ADD-GMCP-BX-USC

10/100/1000Base-TX(RJ-45) to 1000Base-BXU(SC) BiDi SMF 1310nm/1550nm 20km POE Media Converter

Features

- Ethernet Support: Compatible with Gigabit Ethernet (10/100/1000 Mbps)
- Power Over Ethernet (PoE) Compliance: Supports IEE 802.3af/at/bt PoE standards, delivering up to 30W/90W of power to connected PD (Power Device) equipment such as IP cameras, wireless access point, and VoIP phones.
- Internal Power Supply: Integrated power design eliminates the need for an external adapter, with On/Off switch design is more flexible and safer
- Link Fault Pass-Through(LFP): Automatically detects and mirrors link failures between fiber and copper ports, ensuring seamless network troubleshooting and redundancy.
- PD Remote Rest via DIP Switch: Allows remote power cycling of connected PoE devices without physical access, improving maintenance efficiency.
- Plug-and-Play Installation: No software configuration required, ensuring quick and hassle-free deployment

Product Description

This is a media converter that converts a 10/100/1000Base-TX(RJ-45) to 1000Base-BXU(SC) via a 1310nm/1550nm bi-directional (BiDi) single-mode fiber (SMF) SC connector, which allows distance reach up to 20km. This provides a cost effective conversion from 10/100/1000Base-TX(RJ-45) to 1000Base-BXU fiber, while extending the network reach beyond the 100m reach limitation of copper. This AC/DC powered PoE media converter is a power sourcing equipment (PSE), which combines data transferred over a fiber optic link with 48V (or other voltage) power supply, providing power to IEEE802.3af powered device (PD) over CAT5 and up UTP cable (cable length up to 100 meters / 330 feet). It complies with the IEEE802.3af standard. The converter includes a single port PSE controller, which offers PD signature sensing and power monitoring features. Other features include over-current protection and LFP function. The LFP (Link Fault Pass-through) allows the media converter to monitor both the fiber and copper RX port for loss of signal. In case of a loss of RX signal on one media port, the converter will automatically disable the TX signal to the other media port, thus passing through the link fault. Our media converters are 100% compliant for all of our networking needs. Now you have a cost effective solution to your network upgrade needs.

Specifications

Parameter	Specifications
Copper Port	1x 10/100/1000Base-Tx RJ-45
	Auto-negotiation, auto MDI/MDI-X with PoE injector function
Fiber Port	1x 1000Base-X
Data Rate	1.25G
Fiber Port Type	SC
Transmission Distance	10km
Receiver Sensitivity	<-22dBm
Transmission Mode	Store-and-Forward
Flow Control	Back pressure for half-duplex mode IEEE 802.3x pause frame for full-duplex mode
Maximum Frame Size	9K
Dimensions	140mm x 110mm x 40mm
Installation	Desktop
Power Over Ethernet & Power Supply	
Standards	IEEE 802.3af PoE Standard, IEEE 802.3at PoE+ Standard, IEEE802.3af/at/bt PoE++ Standard
Power Output	48-56V DC, 30W max for af/at, 52-56V, 90W for bt
PoE Power Supply Type	Mid-Span
Power Pin Assignment	Default: 1/2(+), 3/6(-) for 30W Default: 1/2(+), 3/6(-) & 4/5(+), 7/8(-) for 90W
PoE Power Budget	30W for af/at, 90W for bt
Power Supply	100V-240V AC 50/60Hz
Environmental	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	5% to 905 Non-Condensing
MTBF	>100,000 Hours @ Telcordia SR-332 GB 25°C
Heat Dissipation	113BTU/h with 30w PoE
Cooling	Passive Cooling
Noise Level	0dBa

LED Indicators

LED	State	Indications
PWR	Green	Power On
	Off	Power Off
100M	Green	100Base-Tx
Link/ACT	Steady	A valid network connection established
	Flashing	Transmitting or receiving data ACT Stands for Activity
PoE	Green	Indicates PoE function status
FDX	Green	Full Duplex

LED Indicators

DIP Switch	Name	Status	Description
#1	ENROM	Off	FX Reset Disable
		On	FX Reset Disable
#2	N/A		
#3	PoE Shutdown	Off	PoE Shutdown Disable
		On	PoE Shutdown Enable
#4	LFP	Off	LFP Disable
		On	LFP Enable
#5	MODE1	Off	ALS Disable
		On	ALS Enable
#6	MODE2	Off	Ai PoE Disable
		On	Ai PoE Enable

Notes:

1. ENROM: When enabled, when the optical link is down, the media converter will reboot.
2. LFP: Link fault pass through. When enabled, the UTP receiver is passed to the fiber transmitter to make the median converter appear transparent to the connected end devices. It uses link fault pass-through to indicate when far-end fault issues occur. If a fault occurs, the end device indicated a failure for troubleshooting.
3. ALS: Automatic laser shutdown is a procedure to automatically shut down the laser when there is no input light and stop emitting optical signals.
4. Ai PoE: When enabled, the PoE will restart if there is no data input to the UTP receiver.

About AddOn Networks

In 1999, AddOn Networks entered the market with a single product. Our founders fulfilled a severe shortage for compatible, cost-effective optical transceivers that compete at the same performance levels as leading OEM manufacturers. Adhering to the idea of redefining service and product quality not previously had in the fiber optic networking industry, AddOn invested resources in solution design, production, fulfillment, and global support.

Combining one of the most extensive and stringent testing processes in the industry, an exceptional free tech support center, and a consistent roll-out of innovative technologies, AddOn has continually set industry standards of quality and reliability throughout its history.

Reliability is the cornerstone of any optical fiber network and is in engrained in AddOn's DNA. It has played a key role in nurturing the long-term relationships developed over the years with customers. AddOn remains committed to exceeding industry standards with certifications from ranging from NEBS Level 3 to ISO 9001:2005 with every new development while maintaining the signature reliability of its products.

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