VL Vi-Link
Fiber Optic Communications

HDTV Equipment Series   Model   DL1620

Product Description

Vi-Link HD SDI Video equipment: The DL1620 is a fiber optic digital multiplexer that designed to transmit up to 16 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 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 DL1620 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 DL1620 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

- *16 Channels Digital Broadcast Video Transmission*
- *1 x 100/1000/10000M 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*
- *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*

Ordering Information

Model	Descriptions
DL1620TST05	16 Channels 3G HD SDI Video **(Tx)** and 1 x 10/100/1000M Ethernet Link Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC
DL1620RST05	16 Channels 3G HD SDI Video **(Rx)** and 10/100/1000 Ethernet Link Over Fiber, CWDM, SM ST, 50Km, 90~240 VAC
	*** Please Consult Factory for Additional Model Numbers***

HDTV Equipment Series

Model   DL1620

System:

Error Rate	1 in 10^{12} or Better
Indicators	Power, Video, Ethernet

Optical:

Transmitter	CWDM Lasers
Tx	1290nm~1610nm
Rx	1270nm
Receiver	PIN
Tx	1270nm
Rx	1290nm~1610nm
Power Budget	20 dB @ SM
Connector	ST

Environment:

Operating	-34^0 C to $+74^0$C
Storage	-40^0C to $+95^0$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	16 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

10/100/1000M Ethernet Interface:

Channel	1
Data Rate	10/100/1000 Mbps
TX Port	Auto Negotiation MDI/MDIX
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

Remote Traffic Intersection

Traffic Control Center

Up to 50 Km SM

DL1620T

DL1620R

Typical DL1620T & DL1620R In Traffic Control Application