

stand-alone media converter

SGPAT10xx-100

Power-Over-Ethernet (PoE+) PSE Media Converter

10/100/1000 Bridging

Stand-Alone



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 IEEE802.3at PoE+ and also backwards compatible with IEEE802.3af 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.

Features

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

Specifications

Complete list of fiber optic connector specifications [pg 240-252]

Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab and IEEE 802.3z IEEE 802.3x full duplex flow control IEEE 802.3at Power-over-Ethernet (PoE+)
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
Max Packet Size	9216 Bytes in Cut-Through Mode 2048 Bytes in Normal Mode
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" [158mm] Depth: 5.23" [133mm] Height: 1.57" [40mm]
Power Consumption	Input: 100 – 240 VAC, 47 – 63 Hz Consumption: Max. up to 30W
Environment	Operating Temperature: 0 to 40 C Humidity: 5% - 90% Storage Temperature: -20 to 70 C
Shipping Weight	2 lbs. [0.90 kg]
Regulatory Compliance	Complies with FCC Part 15 Class A and CE Mark
Warranty	Lifetime

Ordering Information

SGPAT1013-100

10/100/1000Base T (RJ-45)
[100 m/328 ft.]
to 1000Base-SX 850nm MM (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 MM (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 SM (SC)
[10m / 6.2mi] Link Budget: 10.5 dB

SGPAT1019-100

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

