



# Vi-Link

Fiber Optic Communications

## One Channel High Quality 3G HD-SDI Broadcast Video & Gigabit Ethernet Over One Fiber

CCTV Equipment Series

Model DL120



### Product Description

Vi-Link HD SDI equipment: The DL120 is a fiber optic digital Transmitter/multiplexer for transmitting high quality broadcast video 3G HD SDI signal and 10/100/1000M Ethernet link over a single mode fiber optic cable.

The DL120 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 DL120 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 DL120 satisfies very critical applications requiring high quality video performance with high reliability.

The DL120 is a rugged standalone compact unit and the DL120RR is a plug-in card of the VK2300 rack system. The VK2300 chassis can accommodate up to 10 hot-swappable plug-in cards with 2 power supplies. It is a the direct replacement equipment for upgrading old analog video monitoring network to the high quality HD video monitoring system.

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

- Digital Broadcast Video Transmission
- 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, SMPTE424M
  - Dual Link HD-SDI 2,97 Gbps, 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 TX port
- +12 VDC or 90~240 VAC (Rack card)
- 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
DL120TST03	One Channel 3 HD SDI (Video Tx) with GB Ethernet Link, SM ST, 50Km, +12 VDC
DL120RST03	One Channel 3G HD SDI (Video Rx) with GB Ethernet Link, SM ST, 50Km, +12 VDC
DL120RRST03	One Channel 3G HD SDI (Video Rx) with GB Ethernet Link, SM ST, 50Km, Rack Card

\*\*\* Please Consult Factory for Additional Model Numbers\*\*\*

## HDTV Equipment Series

Model DL120

<b>System:</b>	
Error Rate	1 in 10 <sup>12</sup> or Better
Indicators	PWR, Video, Ethernet
<b>Optical:</b>	
Transmitter	CWDM Lasers
Tx	1490nm~1550nm
Rx	1310nm
Receiver	PIN
Tx	1310nm
Rx	1490nm~1550nm
Power Budget	20 dB @ SM
Connector	ST
<b>Environment:</b>	
Operating	-34 <sup>0</sup> C to +74 <sup>0</sup> C
Storage	-40 <sup>0</sup> C to + 95 <sup>0</sup> C
Humidity	98% Non-Condensing
<b>Physical:</b>	
Standalone	1" x 6" x 4"
Rackcard	19" x 12" x 5.5"
<b>Power:</b>	
Standalone	+12 VDC
Rack Chassis	90~240 VAC

<b>3G HD-SDI Video Interface:</b>	
Channel	1 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
<b>10/100M Ethernet Interface:</b>	
Channel	1 x 10/100/1000M TX
Network Standard	IEEE802.3 10BaseT IEEE802.3u 1000Base TX/FX IEEE802.3ab IEEE802.3z FX
Support	Cut Through Frame and Data forwarding with low latency. Flow control half/full duplex operation. Loopback Test
Build-in Buffer	128 Kbytes
Auto Re-connect	512 bits collision-free packet
Support	VLAN, Tag VLAN, MTU. MPLS, PPPOE
Indicators	1000M, Link, SD, FDX, FP, TP

## Application

