

Overview

The ViLink ML10DI 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 ML10DI has the ability to transmit video and data signals from multiple locations to the command center, and transmit PTZ control data signals from the command center to multiple locations over a single SM (single mode) fiber optic cable.

This fully redundant and self-healing robust transmission platform additionally offers a full (NMS) monitoring capability at each node. The ML10DI 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 ML10DI multiplexers provide several advance 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 signals, on any one of the system channels.

In addition, the ML10DI multiplexers can also provide up to 60 video and bi-directional data channels in a fully redundant, self-healing single fiber ring by combining the optical repeaters CWDM technologies with its unique "add & Drop" digital modulation scheme.

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



Features

- Add/Drop 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 50 Km between nodes
- More Than 60 Nodes Can Be Connected In One Fiber Ring
- 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
ML10DIVTBDN2ST	1-ch Add/Drop (video Tx & bi-dir data RS-232) Mux, Dual Optic, 1 RU, 90-240 VAC, ST, SM, 1 fiber
ML10DIVTBDN2ST2	2-ch Add/Drop (video Tx & bi-dir data RS-232) Mux, Dual Optic, 1 RU, 90-240 VAC, ST, SM, 1 fiber
ML10DIVTBDN2ST3	3-ch Add/Drop (video Tx & bi-dir data RS-232) Mux, Dual Optic, 1 RU, 90-240 VAC, ST, SM, 1 fiber
ML10DIVTBDN2ST4	4-ch Add/Drop (video Tx & bi-dir data RS-232) Mux, Dual Optic, 1 RU, 90-240 VAC, ST, SM, 1 fiber
ML10DIVRBDN2ST	10-ch Add/Drop (video Rx & bi-dir data RS-232) Mux, Dual Optic, 1 RU, 90-240 VAC, ST, SM, 1 fiber

Specifications

System:	
Error Rate	1 in 10 ⁹ 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

