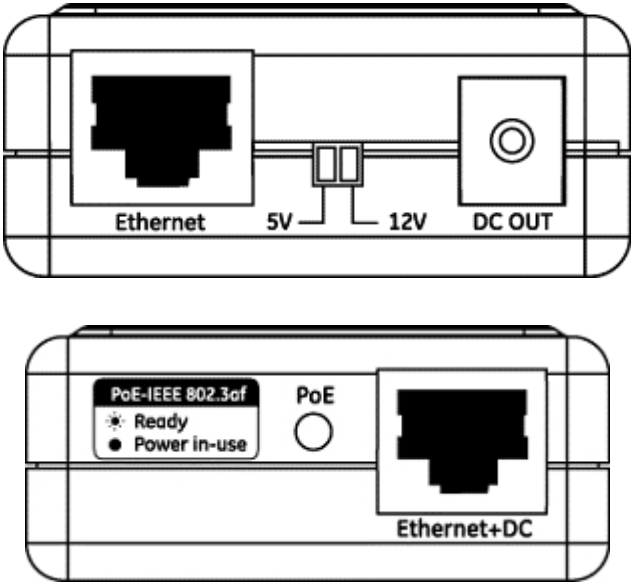
- Complies with the IEEE 802.3z Gigabit Ethernet standard
- 1 X 1000Mbps fiber port
- Plug and Play Installation
- SFP1000SX-220 provides distance up to 220m over 62.5/125μm fiber cable and 550m over 50/125μm fiber cable

- SFP1000LX-10Km provides distance up to 10km over 9/125μm single mode fiber cable

Product Overview

Figure 1 shows the left and right side panels of the SP-PoE Splitter

Figure 1: Left and right side panels of the SP-PoE



LED Indicators

LED	Color	Function
PoE ready / in-use	**Green**	**Lights to indicate the port is providing 48VDC in-line power.**

Product Specifications

Model	SP-PoE
Interface	
Ethernet + DC Copper Port	1 x 10/100Base-TX with IEEE 802.3af PoE PD for data + DC in RJ-45 connector
Ethernet Copper Port	1 x 10/100Base-TX for data out RJ-45 connector
Power over Ethernet	
PoE Standard	IEEE 802.3af Power over Ethernet / PD
PoE Input Pin Assignment	1/2(+), 3/6(-) End-Span or 4/5(+), 7/8(-) Mid-Span
PoE Input Voltage	48V DC (Range 44 to 56VDV)
Hardware Specification	
Data Rate	10/100Mbps (vary on Ethernet device attached)
Throughput (Packet per second)	148810pps@64Bytes
DIP Switch	5VDC / 12VDC output voltage
Output DC Connector	DC Jack 5.5 x 2.5 mm receptacle in the central post
Output Power	12W max
Number of Device can be powered	1
Ethernet Cable	TIA/EIA-568, Category 5/5e cable
Installation	Standalone or Wall mountable
Material	Plastic
Standards Conformance	
Standard Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 10/100Base-TX Fast Ethernet IEEE 802.3af Power over Ethernet PD

Physical Specifications

Dimensions (W × D × H):

2.87” x 2.17” x 0.94” / 73 x 55 x 24mm

Weight:

0.22 lbs / 50g

Environmental Specifications

Operating:

Temperature: 0°C ~ 50°C

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

Storage:

Temperature: -20°C ~ 70°C

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

Electrical Specification

Output Voltage:

DIP switch 5V: 5VDC, 2.0A max

DIP switch 12V: 12VDC, 1.0A max

NOTE: This product is intended to be supplied by a UL Listed Direct Plug-In Power Unit marked "Class 2" or "LPS" and output rated 48 VDC, 3 Amp minimum.

Chapter 2
Hardware Installation

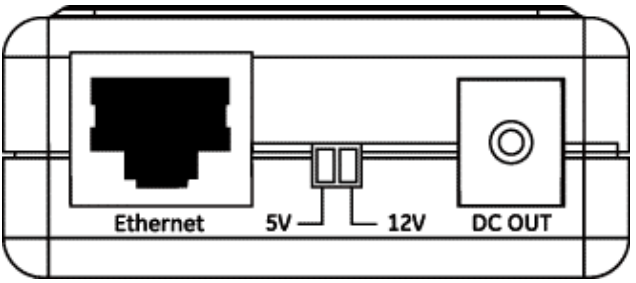
Before Installation

If your network environment is very difficult to find a power socket for your AC-DC Adapter of networked device, the SP-PoE provide DC power for this Ethernet Device conveniently and easily.

The SP-PoE separates the power out and provides two kind of DC power output through its DIP switch and its voltage and current shown as below:

- 5V DC/2A
- 12V DC/1A

Figure 2: 5V/12V DC out DIP switch



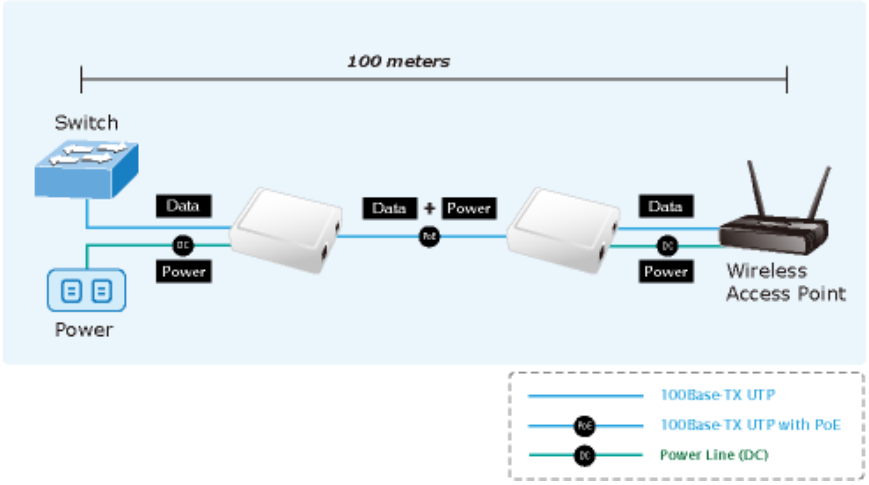
The default value is set on 5V. MS-POE and SP-PoE units can be installed in pairs. However, use of third-party device is allowed if the device complied with IEEE 802.3af standard.

Installation

To connect the hardware do the following:

1. Connect a standard network cable from "Ethernet+DC" of MS-POE to "Ethernet+DC" of SP-PoE. The POE LED of SP-PoE/MS-POE will start to flash continuously.

Figure 3 MS-PoE/SP-PoE application



Note: The SP-PoE only accept IEEE 802.3af equipment, other in-line power device may cause the SP-PoE malfunction.

2. Connect the UTP cable in the package from "Ethernet" of SP-PoE to the RJ-45 port of remote device.
3. Connect proper DC plug from "DC OUT" of SP-PoE to remote device.

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

4. Power on the remote device and the LED indicator on SP-PoE will remains on.

Connect with other802.3af devices

The SP-PoE also provides an alternative way to connect to non IEEE 802.3af devices and to connect with an IEEE 802.3af in-line power device like a Power over Ethernet Switch. See the figure below.

Figure 4: PSE/SP-PoE application