



## DVM-2500

### Bi-directional Video, Audio & Data Fiber Optic Multiplexer

- Supports **1 video, 6 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.



In the USA and Canada call **1-(800)-4TV-TEST**  
191 Forest Avenue, Locust Valley, NY 11560-2132 USA  
1-(800)-488-8378, (516)-671-7278, FAX (516)-671-3362  
**E-Mail: [info@multidyne.com](mailto:info@multidyne.com)**  
**Web Site: <http://www.multidyne.com>**

# SPECIFICATIONS

## Video Performance:

**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.

## Audio Performance:

Signal to noise .....	> 90 dB
Frequency response to <b>20 Hz to 20 KHz</b> .....	< +/- 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 3/4" W x 1 3/4" H
Triple Rack-mount Kit for 3 modules (Part number -RMT):.....	7" L x 19" W x 1 3/4" H

Specifications subject to change without notice.

## ORDERING INFORMATION:

DVM-2500-FMX-3/5, 1 video, 6 audio and 2 data channel, 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 2 units for 1 link)

DVM-2500-FMX-5/3, 1 video, 6 audio and 2 data channel, 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 2 units for 1 link)

## OPTIONS:

- RMT, Triple Rack-mount Kit (1 set)
- BLANK, Blank panel for rack-mounting kit
- WALL, Wall-mount Kit (1 set)
- DVMAUDIO, Audio screw terminal break-out adapter
- NOAUDIO, No Audio Option, price adjustment for units without the 8 audio channels

Designed and manufactured in the U. S. A.



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