

stand-alone media converter

# SPOEB10xx-100

## Power-Over-Ethernet PSE Media Converter



Enables enterprises to provide power to network devices over the existing CAT5 data connection.

Transition's AC powered PoE media converters combine data received over a fiber optic link with -48 VDC power; providing power to Data Terminal Equipment (DTE) Power Devices (PD) over unshielded twisted pair cable. The PoE converters are Power Sourcing Equipment (PSE) and are fully compatible with Powered Devices (PD) that comply with the IEEE802.3af: 2003 standard. The converters also include a PD signature sensing and power monitoring features per the IEEE 802.3af standard. Other features include Over-Current Protection, Under-Current Detection and Fault Protection Input.

This feature enhanced model offers the ability to enable/disable many of the features as well as force port capabilities (see switch section under specifications to the right).

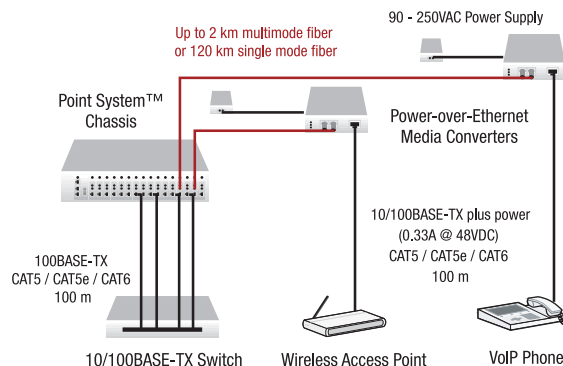
In addition, with the PSE/LPT switch enabled, a loss of Fiber RX will disable PSE power output on the UTP port for 2 seconds to allow remote device to re-initialize. (Also known as Powered Device Reset.)

The PoE converter is fully compatible with devices that comply with the IEEE802.3af standard. The PoE converter is capable of inserting power on data pairs or spare pair of the MDI.

### Features

- ▶ External AC power supply
- ▶ IEEE802.3af Power-Over-Ethernet Compatible
- ▶ 48 VDC PSE Output Voltage
- ▶ Signal Pair or Spare Pair Power Insertion
- ▶ PD Detection Signature
- ▶ Over-Current Protection & Under-Current Detection
- ▶ Powered Device Reset
- ▶ Switch selectable features and port settings
- ▶ Minimum Load Sensing
- ▶ Fault Protection Input
- ▶ Auto-Negotiation
- ▶ AutoCross™ [
- ▶ Link Pass Through
- ▶ Far-End-Fault (FEF)
- ▶ Automatic Link Restoration

### Power Over CAT5 to Remotely Located Devices



### Specifications

|                       |                                                                                                                                                                                                                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards             | IEEE Std. 802.3, IEEE Std. 802.3af                                                                                                                                                                                                                                                                                             |
| Switches              | <b>SW1:</b> Auto-Negotiation On/Off<br><b>SW2:</b> Speed TP: Force 10 Mbps or 100 Mbps (SW1 off)<br><b>SW3:</b> Duplex TP: Force Half or Full Duplex (SW1 off)<br><b>SW4:</b> Duplex Fiber: Half or Full Duplex<br><b>SW5:</b> AutoCross™ On/Off<br><b>SW6:</b> PSE On/Off<br><b>SW7:</b> PSE/LPT on/off<br><b>SW8:</b> Unused |
| Max Packet Size       | 1522 bytes untagged<br>1518 bytes tagged                                                                                                                                                                                                                                                                                       |
| Dimensions            | <b>Width:</b> 3.25" [82 mm]<br><b>Depth:</b> 4.8" [120 mm]<br><b>Height:</b> 1.0" [25 mm]                                                                                                                                                                                                                                      |
| Power                 | 90 – 250 VAC external power supply                                                                                                                                                                                                                                                                                             |
| Power Consumption     | 20 Watts max.                                                                                                                                                                                                                                                                                                                  |
| Operating Temperature | 0 – 40°C [32° – 104°F]                                                                                                                                                                                                                                                                                                         |
| Storage Temperature   | -25° to +85°C [-13° to +185°F]                                                                                                                                                                                                                                                                                                 |
| Environment           | 5% – 95% humidity non-condensing;<br>0 – 10,000 ft. altitude                                                                                                                                                                                                                                                                   |
| Shipping Weight       | 2 lbs. [0.90 kg]                                                                                                                                                                                                                                                                                                               |
| Compliance            | EN55022:1994+A1:1996+A2:1997 Class A;<br>FCC Part 15 Subpart B; UL 1950                                                                                                                                                                                                                                                        |
| Warranty              | Lifetime                                                                                                                                                                                                                                                                                                                       |

## 10/100 Bridging

### Ordering Information

- SPOEB1011-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1300nm multimode (ST)  
[2 km/1.2 mi.] Link Budget: 11.0 dB
- SPOEB1013-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1300nm multimode (SC)  
[2 km/1.2 mi.] Link Budget: 11.0 dB
- SPOEB1014-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1310nm SM (SC)  
[20 km/12.4 mi.] Link Budget: 16.0 dB
- SPOEB1015-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1310nm SM (SC)  
[40 km/24.9 mi.] Link Budget: 26.0 dB
- SPOEB1016-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1310nm SM (SC)  
[60 km/37.3 mi.] Link Budget: 29.0 dB
- SPOEB1017-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1550nm SM (SC)  
[80 km/49.7 mi.] Link Budget: 29.0 dB
- SPOEB1035-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1550nm SM (SC)  
[120 km/74.6 mi.] LB: 36.0 dB
- Single Fiber Products**  
Recommended use in pairs
- SPOEB1029-100**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1310nm TX/1550nm RX  
single fiber single mode (SC)  
[20 km/12.4 mi.] LB: 19.0 dB
- SPOEB1029-101**  
10/100BASE-TX (RJ-45) [100 m/328 ft.]  
to 100BASE-FX 1550nm TX/1310nm RX  
single fiber single mode (SC)  
[20 km/12.4 mi.] LB: 19.0 dB

### Optional Accessories (sold separately)

#### Mounting Options

**WMBD or WMBL**  
Wall Mount Brackets

**RMS19-SA4-01**  
4-Slot Media Converter Shelf