

DATA SHEET

POE SERIES

POWER OVER ETHERNET MEDIA CONVERTER 15W/25.5W/30W



BLACK BOX®

OVERVIEW

PoE+ MEDIA CONVERTER DATA SHEET

INTRODUCTION

Use the PoE+ PSE Media Converter, 10/100/1000BASE-T to 1000BASE-SX/LX to connect two types of network segments easily and inexpensively. These Media Converters feature a UTP RJ-45 port and a fiber port. Depending on the model, the fiber port will be either an SFP, duplex Multimode SC, or duplex Single Mode SC connection. The SFP model is customizable with the use of swappable SFPs for single-mode or multimode applications. The copper port on these Media Converters will auto sense 10/100/1000 Mbps and supply power to PoE+ Powered Devices (PD). Also included will be an AC power supply to power the unit.

FEATURES

- IEEE802.3AT POE+ STANDARD
- IEEE802.1Q
- IEEE802.3Z 1000BASE-TX/FX STANDARD
- PoE PSE COMPATIBLE
- SUPPORTS FLOW CONTROL FOR FULL AND HALF DUPLEX OPERATION
- BANDWIDTH CONTROL
- FCC CLASS A, CE

| SPECIFICATIONS | |
|---------------------------|------------------|
| CATEGORY | 802.3AT (PoE+) |
| CLASSIFICATION | 0-4 |
| MAX. CURRENT | 600mA |
| PSE OUTPUT VOLTAGE | 50-57V DC |
| PSE OUTPUT POWER | <=25.5W |
| PD INPUT VOLTAGE | 42.5-57V DC |
| PD MAX. POWER | 25.5 W |
| CABLE REQUIREMENTS | CAT-5e or better |
| POWER SUPPLY CABLE (PAIR) | 2 |

1. PoE system components

A complete POE system includes PSE (Power Sourcing Equipment) and PD (Powered Device). The PSE device powers Ethernet client devices, and it is the administrator of the entire Power over Ethernet process.

2. There are two international standards for PoE: IEEE802.3af and IEEE802.3at. The differences follow:

| PARAMETER DIFFERENCES | | | |
|---------------------------|---------------|------------------|-----------------------------|
| CATEGORY | 802.3AF (PoE) | 802.3AT (PoE+) | EXCEEDS 802.3AT (ENHANCED+) |
| CLASSIFICATION | 0-3 | 0-4 | 0-4 |
| MAX. CURRENT | 350mA | 600mA | 600mA |
| PSE OUTPUT VOLTAGE | 44-57V DC | 50-57V DC | 50-57V DC |
| PSE OUTPUT POWER | <=15.5W | <=25.5W | <=30W |
| PD INPUT VOLTAGE | 36-57V DC | 42.5-57V DC | 42.5-57V DC |
| PD MAX. POWER | 15.5W | 25.5W | 30W |
| CABLE REQUIREMENTS | Unstructured | CAT-5e or better | CAT-5e or better |
| POWER SUPPLY CABLE (PAIR) | 2 | 2 | 2 |

3. If both PSE and PD equipment are standard items, this equipment must comply with the two international standards. If the PD is a non-standard item, the PoE (PSE) equipment must be customized.

4. In the early stage of PoE development, PoE equipment supported IEEE802.3af or IEEE802.3at, respectively. Now IEEE802.3at POE equipment can be backward compatible to IEEE802.3af equipment (but IEEE802.3af can't be upward compatible) via a built-in intelligent chip. PoE+ equipment with built-in intelligent chips can identify PD equipment automatically and supply suitable power.

5. When checking the PoE equipment (PSE or PD), users must confirm the equipment power requirement (PoE, PoE+, or Enhanced+)



SPECIFICATIONS

PoE+ MEDIA CONVERTER DATA SHEET

| BASIC SPECIFICATIONS | |
|---------------------------|---|
| STANDARD PROTOCOL | IEEE 802.1q/IEEE 802.3z 1000Base-TX/FX standard IEEE 802.3af Interface |
| OPERATION MODE | Full/Half duplex mode |
| CONNECTORS | UTP: RJ-45; Fiber: SC AC-inlet connector |
| RJ-45 INTERFACE | The transmission media adopts CAT5 twisted-pair with maximum length of 100 meters (330 ft.). |
| FIBER INTERFACE | SC fiber interface is a duplex mode type which includes two sets of optical transceivers: TX and RX. |
| POWER SUPPLY INTERFACE | The AC power supply is connected to AC input jack of media converter through the attached AC power cable. |
| POWERED DEVICE MAX. POWER | 25.5W |
| ENVIRONMENTAL PARAMETERS | Work temperature: 32 ~ 122°F (0 ~ 50°C); Storage temperature: -40 ~ +158°F (-40 ~ +70°C); Humidity: 5%-90% non-condensing |
| CABLE | UTP Cable: Cat5 UTP cable Single-Mode: 8.3/125, 8.7/125, 9/125, 10/125µm; Multimode: 50/125, 62.5/125µm, 100/140µm |
| DIMENSIONS | 1" H x 2.8" W x 3.7" H (25.4 x 71.5 x 95 mm) |
| WARRANTY | 3 years |
| MEAN TIME BETWEEN FAILURE | 114,000 hours |
| TAA COMPLIANT | Yes |

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ORDERING INFORMATION

| ITEM | CODE |
|--------------------------------------|-----------------------|
| 10/100/1000 PoE+/FX SFP | LPS600A-SFP |
| 10/100/1000 PoE+/FX MM 1300NM SC 2KM | LPS601A-MM1300 |
| 10/100/1000 PoE+/FX MM 850NM SC 550M | LPS602A-MM850 |
| 10/100/1000 PoE+/FX SM 1310NM 10KM | LPS603A-SM1310 |

