

Video 3 System Level Fiber Optic Multiplexer

Description

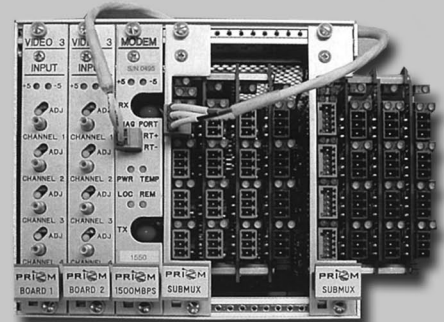
The Prizm™ Video 3 is the third generation of our industry leading multiplexer product family for remote telemetry applications. Developed for the subsea vehicle industry, the Video 3 system provides high quality video and data links.

Features

- 1.5 Gbps of bandwidth
- Up to 12 video channels, 64 bidirectional data channels
- PC based diagnostic software
- Ethernet, Arcnet, Sonar and Hydrophone interfaces
- Expandable to 6 Gbps bandwidth using state-of-the-art CWDM technology
- Designed for operation in harsh environments (-20° to +70° Celsius)
- Available for link lengths over 100 km
- Custom configurations available

Benefits

- Moog's multiplexer systems have been the industry standard for over 10 years. Our systems are used the world over by ROV manufacturers. Independent tests by the U.S. Navy rate Moog systems at over 100,000 hours MTBF.
- The Video 3 system is fully configurable with a myriad of broadcast quality video and data channel combinations. A 4-channel CWDM expands the system to meet every need.
- The experience of the Moog engineering team provides customers the ability to design the system they need, including custom configurations and interfaces.



Typical Applications

- Subsea Vehicles
- Sonar

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The Video 3 system employs a standard 3U card size with an industry standard VME backplane. The racking structure is designed for expandability from a 3 to 12 slot backplane per standard system. Racks can be supplied with an integral power supply or require an external power supply with both +5 VDC and -5 VDC. The standard integral power supply operates from within 110 or 220 VAC at 50-60 Hz.

The modem card is the heart of the system and each telemetry link requires at least one modem cord at both the remote (subsea) and local (surface) end of the link. The system can be configured with a variety of video, data, sonar or custom interfaces as shown below.

Modem Cards

- 1 slot per card
- Optical wavelength at either 1310 nm or 1550 nm
- 1.5 Gbps bandwidth
- 25 db optical budget (custom up to 33 dB)
 - up to 100 km over singlemode fiber
 - up to 4 km over multimode fiber
- Software driven diagnostics

Data Interface Cards

- 4 channels per card
- Mother board required for VME interface
- Daughtercard for expansion, up to 16 channels over a single backplane slot
- RS-232 up to 115 kbps
- RS-422 up to 2 Mbps
- RS-485 up to 230 kbps
- Transient protection and optical isolation

Ethernet

- 10Base-T Ethernet interface
- 4 port hub / bridge

Video Cards

- 4 PAL / NSTC channels per card
- 1 slot per card
- up to 2 Vp-p, 75 ohm

Video 3 Input Card

- Camera or subsea end
- 10-bit ADC for high resolution
- Analog input, SMB connector

Video 3 Output Card

- Monitor or surface end
- 10-bit ADC for high resolution
- Analog output, SMB connector

Arcnet

- Number of channels: one
- Data rates supported: 2.5 Mbps, 1.25 Mbps 635 Kbps, 312 Kbps, 165 Kbps

Interfaces Supported

Standard Arcnet Trittech SeaKing Arcnet

Sonar and Hydrophone Options

Edge Tech, Mesotech, Reson and Trittech options

Single Fiber Options

WDM

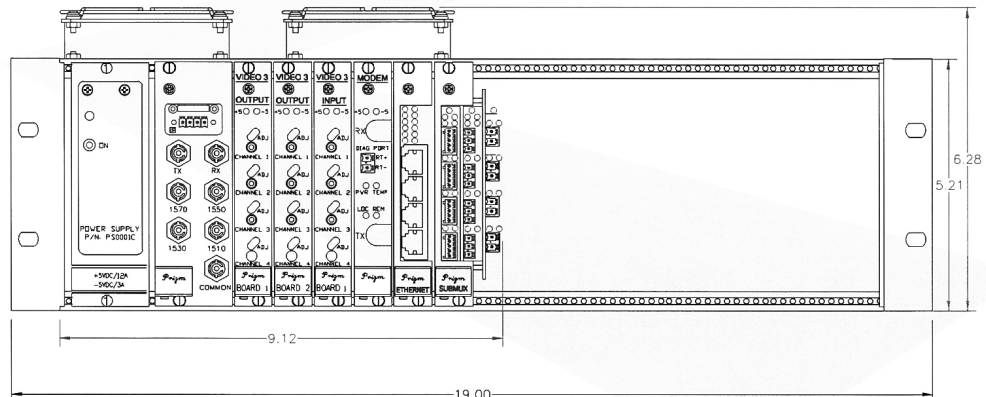
- Using a 1310 nm modem at one link end and a 1550 nm modem at the other end with a WDM at both ends allows system operation over a single fiber.
 - OPOO26 singlemode WDM
 - OPOO48 50 micron multimode WDM
 - OPOO66 62.50 micron multimode WDM

CWDM

A CWDM with the appropriate optics provides the user either two or four parallel Video 3 systems over a single fiber. CWDM technology also allows high bandwidth devices (USB camera, high resolution sonar, digital camera devices) to be added to the system fiber as a unique wavelength. Please contact the factory for further information.

Specifications

Connectors	
Optical	FC / PC or ST / PC
Video	SMB
RS-232 Data	3-pin Phoenix
RS-422 Data	5-pin Phoenix
RS-485 Data	2-pin Phoenix
Diagnostic Port	2-pin Phoenix (RS-485)
Ethernet	RJ-45
Environmental	
Operating Temperature	-20° to +70° Celsius
Storage Temperature	-40° to +85° Celsius



24 / 7 Technical Customer Support
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