

### 4 Channels High Quality 3G HD-SDI Video With 10/100/1000M **Ethernet Over Fiber CWDM Multiplexer** Plus+ NMS

**HD SDI Equipment Series** 

Model DL420



#### Overview

VILINK new generation HD SDI Video equipment: The VILINK DL420 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 10/100/1000M Ethernet Data over one single mode cable. It is a cost effective selection for transporting high quality SDI camera pictures and Ethernet network link to the remote location via long fiber optic cable. The DL1620 Series 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 10/100/1000M Ethernet channel supports store and data forwarding with extremely low latency. It is high-performance, cost effective and flexible solutions for a wide range of applications in the field of LAN campus network.

The DL420 series 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 DL420 satisfies very critical applications requiring high quality video performance with high reliability. The DL420 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.

In addition, the DL420 can be optionally ordered with the 100 Ohms differential input/output BNC video interfaces for even higher video pictures quality, as well as pathological code for some broadcast video image requirements.

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 Uncompressed Digital Video Transmission
- One 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
- Pass Through Pathological Code (Option)
- 100 Ohms BNC Differential Input/Output Video signals Option
- Fully Compliant with IEEE802.3, IEEE802.3u, IEEE802.3ab standard
- Auto-detection of half/full duplex transfer mode
- Auto-negotiation of 10/100/1000 Mbps rate and Auto-MDI/MDIX for TX port
- AGC Single mode Transmission of 0 to 50 Km
- NMS (GUI) Monitor Package (Option)
- 90~240 VAC or +24 VDC, +28 VDC, -48 VDC Power Supplies
- **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	Lescriptions experience of the control of the contr
DL420TST05 DL420RST05	FO 4 Channels 3G HD SDI Video <b>(Tx)</b> and 10/100/1000M Ethernet Link, CWDM, SM ST, 50Km, 90~240 VAC FO 4 Channels HD SDI Video <b>(Rx)</b> and 10/100/1000M Ethernet Link, CWDM, SM ST, 50Km, 90~240 VAC *** Please Consult Factory for Additional Model Numbers***



# Technical Specifications

#### **CCTV** Equipment Series

Model DL420

System:				
Error Rate	1 in 10 <sup>12</sup> or Better			
Indicators	PWR, CH1 CH4			
NMS (Option)	GUI Interface – RS-232 Ports			
Optical:				
Transmitter	CWDM Lasers			
Tx	1430nm~1610nm			
Rx	1310nm			
Receiver	PIN			
Tx	1310nm			
Rx	14300nm~1610nm			
Power Budget	20 dB @ SM			
Connector	ST, SC			
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	5 lbs			
Power:				
AC	90~240 VAC @ 0.5Amp 50/60Hz			
DC	+24 VDC, +28VDC, -48 VDC			

3G HD-SDI Video Interface:			
Channel	4 x 3G HD-SDI		
Format	SMPTE 259M, 292M and 424M		
Speed	143Mps~540Mps, 1.485~2.97 Gbps		
Full HD Revolution	1280 x 720P @ 50/60fps 1920 x 1080P @ 50/60fps		
Signal Level	800mVp-p +/-10%		
Connector	BNC		
Impedance	75 Ohms		
Input/Output	100 Ohms Dual Ports BNC Option		
HD Video Code	Pathological Code Option		
10/100/1000M Ethernet Interface:			
Channel	1		
Network Standard	IEEE802.3 10BaseT IEEE802.3u 100Base TX/FX IEEE802.3ab 1000Base TX IEEE802.3z FX		
Support	Cut Through Frame and Data forwarding with low latency. Flow control half/full duplex operation.		
Build-in Buffer	128 Kbytes		
Auto Re-connect	512 bits collision-free packet		
Support	VLAN, Tag VLAN, MTU. MPLS, PPPOE		
Indicators	100M, Link, Act, SD. FXD, Pwr		

## **Application**

