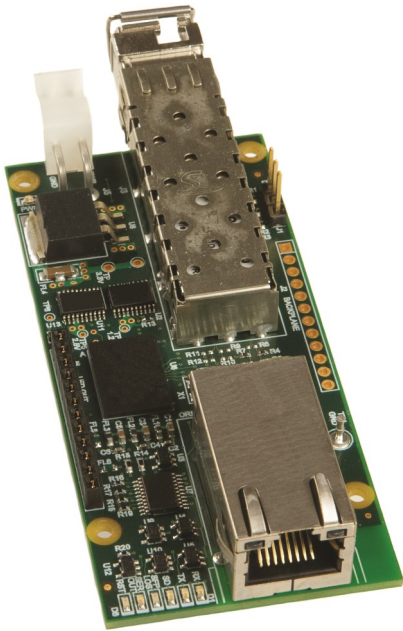


Gigabit Ethernet (GbE) Media Converter

Model 914-GBE

Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom marine products for harsh environment applications 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 914-GBE Gigabit Ethernet Media Converter converts 10/100/1000 BASE-T(X) Ethernet from a single RJ-45 to optics, and vice versa, all within a small credit-card size form-factor. The 914-GBE may be used as a standalone card or optically integrated into a 914 system stack via CWDM modules. Optical power budgets are typically 20-24 dB over 10 km of singlemode fiber. Diagnostics are provided by on-board LEDs for power, optical, and data link status. A 12-pin header is also provided to drive LED diagnostics on a front panel or enclosure of a system.

Features

- Low Latency (no switch buffer delays)
- Compatible with 10/100/1000 BASE-T(X) copper links per IEEE 802.3
- Interchangeable SFP transceivers
- Rugged design for harsh environment, including 6000 psi pressure tolerant version

Benefits

- Provides fast response for time-critical links
- Backwards compatible with legacy 10/100 Mbps links
- Supports a wide range of optical options, including CWDM wavelengths for combining multiple cards on a single optical fiber

Applications

- Remotely Operated Vehicles (ROVs) and Tether Management Systems
- Pipe Inspection Robots
- Bomb Disposal Robots
- Video Security Systems
- Tactical Networks and Defense Systems
- Industrial Process Control

Specifications

Data	
No. Copper Ports	1
Ethernet	10/100/1000 BASE-T(X)
Total Throughput	Up to 1000 Mbps
Options	Half Duplex 10/100 Mbps Ethernet also supported
Optical	
Optical Fiber	1 - 2 singlemode (9/125 μ m)
Baud Rate	1.25 Gbaud
Wavelength	Optical table; Wavelength: 1310/1550 nm standard CWDM 1471 – 1611 nm optional
Flux Budget	> 20 dB (24 dB typical). Higher budgets available, contact factory
Options	1310/1550 nm or CWDM wavelengths for combining multiple model systems on one singlemode fiber
Electrical	
Power Supply	+5 VDC +/-10%, regulated
Power Used	4 W typical
Protection	Overvoltage and reverse polarity protection, fused

Mechanical	
Dimensions	41 x 89 mm [1.6 x 3.5 inches]
Weight	< 90 g (0.2 lb), including SFP
Enclosures	Contact Moog for custom enclosures
LED	On-board diagnostic LEDs including: power receive optical link valid, Tx and Rx activity, copper link speed and duplex
Connectors	
Optical	Dual or single LC
Ethernet	RJ45
Power	2-pin Molex, 0.156 inch pin spacing
Diagnostic	12-pin 0.1 inch header
Environmental	
Temperature	-20°C to +60°C (operational) -40°C to + 85°C (storage)
Humidity	85% RH, non-condensing
Vibration	5 g, 25 - 1000Hz, 3 axes
Shock	30 g, 11 ms half sine, 3 axes

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

© 2016 Moog Inc. DS914GBE-v1.0

www.moog.com/marine

Focal Technologies Corporation, A Moog Inc. Company