

Gigabit Ethernet Embedded Media Converter

10/100/1000Base-T Port to 100/1000Base-X Port



The AP-GET-SFP-01 is a 10/100/1000 Ethernet media converter that provides cost effective, entry-level media conversion between 10/100/1000Base-T ports and 100/1000Base-X fiber ports. Designed as an embedded solution that can be mounted internally in Tempest rated computer and networking equipment such as VoIP Phones, Workstations, Thin Clients, Printers, Monitors and similar devices. Government agencies like Intelligence, Defense, and Foreign Affairs generally

require fiber connectivity to these devices to aid in data security as well as mitigating electromagnetic emissions. The converter should be positioned such that the copper connection is internal to the device it is mounted within, while the fiber is the only port accessible externally. With its fixed configuration, deployments are plug-and-play and the hot-swappable dual speed SFP slot supports autosensing 100Mbps or 1000Mbps SFP transceivers. Transition Networks offers a wide variety of SFP optical transceivers to meet specific deployment environments supporting either multimode or single mode fiber. The copper port and power input share a connection through a 10-Pin interface via a PH Connector. Pins 1 and 2 are used to provide the internal power connection, while pins 3 through 10 are used for the 10/100/1000 Ethernet connection. This converter is an ideal solution for fiber integration in both Fast Ethernet and Gigabit Ethernet environments, along with its small size; it is perfect for locations where space is limited.

Ordering Information

AP-GET-SFP-01

10/100/1000Base-T (10-pin) [100m / 328ft.] to 100/1000Base-X Open SFP Slot Embedded Media Converter

Optional Accessories (sold separately)

FP Modules

TN-GLC-FE-100FX (100Base-FX SFP Module)
TN-GLC-SX-MM (1000Base-SX SFP Module)

Features

- 10/100/1000Base-T on the copper port
- Fiber 100/1000Base-X open SFP slot
- Supports Power Level III (2W) SFP modules
- Auto-Negotiation enabled
- Auto-sensing 100/1000 SFP port speed
- Auto-MDI/MDIX enabled
- Active Link Pass Through (ALPT) enabled
- Automatic Link Restoration
- Support for Jumbo Frames up to 10,240 bytes
- Power input range from 3.3 to 5 VDC
- PCB board assembly only, metal enclosure not provided
- 10-pin #B10B-PH-K-S PH Connector by JST needed for UTP and power connections (customer provided)
- One internal copper port status LED
- One external fiber port status LED
- Two PCB mounting holes

Specifications

Standards	IEEE 802.3-2012 IEEE 802.3z IEEE 802.3ab
Connectors	Fiber Ports: SFP TP & Power: #B10B-PH-K-S to PH Connector by JST
Data Speeds	SFP Ports at 100Base-FX & 1000Base-X
Status LEDs	SFP Link/Activity: Green, On for Link, Blink for Activity TP Link/Activity: Yellow On for Link, Blink for Activity
Dimensions	Width: 2.65" [67.3 mm] Depth: 1.5" [38.1 mm] Height: 0.62" [15.75 mm]
Power Consumption	0.75 Watts without the SFP
Power Source	3.3 - 5VDC
Environment	Operating: 0°C to 50°C Storage: -40°C to +85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 to 10,000 ft.
Weight	0.05 lbs. [0.02 kg]
Warranty	Lifetime

Applications

Individual embedded projects may vary, below is a list of features that could be customized to meet a projects unique requirements (contact your Transition Networks representative for more information):

- PCB Board Sze
- Mounting hole locations
- Power input voltage
- Power input connector
- Status LED location
- Ethernet copper port connector
- Fiber port connector