

914-X SERIES DUAL HD VIDEO MEDIA CONVERTER

Model 914-HDV2



Moog Focal has been the leading manufacturer of reliable, high-performance, and high-quality multiplexers and media converters since 1983, specializing in standard and custom products for harsh environment applications. Our experience positions us perfectly to help you choose the best solution for your application.

The Moog Focal 914-HDV2 is an extremely compact, ruggedized, single card solution for two high definition (3G/HD-SDI) video channels.

The 914-HDV2 is targeted for use with Remotely Operated Vehicles (ROVs), HD video platforms, or electro-optic (EO) sensor pods. A great solution for upgrading or designing new systems, the 914-HDV2 easily fits in confined spaces and allows minimum pressure bottle diameters in subsea applications, reducing size and weight.

The fiber-optic transmitter is available in four standard CWDM wavelength pairs, and custom CWDM combinations. High power lasers and sensitive APD receivers maintain the high optical link budgets often needed for subsea systems and other harsh environments. Since the same board supports both transmit and receive functions, spare cards can be configured for use at either end of the link by changing the pluggable SFP module.

The 914-HDV2 is part of the 914-X Series and therefore includes advanced features, such as real-time diagnostics with Moog Focal Graphical User Interface (GUI).

Features:

- Supports 2 channels of 3G-SDI, HD-SDI or SD-SDI
- 4K video via dual link 3G-SDI
- 4K video via quad link 3G-SDI using 2x 914-HDV2
- Real-time diagnostics and Graphical User Interface (GUI)
- Rugged design for harsh environments including 6000 PSI pressure tolerant version
- LED header for enclosure diagnostics
- Reclocked video

ADVANTAGES

- Two independent HD video channels in a small package
- Simplifies troubleshooting with advanced diagnostics
- Compatible with the 914-X Series
- High budget optical interface for long optical links

APPLICATIONS

- Remotely Operated Vehicles (ROVs)
- Pipe inspection robots
- Bomb disposal robots
- Camera add-ons for ROVs
- Remote video security platforms
- Remote video broadcast platforms

TECHNICAL DATA

Video	
No. 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
Impedance	75 Ω
Latency	< 1 μs (not including fiber)
Optical	
Optical Fiber	2 singlemode (9/125 μm)
Baud Rate	Same as video rate
Wavelength	CWDM
Optical Budget	> 24 dB
Options	Higher or lower optical budgets, multimode
Environmental	
Temperature	-10 °C to + 60 °C, operational -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
Options	Extended temperature Pressure tolerant version up to 6000 PSI

Electrical	
Power Voltage	+4.5 to +13.5 VDC
Power Dissipation	2.8 W typ., 3.2 W max.
Protection	Overvoltage, under-voltage, reverse voltage, time delay fuse
Diagnostics	
LEDs	Power status, video status
LED Header	Power status, video status, optical status
RS-232 to PC	Diagnostics from console through GUI
Mechanical	
Weight	< 80 g (0.18 lb)
Dimensions	40.6 x 88.9 mm (PCB)
Connectors	
Video	SMB (75 Ω)
Power	Molex, 0.156 in pin spacing, 2-pin
Diagnostics	Molex 1.0 mm Pico-clasp connector, 3-pin
LED Header	FCI Minitex 127, 10-pin

For product information, visit www.moog.com

For more information or the office nearest you, contact us online, focal@moog.com

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