

# SGPOE Series

## Stand-alone Gigabit Ethernet PoE Media Converter

### 10/100/1000Base-T PoE PSE to 1000Base-X



SGPOE1040-110

Transition Networks' AC powered PoE media converters combine data received over a fiber optic link with -48 VDC power; providing power to Data Terminal Equipment (DTE) Powered 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 IEEE 802.3af standard. The converters also includes a PD signature sensing and power monitoring feature per the IEEE 802.3af standard. This feature enhanced model offers the ability to enable/disable many of the features as well as force port capabilities (see switches section under Specifications).

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 IEEE 802.3af standard as well as select legacy PDs. The PoE converter is capable of inserting power on data mode A or mode B pairs of the MDI.

## Features

- SFP ports support either 100Base or 1000Base fiber
- Redundant SFP port option
- IEEE 802.3af Power-over-Ethernet Compatible
- 48 VDC PSE Output Voltage
- Mode A or Mode B Pairs Power Insertion
- PD Detection Signature
- PoE Legacy Detect for non-IEEE 802.3af compatible Powered Devices (PD)
- Over-Current Protection
- Under-Current Detection
- Powered Device Reset
- Minimum Load Sensing
- Fault Protection Input
- Auto-Negotiation
- Auto-MDI/MDIX
- Link Pass Through available on SGPOE10xx-100
- Automatic Link Restoration
- External AC power supply

## Specifications

Standards	IEEE 802.3 IEEE 802.3af
MAC Addresses	8K
Max Packet Size	1632 bytes untagged 1628 bytes tagged
Switches	SW1: Auto-Negotiation TP On/Off SW2: Speed TP: Force 10 Mbps or 100 Mbps (SW1 off) SW3: Duplex TP: Force Half or Full-Duplex (SW1 off) SW4: Duplex Fiber: Half or Full-Duplex SW5: Auto-MDI/MDIX On/Off SW6: PSE On/Off SW7: PSE/LPT on/off SW8: Unused
Dimensions	Width: 4.4" [112 mm] Depth: 5.1" [129 mm] Height: 1" [25 mm]
Power Consumption	20 Watts (max)
Power Supply	External AC/DC required; 48 VDC 0.67A Output; 90 – 250VAC external power supply input
Environment	Operating: 0°C to 40°C Storage: -25°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2 lbs. [0.90 kg]
Compliance	EN55022:1994+A1:1996+A2:1997 Class A, FCC Part 15 Subpart B, UL 1950
Warranty	Lifetime

## Ordering Information

### SGPOE1013-100

10/100/1000Base-T PoE (RJ-45)  
[100 m/328 ft.]  
to 1000Base-SX 850nm multimode (SC)  
[62.5/125 µm: 220 m/722 ft.] Link Budget: 8.0  
dB [50/125 µm: 550 m/1804 ft.] Link Budget:  
8.0 dB

### SGPOE1039-100

10/100/1000Base-T PoE (RJ-45)  
[100 m/328 ft.]  
to 1000Base-SX 850nm multimode (LC)  
[62.5/125 µm: 220 m/722 ft.] Link Budget: 8.0  
dB [50/125 µm: 550 m/1804 ft.] Link Budget:  
8.0 dB

### SGPOE1040-100

10/100/1000Base-T PoE (RJ-45)  
[100 m/328 ft.]  
to 100/1000Base-X SFP Slot (empty)

### SGPOE1040-110

10/100/1000Base-T PoE (RJ-45)  
[100 m/328 ft.]  
to (2) 100/1000Base-X SFP slots (empty)

Optional Accessories (sold separately)

### SFP Modules

### Mounting Options

#### WMBD

DIN Rail Mount Bracket 5" [127 mm]

#### WMBL

Wall Mount Bracket 4" [102 mm]

## Power Supply Included

To order the corresponding country specific power supply, add the extension from the list below to the end of the SKU; Ex: SGPOE1013-100-NA

### -NA = Country Code

- NA = North America
- LA = Latin America
- EU = Europe
- UK = United Kingdom
- SA = South Africa
- JP = Japan
- OZ = Australia
- BR = Brazil