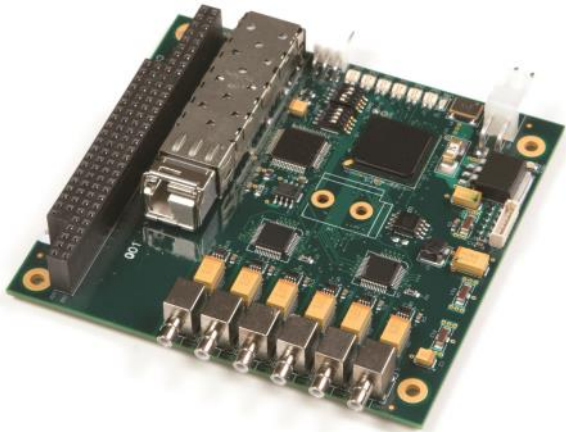


Video/Data Multiplexer

Model 907V

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 907V Video Multiplexer provides digital transmission over a singlemode optical fiber for 6 high quality video channels (NTSC/PAL, RGB, Y/C, YPrPb formats) in a single PC/104 form-factor card. The 907V may be configured to operate on a single uplink wavelength in video-only mode or with an uplink and downlink wavelength to support model 907 expansion cards with bidirectional data channels. A diagnostics add-on card is available that offers end-to-end performance monitoring and identification for multi-card systems via an Ethernet connection at the console, and Graphical User Interface (GUI) software.

Expansion cards may be stacked on the motherboard to add up to 48 data channels in a variety of formats, including RS-232, RS-485/422, TTL, Ethernet, CAN Bus, analog sonar, hydrophone, audio, and Tritech ARCNET. Depending on transceiver options, optical power budgets are typically 20-26 dB with 10 km or more of singlemode fiber.

Features

- 6 Analog composite video channels
- Highest density of high quality video channels available in PC/104 size
- Video-only mode operates on a single wavelength
- Compatible with 907-DIAG-E diagnostics card and Graphical User Interface (GUI) software
- Compatible with existing 907 expansion cards and media converters
- Interchangeable SFP transceiver

Benefits

- Reduces cost and number of cards required for video intensive applications
- Reduces number of wavelengths required in CWDM systems when using video-only mode
- Simplifies troubleshooting with advanced diagnostics
- Supports reuse of existing 907 cards and reduced sparing in mixed 907 and 907V systems
- Supports a wide range of options including CWDM wavelengths

Applications

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

Specifications

Analog Composite Video	
No. of Channels	6
Format	NTSC/PAL, RGB, Y/C (S-video), YPrPb
Digital	10-bit (6 channels, video only) 10-bit (4 video channels with expansion cards) 8-bit (6 video channels with expansion cards)
Bandwidth	6.0 MHz
SNR	> 60 dB (62 dB typical)
Impedance	75 Ohms
Data	
Options	907 expansion cards
Optical	
Fiber Type	1
Baud Rate	1.2 GBaud
Wavelength	1310/1550 nm (standard)
Flux Budget	> 20 dB standard
Options	CWDM (> 24 dB, 1271– 1611 nm), Higher / lower optical budget
Diagnostics	
LEDs	Power (electrical), optical link, video present, video out of range
Ethernet to PC	Diagnostics from remote and console through 907-DIAG-E card at console

Electrical	
Power Voltage	+ 5 VDC \pm 10% regulated
Power Used	3.5 W typical
Protection	Overvoltage, reverse, polarity, 2A time delay fuse
Mechanical	
PCB Dimensions	PC/104 standard, 3.550" x 3.775"
Mounting Holes	PC/104 standard
Weight	< 120g (0.25lb), including SFP
Backplane Connector	Proprietary (Non-standard) pinout
Options	Custom enclosures
Connectors	
Optical	ST/PC (standard), LC (CWDM options)
Video	6 x SMB
Power	2 pin Molex, 0.156" pin spacing
Environmental	
Temperature	-10°C to +60°C (operational) -20°C to +85°C (storage)
Humidity	85% RH, non-condensing
Vibration	5g, 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.

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