MOOG

914-HDV2

HD Video Media Converter

The Focal 914-HDV2 is an extremely compact, harsh environment, single card solution for dual High Definition (HD) video.

The model is targeted for use with small Remotely Operated Vehicles (ROVs), HD video broadcast, or ROV survey upgrades. A great solution for upgrading or designing a new system. With its compact size and no enclosure, the model can fit in very small spaces and allows for minimal pressure bottle diameters.

The fiber-optic transmitter in the video input can be provided in four standard CWDM* wavelength pairs, or tailored with almost any combination of CWDM wavelengths. The fiber-optic transmitter uses powerful CWDM lasers and the fiber-optic receiver uses a sensitivity fiber-optic receiver to maintain a high link budget. Focal also provides fiber-optic multiplexer cards to work with the 914 form-factor or the 907 form-factor.

914-HDV2- Compact Design

To help with sparing, both the video input and video output unit use the same base card assembly, only the SFP** is different. Video input or video output is controlled by a DIP*** switch and the installed transceiver.

The 914-HDV2 supports advanced features, such as: real-time diagnostics over a dedicated RS-232 channel. Diagnostic readings may be accessed via an RS-232 serial link in real time by using Focal Graphical User Interface (GUI) software, based on the Microsoft® .NET Framework, or by using a customer's own software configured to read Focal's serial ASCII protocol or Modbus ASCII format.

**Coarse Wavelength Division Multiplexing*

*** Small Form-Factor Pluggable*

****Dual In-Line Package*

Benefits

- Dual HD Video in a small package
- Simplifies troubleshooting with advanced diagnostics

Features

- Supports SD-SDI, HD-SDI and 3G-SDI
- Real-time diagnostics and Graphical User Interface (GUI)
- Rugged design for harsh environments
- LED header for enclosure diagnostics
- Reclocked video

Applications

- ROVs
- Pipe Inspection Robots
- Bomb Disposal Robots
- Camera Add-ons for ROVs
- Remote Video Security Platforms
- Remote Video Broadcast Platforms

PRELIMINARY

FOCAL™

www.moog.com/marine

Line drawing coming soon

Video

Number of Channels	2
Format	3G-SDI (SMPTE-424M) HD-SDI (SMPTE-292M) SD-SDI (SMPTE-259M-C)
Data Rates	3G-SDI: 2.970 Gbps HD-SDI: 1.485 Gbps SD-SDI: 270 Mbps
Impedence	75 Ω
Latencey	< 5 us (not including fiber)

Optical

Optical Fiber	2 singlemode (9/125 um)
Baud Rate	3G-SDI: 2.970 Gbaud HD-SDI: 1.485 Gbaud SD-SDI: 270 Mbaud
Wavelength	1471 / 1491 nm CWDM standard
Optical Budget	> 28 dB
Options	Other wavelengths, lower optical budgets

Electrical

Power Voltage	+4.5 to +13.5 VDC
Power Dissipation	3 W typ., 5 W max.
Protection	Overvoltage, reverse voltage, time delay fuse

Diagnostics

LEDs	Power status, optical status, video status
LED Header	Power status, optical status, video status
RS-232 to PC	Diagnostics from console through GUI

Mechanical

Weight	< 80g (0.18 lb)
PCB Material	Isola 3700HR, conformally coated

Connectors

Video	SMB (75 Ω)
Power	2-pin Molex, 0.156" pin spacing
Diagnostics	Molex 1.2mm W-T-B Connector
LED Header	FCI Minitek 127

Environmental

Temperature	-10°C to +60°C (Operational)
Temperature	-40°C to +85°C (Storage)
Humidity	85% RH, non-condensing
Shock	30 g, 11 ms half sine, 3 axis
Vibration	5 g, 25-1000 Hz, 3 axis
ESD	±15 kV air/HBM, ±8 kV contact

Manufactured in an ISO 9001:2008 registered facility.
All specifications and information are subject to change without prior notice. Please refer to the website for the latest updates.

Focal Technologies Corporation
A Moog Inc. Company
77 Frazee Avenue, Dartmouth
Nova Scotia, Canada. B2B 1Z4
Tel: 88-302-2263 or +1-902-468-2263
Fax: +1-902-468-2249
Email: focal@moog.com **Web:** www.moog.com/marine

FOCAL™