Overview

Vi-Link HD SDI Video equipment: The 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 from the remote location to the operation center via long fiber optic cable.

The DL420 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 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.


Features
- 4 Channels Digital Broadcast Video Transmission
- 1 x 10/100/1000M Ethernet Link
- 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 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
- 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

Order Information

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<tr>
<th>Model</th>
<th>Descriptions</th>
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<tbody>
<tr>
<td>DL420ST05</td>
<td>4 Channels 3G HD SDI Video (Tx) and 1x10/100/1000M Ethernet Link Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC</td>
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<tr>
<td>DL420RS05</td>
<td>4 Channels 3G HD SDI Video (Rx) and 1x10/100/1000M Ethernet Link Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC</td>
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Specifications

System:
- Error Rate: 1 in 10^12 or Better
- Indicators: PWR, CH1 .. CH4

Optical:
- Transmitter: CWDM Lasers
- Tx: 1470nm~1570nm
- Rx: 1570nm
- Receiver: PIN
- Tx: 1550nm
- Rx: 1470nm~1570nm
- Power Budget: 20 dB @ SM
- Connector: ST

Environment:
- Operating: -34°C to +74°C
- Storage: -40°C to +95°C
- Humidity: 98% Non-Condensing

Physical:
- Dimensions: 19” x 10” x 1.75”
- Weight: 7 lbs

Power:
- AC: 90~240 VAC @ 0.5Amp 50/60Hz
- DC: +24 VDC, +28VDC, -48 VDC

3G HD-SDI Video Interface:
- Channel: 8 x 3G HD-SDI
- Format: SMPTE 259M, 292M and 424M
- Speed: 143M~540M, 1.485G~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

10/100/1000M Ethernet Interface:
- Channel: 1
- TX Port: Auto Negotiation MDI/MDIX
- Data Rate: 10/100/1000 Mbps
- 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
- Support: 512 bits collision-free packet
- VLAN, Tag VLAN, MTU, MPLS, PPPOE
- Indicators: 100M, Link, Act, SD. FXD, Pwr

Application

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