Gigabit Ethernet Media Converter

Model 907-GBE

Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom marine products for harsh environments and is a leading manufacturer of high performance and high quality multiplexers. Contact Focal for any assistance in selecting the best solution for your requirements.



The model 907 Gigabit Ethernet (GbE) Media Converter is a PC/104 form-factor card that optically transfers Ethernet data at 1000 Mbps with low latency over a singlemode fiber. Standard Ethernet rates (10/100/1000 Mbps) are compatible with the copper side RJ-45 input. As with other 907 media converters, the 907-GBE may be used as a standalone card or combined optically with other 907 cards. Optical power budgets are typically 20-26 dB with 10 km or more of singlemode fiber. Diagnostics are available as on-board LEDs for optical and data link status.

Features

- Lowest latency (no switch buffer delays)
- Compatible with 10/100/1000 Mbps copper links per IEEE 802.3
- Interchangeable SFP transceivers

Benefits

- · Provides fastest response for time-critical links
- Backwards compatible with older 10/100 Mbps links
- Supports a wide range of optical options, including CWDM wavelengths

Applications

- Remotely Operated Vehicles (ROVs)
- Pipe Inspection Robots
- Bomb Disposal Robots
- Video Security Systems
- Tether Management Systems
- Tactical Networks



Specifications

Data	
No. Channels	1
Data Rate	10/100/1000 BASE-T(X)
Options	Half Duplex 10/100 Mbps Ethernet is supported by < 2 km optical links
Optical	
Optical Fiber	1 or 2 singlemode (9/125 μm)
Baud Rate	1.25 Gbaud
Format	SGMII
Wavelength	1310/1550 nm standard
	(CWDM optional, 1471 - 1611 nm)
Flux Budget	> 20 dB (24 dB typical)
Options	Bidi (bidirectional) transceivers
Electrical	
Power Voltage	+5.0 VDC ±10%, regulated
Power Used	4 W typical
Options	Isolated power cord (DC-DC)

Mechanical	
Dimensions	PC/104 (form-factor only)
Weight	< 120 g (0.25 lb) including SFP
Options	Custom Enclosures
Connectors	
Optical	ST/PC (standard), LC CWDM optional
Data	1 x RJ-45
Power	2 pin Molex, 0.156 inch pin spacing
Environmental	
Temperature	-10°C to +60°C (operational) -40°C to +85°C (storage)
Humidity	85% RH, non-condensing
Vibration	5 g, 25 - 1000 Hz, 3 axes
Shock	30 g, 11 ms, half-sine, 3 axes
Options	6000 psi pressure tolerant, extended temperature, stress screened or qualified

All specifications and information are subject to change without notice. Please contact Focal for the latest updates.