

## Overview

The ViLink ML10D is a Fiber Optic Digital Add Drop Fault Tolerant Self-Healing Multiplexer for transmitting up to 10 channels of uncompressed digital video and 10 channels of data over one fiber optic cable. The ML10D has the ability to transmit video and data signals in a redundant configuration to the command center over a single SM (single mode)s fiber optic cable.

This fully redundant and self-healing robust transmission platform additionally offers a full (NMS) monitoring capability at each node. The ML10D Series is compatible with NTSC (medium haul), PAL and CCIR video, and standard data interfaces such as EIA-RS-232 and EIA-RS-422. Vilink's use of uncompressed analog to digital modulation techniques provides for adjustment free operation over a wide dynamic range. This digital signaling also offers superior receiver output stability, which is unaffected by changes in fiber path attenuation due to aging or splicing points.

The ML10D multiplexers provide several advanced features in the master receiver unit, including a "Build-in Matrix Switch" function, allowing the users to reduce the number of monitors in the control center. This unique feature may be further maintained with the VILINK Plus+ (NMS) Network Management & (GUI) Interface Software Package. The "NMS" also permits users the ability of monitoring the entire system for status alarms, such as loss of video or optical signal, on any one of the system channels.

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



### Features

- Point to Point Video and PTZ Controlled Data
- Compatible with NTSC, RS-170, RS-250, PAL, and CCIR Video-Formats
- Built-in Video Matrix Switch
- Adjustment Free Uncompressed Digital Transport
- Transmission up to 70 Km between nodes
- Redundant & Self-healing Video/Data System
- NMS (GUI) Monitor Package
- TCP/IP Software Package Option

### Applications

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

## Ordering Information

Model	Description
ML10DVTST02	10 Ch Digital Video Multiplexer, Transmitter, 1RU, ST, MM, 1 Fiber, 1Km, NMS
ML10DVTST03	10 Ch Digital Video Multiplexer, Transmitter, 1RU, ST, SM, 1 Fiber, 30Km, NMS
ML10DVTNST02	10 Ch Digital Video Multiplexer, Transmitter, Redundant Optics, 1RU, ST, MM, 850, 2 Fibers, 1Km, NMS
ML10DVTNST03	10 Ch Digital Video Multiplexer, Transmitter, Redundant Optics, 1RU, ST, SM, 1310, 2 Fibers, 30Km, NMS
ML10DVTNST05	10 Ch Digital Video Multiplexer, Transmitter, Redundant Optics, 1RU, ST, SM, 1550, 2 Fibers, 70Km, NMS
ML10DVTBDST23	10 Ch Digital Video & Bidirectional Data Multiplexer, Transmitter, 1RU, ST, MM, 1 Fiber, 1Km, NMS
ML10DVTBDST35	10 Ch Digital Video & Bidirectional Data Multiplexer, Transmitter, 1RU, ST, SM, 1 Fiber, 30Km, NMS
ML10DVTBDNST23	10 Ch Digital Video & Bidirectional Data Multiplexer, Transmitter, Redundant, 1RU, ST, MM, 850/1310, 2 Fibers, NMS
ML10DVTBDNST35	10 Ch Digital Video & Bidirectional Data Multiplexer, Transmitter, Redundant, 1RU, ST, SM, 1310/1550, 2 Fibers, NMS

\* Replace VT with VR for Receiver, Replace ST with SC or FC for other optical connectors

### Specifications

System:	
Error Rate	1 in 10 <sup>9</sup> or Better
NMS (Option)	GUI RS-232 ports
Indicators	PWR, LINK1, LINK2
NMS Connector	RJ-12
Matrix Switch	10 to 1
Environment	
Operating	-34°C to 74°C
Storage	-40°C to 95°C
Humidity	95% Non-Condensing
Video	
Channels	10
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

Optical:	
Transmitter	Lasers
Receiver	PIN
Power Budget	25 dB SM
Connectors	ST, FC, SC
Data:	
Channels	10
Data Rate	19.2 Kbps
Format	RS-232, RS-422
Connector	RJ-45
Physical:	
Transmitter / Receiver	19" x 1.75" x 10"
Weight	5 lb
Power:	
Rackmount/Standalone	90-240 VAC / 47-63 Hz

### Application

