

907V

Video Multiplexer

Description

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.

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. Diagnostics are available as on-board LEDs for video and optical link status and as an optional serial link.

Features

- 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



Typical Applications

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

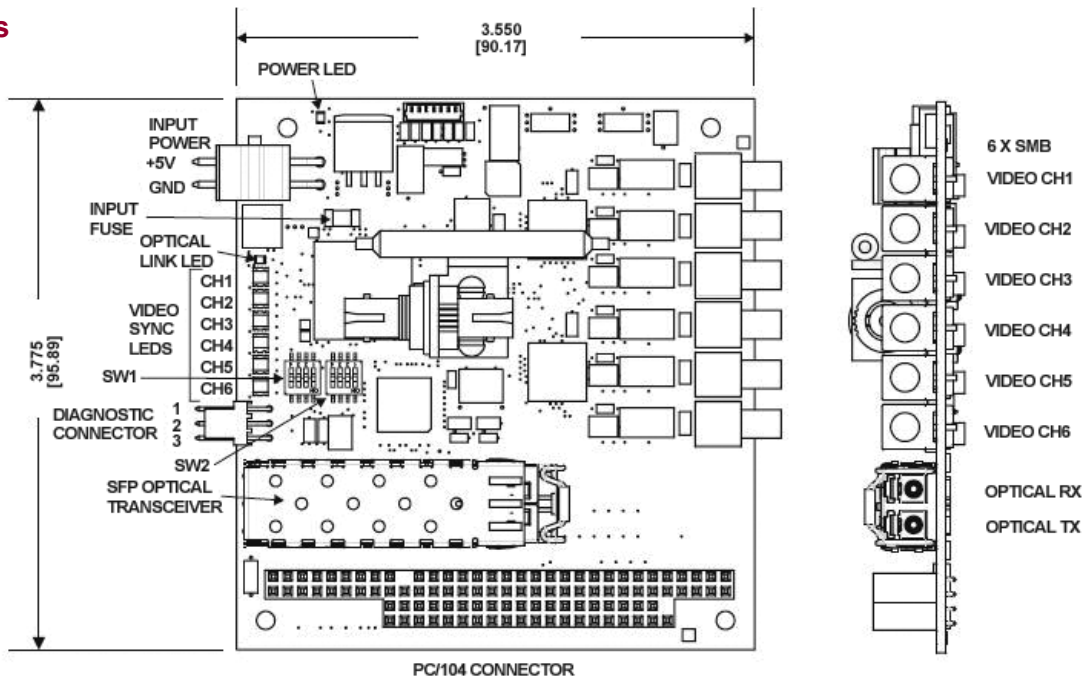
Model 907 Datasheet

Model 907

Video	
No. Channels	6
Format	NTSC/PAL, RGB, Y/C (S-video), YPrPb
Digitization	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	Expansion cards for isolated serial data (RS-232/485/422), TTL, Ethernet (10 Mbps), Tritech ARCNET, MS-900/971 sonar, hydrophone, audio, CAN Bus. Ethernet (10/100/1000 Mbps) HD-SDI, ECL
Optical	
Optical Fiber	1 or 2 singlemode (9/125 μm)
Baud Rate	1200 Mbaud
Wavelength	1310, 1550 nm standard (CWDM optional, 1471 - 1611 nm)
Flux Budget	> 20 dB (24 dB typical)
Options	Bidi (bidirectional) transceivers; higher/lower buget transceivers

Electrical	
Power Voltage	+5 VDC ± 10% regulated
Power Used	3.5 W typical
Mechanical	
Dimensions	PC/104 (form-factor only)
Weight	< 120g (0.25lb), including SFP
Options	Custom enclosures
Connectors	
Optical	ST/PC (standard), LC (CWDM options)
Video	6 x 5 SMB
Power	2 pin Molex, 0.156" pin spacing
Environmental	
Temperature	-10°C to +60°C (operating) -20°C to +85°C (storage)
Humidity	85% RH, non-condensing
Vibration	5 g, 25-1000 Hz, 3 axes
Shock	30 g, 11 ms half-sine, 3 axes
Options	3000 psi pressure tolerant; extended temperature; stress screened or qualified

907V Dimensions



Dimensions in inches [millimeters]

Note: These are standard commercial products that are available with many options or configurations not explicitly shown.