SGPAT10xx-100
PoE+ PSE Media Converter

TRANSITION NETWORKS®

The SGPAT10xx-100 is a 10/100/1000Base-T to 1000Base-SX/LX Gigabit Ethernet Media Converter, which allows two different types of network segments to be connected easily and affordably while also injecting PoE+ power through the copper RJ-45 port.

PoE allows for the transmission of power over the same copper cables used to transmit data. PoE+ media converters are Power Sourcing Equipment (PSE). This AC powered media converter combines data received over a fiber optic link with 56VDC power to provide power and data to Powered Devices (PD) over unshielded twisted pair cabling while complying with IEEE 802.3at PoE+ (pre-standard) and also backwards compatible with IEEE 802.3af standard PoE.

The converter includes a PD signature sensing and power monitoring features. Other features include over-current protection, under-current detection, and fault protection input. Link Pass Through and Remote Fault Detect allows the media converter to monitor both the fiber and the copper ports for the loss of a receive (RX) signal and propagate the failure on to the end devices.

SGPAT1013-100

Ordering Information

SGPAT1013-100
10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-SX 850nm multimode (SC) [62.5/125um: 220m / 722 ft.] [50/125um: 550m / 1804 ft.] Link Budget: 7.5 dB

SGPAT1039-100
10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-SX 850nm multimode (LC) [62.5/125um: 220m / 722 ft.] [50/125um: 550m / 1804 ft.] Link Budget: 7.5 dB

SGPAT1014-100
10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm single mode (SC) [10km / 6.2mi] Link Budget: 10.5 dB

SGPAT1019-100
10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm single mode (LC) [10km / 6.2mi] Link Budget: 10.5 dB

Optional Accessories (sold separately)

Mounting Options

WMBD
DIN Rail Mount Bracket 5" [127 mm]

WMBL
Wall Mount Bracket 4" [102 mm]

Power Cord Included

To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU; Ex: SGPAT1013-100-NA

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

Features

- Internal AC power supply
- Over-current protection
- Under-current detection
- Minimum load sensing
- Fault Protection Input
- Auto-Negotiation
- Auto-MDI/MDIX
- Link Pass Through
- Remote Fault Detect
- Wall mount or Tabletop installation

Specifications

Standards	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x IEEE 802.3at (pre-standard)
Max Packet Size	9216 Bytes in Cut-Through Mode 2048 Bytes in Normal Mode
Switches	Switch 1: Cut-Through Mode (default) or Normal Mode Switch 2: Link Pass Through Enable (default) or Disable Switch 3: PoE Enable(default) or Disable
Status LEDs	PWR (Power): On = Power LNK/ACT 1: On = Copper Link, Blinking = Activity LNK/ACT 2: On = Fiber Link, Blinking = Activity 10/100/1000: Green = Copper 1000Mbps Link Amber = Copper 100Mbps Link Off = Copper 10Mbps Link PoE1: On = RJ-45 (1,2), (3,6) pairs detect PD PoE2: On = RJ-45 (4,5), (7,8) pairs detect PD
Dimensions	Width: 6.22" [158 mm] Depth: 5.23" [133 mm] Height: 1.57" [40 mm]
Power Consumption	30 Watts (max)
Power Input	100 – 240 VAC, 47 – 63 Hz
Environment	Operating: 0°C to 40°C Storage: -20°C to 70°C Humidity: 5% to 90% (non-condensing)
Weight	2 lbs. [0.90 kg]
Compliance	FCC Part 15 Class A, CE Mark
Warranty	Lifetime