

### FIBER OPTIC TRANSPORT

# **DVM-1500**

Bi-directional, 1Ch 9-bit Video, 2 Audio & 2 Data, Fiber Optic Multiplexer









## **COMPATIBLE WITH:** -RMT,-BLANK,-WALL

### SUMMARY

- -Supports 1 video, 2 audio and 2 data channels with 1 tally dry contact closure Bi-directionally over ONE optical fiber.
- -9 Bit Video with a Signal to Noise ratio greater than 62 dB and a Signal to Quantizing Noise ratio of 62 dB.
- -Video Bandwidth of 8 MHz for support of NTSC, PAL, SECAM and video with diplexed audio carriers at 4.5 MHz, 5.8 MHz and 6.4 MHz (Option for 10 MHz).
- -Differential Gain and Phase of less than 2% and 1°, respectively.
- -Differential video and audio inputs for superior Common-mode Hum and Noise rejection of greater than 60 dB.
- -Video channel isolation greater than 90 dB using a Red Field test signal.
- -Front panel video output gain.

- -24 Bit Audio flat from 20 to 20K Hz, S/N greater than 90 dB and THD less than 0.05%.
- -Video and Optical front panel status indicators with dry alarm relay contacts.
- -Optical budget of up to 24 dB for Single-mode.
- -Available in portable and rack-mount configurations.
- -Applications include links from studio to transmitter (STL), studio to studio, studio to CATV head-end, common carrier, teleconferencing, RBOC Telco circuits, distance learning, Intelligent Transportation Systems & back-haul feeds from special events.

The DVM-1500 series is a compact standalone unit designed to provide bi-directional video, audio and data transmission over one strand of single mode fiber. It is ideally suited to applications such as teleconferencing, distance learning, STL and studio to studio

The DVM-1500 series supports NTSC, PAL, SECAM as well as video with diplexed audio carriers at 4.5MHz, 5.8 MHz and 6.4 MHz (Option for 10 MHz). The design features differential video and audio inputs which greatly reduce hum and noise. Video and Optical front panel status indicators with dry alarm relay contacts.

#### APPLICATIONS





## SPECIFICATIONS

Exceeds the RS-250C Short-haul specification.

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Signal to noise	> 62 dB
Video channel isolation with Red Field	> 90 dB
Differential gain	< +/- 2 %
Differential phase	< +/- 1 <b>□</b>
Chrominance to luminance gain	< +/- 2 %
Chrominance to luminance delay	< +/- 30 nsec.
Frequency response to 6 MHz	< +/- 1 dB
3 dB Bandwidth	8 MHz
Luminance non-linearity	< 2%
Ringing	< +/- 2 %
Tilt	< +/- 0.5 %
Video output & input impedance	75 Ohms
Delay, throughput	1.24 micro sec.
Signal to noise	> 90 dB
Frequency response to 20 Hz to 20 KHz	< +/- 0.1 dB
Distortion	< 0.05 %
Audio output level, adjustable	Unity, +/- 6 dBm
Maximum input & output level, 600 Ohm termination	+18 dBm
Audio output impedance, balanced	50 Ohms
Audio input impedance, balanced (selectable)	600 Ohms or High
Data channels (at 9600 Baud)	2 RS-232C, RS422, RS485, TTL
Power dissipation	< 15 Watts, per unit
AC operation	110 or 220 VAC
Operating temperature	0 to +50 <b>c</b> C
Portable and Wall-mount:	7" L x 5 ¾" W x 1 ¾" H
Triple Rack-mount Kit for 3 modules (Part number -RMT):	7" L x 19" W x 1 ¾" H

## ORDERING INFORMATION

	Bi-directional, 9 bit Video, Audio and Data Fiber Optic Multiplexer, Stand-alone, Multimode (SIN 58-6)
DVM-1500-FMX-38	1 video 9 bits, 2 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver with WDM for 1310nm Multimode Laser 0 dBm, 850nm Singlemode PIN, Sensitivity -24 dBm with FC, SC or ST connector. (Requires both -35 and -53 versions for 1 link) (May require - DVMAUDIO25, -RMT, -BLANK, -WALL)
DVM-1500-FMX-83	1 video 9 bits, 2 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver with WDM 850nm Multimode Laser 0 dBm and 1310 Singlemode PIN, Sensitivity -24 dBm with FC, SC or ST connector. (Requires both -35 and -53 versions for 1 link) (May require - DVMAUDIO25, -RMT, -BLANK, -WALL)
	Bi-directional, 9 bits Video, Audio and Data Fiber Optic Multiplexer, Stand-alone, Singlemode (SIN 58-6)
DVM-1500-FMX-35	1 video 9 bits, 2 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver with WDM for 1310nm Single-mode Laser 0 dBm, 1550nm Singlemode PIN, Sensitivity -24 dBm with FC, SC or ST connector. (Requires both -35 and -53 versions for 1 link) (May require -DVMAUDIO25, -RMT, -BLANK, -WALL)
DVM-1500-FMX-53	1 video 9 bits, 2 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver with WDM 1550nm Single-mode Laser 0 dBm and 1310 Singlemode PlN, Sensitivity -24 dBm with FC, SC or ST connector. (Requires both -35 and -53 versions for 1 link) (May require - DVMAUDIO25, -RMT, -BLANK, -WALL)
	Accessories (SIN 58-6)
-RMT	Triple Rack-mount Kit (1 kit)
-BLANK	Blank panel for rack-mounting kit
-WALL	Wall-mount Kit (1 set )
-DVMAUDIO25	Audio screw terminal break-out adapter for DVM1500
-NOAUDIO	No Audio Option, price adjustment for units without the 2 audio channels

**MultiDyne** 



