

## Overview

The VILINK ML8D is a Fiber Optic Digital Multiplexer for transmitting 8 channels of video, 8 channels of stereo audio, and/or 8 channels of data over a fiber optic cable. It allows the users the ability to encode these signals, multiplex, and transmit bi-directionally over one single mode fiber optic cable. This robust transmission platform additionally offers a full (NMS) monitoring capability at each node.

The ML8D Series is compatible with NTSC (medium haul), PAL and CCIR video and standard data interfaces such as RS-232 and RS-422. The VILINK 2/4/8/16/32/64 channel multiplexers may functionally be cascaded to bring together and deliver, as many as 8 individual source locations. Long transmission distances are easily accommodated because each node becomes a repeater point for the digital signal, allowing for vast overall transmission considerations.

The ML8D series use of uncompressed analog to digital modulation techniques provides for adjustment free operation over a wide dynamic range. Digital signaling offers superior receiver output stability, which is unaffected by changes in fiber path attenuation due to aging or splicing points.

The ML8D series may be further maintained with the optional VILINK *Plus+ (NMS) Network Management & (GUI) Interface Software* Package. This permits any users the ability of monitoring the entire system for status alarms, such as loss of signal or optical signal, on any one of the system channels.

Applications for the ML Series include video conferencing, long haul CCTV, campus fiber networks, traffic surveillance, homeland security, SCADA systems, and military applications.



## Features

- ◆ *Multiplex Video, Audio, and Data*
- ◆ *Compatible with NTSC, RS-170, RS-250C, PAL, and CCIR Video-Formats*
- ◆ *Adjustment Free Uncompressed Digital Transmission up to 50 Km*
- ◆ *100% Protocol Independent I/O*
- ◆ *NMS (GUI) Monitor Package*
- ◆ *TCP/IP and SNMP Software Package Option*

## Applications

- ◆ *Long Distance CCTV*
- ◆ *Video Conferencing*
- ◆ *Traffic Surveillance*
- ◆ *Railway System Surveillance*
- ◆ *Homeland Security*
- ◆ *Utility SCADA Network*

## Ordering Information:

Model	Description
ML8DVTST03	8-Channel Video Transmitter, 1310nm SM, ST.
ML8DVRST03	8-Channel Video, 1310nm SM, ST.
ML8DVATST03	8-Channel Video, Stereo Audio Transmitter, 1310nm SM, ST.
ML8DVARST03	8-Channel Video, Stereo Audio Receiver, 1310nm SM, ST.
ML8DVTB233/5	8-Channel Video Transmitter and Bi-directional RS-232 1310/1550nm SM, ST.
ML8DVRB233/5	8-Channel Video Receiver and Bi-directional RS-232 1550/15310nm SM, ST.

*\* Please consult factory for additional models and specifications*



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**System:**

Error Rate 1 in 10<sup>9</sup> or Better  
 NMS (Option) GUI RS-232 ports  
 Indicators PWR, LINK  
 NMS Connector RJ12

**Optical:**

Transmitter Laser 1310/1550nm  
 Receiver PIN  
 Power Budget 20 dB SM  
 Connectors ST, FC, SC

**Environment:**

Operating -34°C to 74°C  
 Storage -40°C to 95°C  
 Humidity 98% Non-Condensing

**Physical:**

Dimensions 19" x 1.75" x 10"

**Power:**

Stand alone 90-240 VAC / 47-63 Hz

**Video:**

Channel 8  
 Format NTSC, RS-250C, PAL, CCIR  
 Signal Level 1 Vp-p  
 Video Digitization 8 bits, 13 Mega Samples  
 Bandwidth 6.5 MHz  
 Differential Gain <2 %  
 Differential Phase <1.3°  
 SNR > 60 dB (weighted)  
 Connector BNC

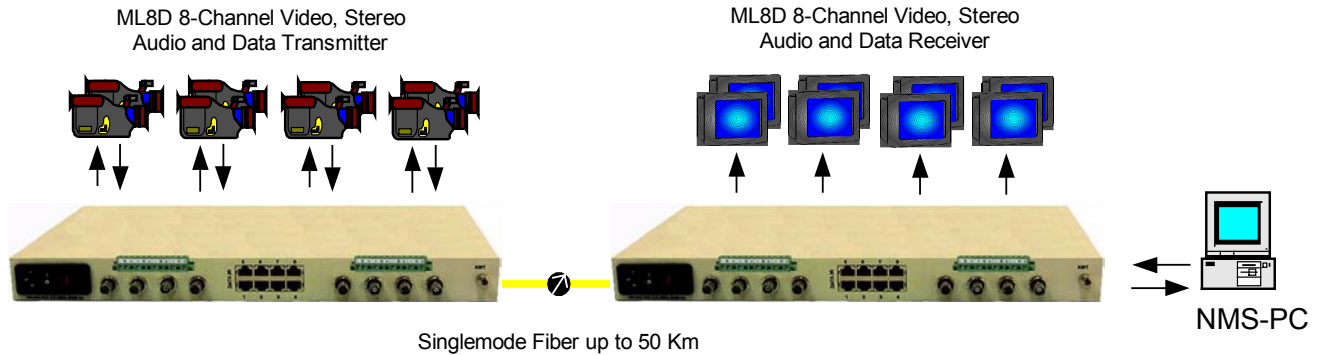
**Audio:**

Channel 8 Stereo  
 Audio Input Unbalanced  
 Impedance 600 Ohms  
 Freq. Response 10 Hz to 20 KHz  
 SNR >70 dB Weight  
 Connectors Terminal Blocks

**Data:**

Channel 8  
 Rate 19.2 Kbps per Channel  
 Format RS-232, RS-422  
 Connector RJ45

## Example Applications



**Typical ML8D Video/Audio Bi-directional Data Transmitter/Receiver Pair Application**

