

## Overview

The VL8D is a reliable high quality low cost fiber optic uncompressed digital video Transmitter/Receiver for transmitting/receiving 8 channels of video, and receiving/transmitting 1 channel of data for controlling PTZ camera over one single mode or multimode fiber optic cable.

The VL8D uncompressed video is compatible with NTSC Medium Haul standards (RS-250C) and other video formats such as PAL, CCIR and C-Cam standards. The PTZ data is compliance with IEA Standard RS-232, RS-422 and RS485 interfaces.

The VL8D series offers a fully digital 8 bits encoding/decoding of uncompressed real time video providing adjustment free operation over a wide operational range. Using AGC techniques for distances from back-to-back to 50 Kilometers, our digital signaling offers superior receiver output stability, which is unaffected by changes in fiber path attenuation due to aging or splicing points.

The extended temperature capability of the VL8D satisfies very critical applications requiring high quality video performance with high reliability.

Applications include City and Highway Traffic Monitoring System, Metro & Railroad Monitoring System, Oil & Gas Pipeline Monitoring System, Airport Security System, High quality CCTV Surveillance, Homeland Security, Utility Management, Premise Networks, Military Hardened applications or anything requiring high quality video performance.



## Features

- Real Time Digital Video Transmission
- 8 Bits Digital Encoding/Decoding
- NTSC Medium Haul Performance (RS-250C)
- International PAL Standards/ CCIR Formats
- PTZ Camera Data ( EIA-RS-485)
- AGC Single Mode Transmission of 0 to 50 Km
- Extended Temperature Range

## Applications

- City and Highway Monitoring System
- Metro & Railroad Monitoring System
- Oil & Gas Pipeline Monitoring
- Airport Security System
- Long Distance CCTV with PTZ
- Homeland Security
- Utility System
- Military Security Applications
- Premise Networks
- Any High Quality Video Requirement

## Order Information

Model	Descriptions
VL8DST03T	8 Channels Analog Video (Tx) with PTZ Data Over Fiber, SM ST, 50Km, +5 VDC
VL8DST03R	8 Channels Analog Video (Rx) with PTZ Data Over Fiber, SM ST, 50Km, +5 VDC

## Specifications

### System:

Error Rate	1 in 10 <sup>12</sup> or Better
Indicators	PWR, Link

### Optical:

Transmitter	Lasers
Receiver	PIN
Wavelength	1310/1550 nm
Power Budget	20 dB @ SM
Connector	ST, FC, SC

### Environment:

Operating	-34 <sup>o</sup> C to +74 <sup>o</sup> C
Storage	-40 <sup>o</sup> C to + 95 <sup>o</sup> C
Humidity	98% Non-Condensing

### Physical:

Dimensions	1.25" x 4.5" x 5.0"
Weight	1 lb

### Power:

TX/RX	+5 VDC
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### Video Interface:

Channel	8
Format	NTSC, PAL, RS-250C, CCIR
Signal Level	1 Vp-p
Impedance	75 Ohms
Video Digitization	8 Bits, 14 Mega Samples
Bandwidth	8 Mhz
Differential Gain	< 1.0%
Differential Phase	< 0.6 <sup>o</sup>
Signal/Noise Ratio	> 65 dB (Weighted)
Connector	BNC

### Data Interface:

Channel	1
Type	PTZ Control
Speed	DC to 115 Kbps
Format	RS-232 / RS-422 / RS-485
Connector	Terminal Block

## Application

