

### **4 Channels High Quality 3G HD-SDI Broadcast Video** and 4 Bi-Directional Data Over SM One Fiber

#### **HDTV** Equipment Series

Model DL415



#### **Product Description**

Vi-Link HD SDI Video equipment: The DL415 is a fiber optic digital multiplexer that designed to transmit up to 4 channels of high quality uncompressed digital 3G HD SDI video signals and Bi-directional EIA-RS232 or RS-422 Data over one single mode cable. It is a cost effective selection for transporting high quality SDI camera pictures and traffic control or sensor data from the remote locations back to the operation center via long fiber optic cable.

The DL415 is compatible with all SMPTE rates: SMPTE259M SDI from 143 to 360 Mbps, SMPTE344M 540Mbps, SMPTE292M HD-SDI 1.485 Gbps, SMPTE372M Dual Link HD-SDI 2,97 Gbps, SMPTE424M Dual Speed 3G-SDI 2.97 Gbps.

The DL415 offers a fully serial digital video encoding/decoding of real time high quality digital video providing adjustment free operation over a wide operational range. Using automatic gain control and state-of-the-art multiplexing, combining with CWDM technologies 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 DL415 satisfies very critical applications requiring high quality video performance with high reliability.

Applications include Broadcast Video Production, Video Editing, Unmanned Aircraft Vehicle Days & Nights Monitoring Systems, ITS Intelligent Traffic System, Metro & Railroad Monitoring System, Homeland Security, Utility Management, Premise Networks, Military Hardened applications or anything requiring HD quality video performance.

#### **Features**

- 4 Channels Digital Broadcast Video Transmission
- 4 Channels Bi-Directional Data
- Single Mode Fiber With CWDM Technology
- Real Time High Quality 3G-HD-SDI Video
- Compatible with all SMPTE3G SDI Rates
  - SMPTE259M SDI from 143 to 360 Mbps,
  - SMPTE344M 540Mbps, SMPTE292M HD-SDI 1.485 Gbps, SMPTE372M Dual Link HD-SDI 2,97 Gbps, SMPTE424M Dual Speed 3G-SDI 2.97 Gbps
- Fully Compliant with EIA RS-232/RS-422 standard
- Asynchronous Data Speed Up to 115 Kbps
- 90~240 VAC or +24 VDC, +28 VDC, -48 VDC
- NEMA Temperature

#### **Applications**

- Broadcasting Video Transmission
- High Quality HD-SDI Video Monitoring in Traffic Control Center
- METRO Security System
- Unmanned Aircraft Video System
- Oil & Gas Perimeter Intruder Detection
- Military Applications
- Premise Networks
- Any High Quality Video Requirement

#### **Ordering Information**

Model	<u>Descriptions</u>	
DL415T23ST05	4 Channels 3G HD SDI Video <b>(Tx)</b> and Bi-Directional RS-232 Data Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC	
DL415R23ST05	4 Channels 3G HD SDI Video (Rx) and Bi-Directional RS-232 Data Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC	
	*** Please Consult Factory for Additional Model Numbers***	



# Technical Specifications

#### **HDTV** Equipment Series

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System:			
Error Rate	1 in 10 <sup>12</sup> or Better		
Indicators	PWR, CH1 CH4		
Optical:			
Transmitter	CWDM Lasers		
Tx	1470nm~1570nm		
Rx	1570nm		
Receiver	PIN		
Tx	1470nm		
Rx	1470nm~1570nm		
Power Budget	20 dB @ SM		
Connector	ST		
Environment:			
Operating	$-34^{\circ}$ C to $+74^{\circ}$ C		
Storage	$-40^{\circ}$ C to + 95°C		
Humidity	98% Non-Condensing		
Physical:			
Dimensions	19" x 10" x 1.75"		
Weight	7 lbs		

3G HD-SDI Video Interface:			
Channel	4 x 3G HD-SDI		
Format	SMPTE 259M, 292M and 424M		
Speed	143M~540M, 1.485GB~2.97 GB		
Full HD Revolution	1280 x 720P @ 50/60fps 1920 x 1080P @ 50/60fps		
Signal Level	800mVp-p +/-10%		
Connector	BNC		
Impedance	75 Ohms		
Bi-Directional Data:			
Channel	4		
Speed	DC to 115 Kbps		
Format	RS-232 / RS-422		
Connector	RJ45		
Power:			
AC	90~240 VAC @ 0.5Amp 50/60Hz		
DC	+24 VDC, +28VDC, -48 VDC		

## **Application**

#### **3G HD SDI Cameras**



Up to 50 Km SM



**3G HD SDI Monitors** 



**Typical DL415T & DL415R Application**