DVM-2500

Bi-directional, 1 Video, 8 Audio & 2 Data Fiber Optic Multiplexer

SUMMARY

- Supports **1 video, 8 audio and 2 data channels** with **1 tally** dry contact closure **Bi-directionally** over **ONE optical fiber**.
- Exceeds **RS-250C Short-haul** and **Broadcast Video** specifications.
- **12 Bit Video** with a **Signal to Noise** ratio greater than **72 dB** and a **Signal to Quantizing Noise** ratio of **71 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 **0.2%** and **0.2°**, 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.

DESCRIPTION

The DVM-2500 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 links.

The DVM-2500 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.

Vertrieb / Distributor:
VIDELCO – Professionelle Audio-, Video-, Medien-Technik!
Telefon: +49 (0)2102 / 86 39-00 • Fax: +49 (0)2102 / 86 39-17 • info@videlco.eu • www.videlco.eu
VIDELCO Europe Limited

DVM-2500

Bi-directional Video, Audio & Data Fiber Optic Multiplexer

MultiDyne
Video & Fiber Optic Systems

SPECIFICATIONS

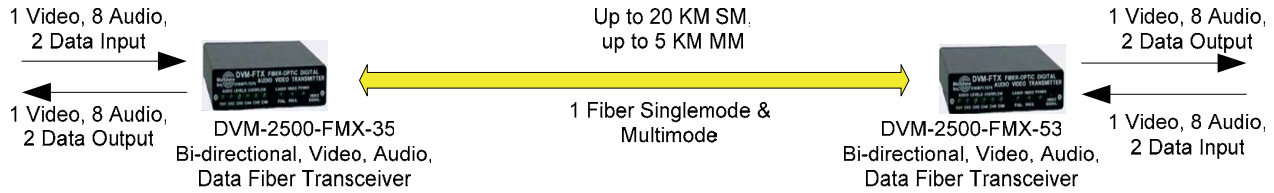
Exceeds the RS-250C Short-haul specification.

Signal to noise .....> 72 dB
Video channel isolation with Red Field .....> 90 dB
Differential gain .....< +/- 0.2 %
Differential phase .....< +/- 0.2 °
Chrominance to luminance gain.....< +/- 0.5 %
Chrominance to luminance delay.....< +/- 5 nsec.
Frequency response to 6 MHz.....< +/- 0.05 dB
3 dB Bandwidth .....8 MHz
Luminance non-linearity .....< 0.2%
Ringing .....< +/- 0.5 %
Tilt .....< +/- 0.2 %
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 °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 Video, Audio and Data Fiber Optic Multiplexer, Stand-alone, Multimode (SIN 58-6)
DVM-2500-FMX-38	1 video, 6 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver; exceeds RS-250C Short-haul specs. 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-2500-FMX-83	1 video, 6 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver; exceeds RS-250C Short-haul specs. 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 Video, Audio and Data Fiber Optic Multiplexer, Stand-alone, Singlemode (SIN 58-6)
DVM-2500-FMX-35	1 video, 6 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver; exceeds RS-250C Short-haul specs. 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-2500-FMX-53	1 video, 6 audio and 2 data channel with tally, Bi-directional, Fiber Optic, Transceiver; exceeds RS-250C Short-haul specs. with WDM 1550nm Single-mode 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)
	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 DVM2500
-NOAUDIO	No Audio Option, price adjustment for units without the 10 audio channels (subtract $1000 per side)

APPLICATION DIAGRAM FOR DVM-2500 Bi-directional, Video, Audio & Data Fiber Optic Transport System



86290908

Vertrieb / Distributor:
VIDELCO – Professionelle Audio-, Video-, Medien-Technik!
Telefon: +49 (0)2102 / 86 39-00 • Fax: +49 (0)2102 / 86 39-17 • info@videlco.eu • www.videlco.eu

VIDELCO
Europe Limited