

# **One Channel High Quality 3G HD-SDI Broadcast Video Over One Fiber**

#### **CCTV** Equipment Series

Model DL100







### **Product Description**

Vi-Link HD SDI Video equipment: The DL100 is a fiber optic digital Transmitter/Receiver for transmitting/receiving high quality 3G HD SDI digital broadcast video over a single mode fiber optic cable. It is a cost effective selection for transporting broadcast quality video images.

The DL100 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 serial digital signal over long distance single mode fiber optic cable.

The DL100 offers a fully serial digital video encoding/decoding of uncompressed real time video providing adjustment free operation over a wide operational range. Using AGC technology 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

The extended temperature capability of the DL100 satisfies very critical applications requiring high quality video performance with high reliability. It is a the direct replacement equipment for upgrading old analog video monitoring network to the high quality HD video monitoring system.

Applications include ITS Intelligent Traffic System, Metro & Railroad systems, Avionic Surveillance, Oil and Gas Systems, Homeland Security, Utility Management, Premise Networks, Military Hardened applications or anything requiring HD quality video performance.

#### **Features**

- Digital Broadcast Video Transmission
- 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
- AGC Single mode Transmission of 0 to 50 Km
- NEMA Temperature

#### **Applications**

- Broadcasting Video Transmission
- High Quality HD-SDI Video Monitoring in Traffic Operation (ITS)
- High Quality Images METRO Security
- Avionic Surveillance System
- Oil & Gas Perimeter Intruder Detection
- Military Applications
- Premise Networks
- Any High Quality Video Requirement

# **Ordering Information**

| Model       | Descriptions  |
|-------------|---|
| DL100TST03  | One Channel 3 HD SDI <b>(Video Tx)</b> , SM ST, 50Km, +12 VDC |
| DL100RST03  | One Channel 3G HD SDI (Video Rx), SM ST, 50Km, +12 VDC        |
| DL100RRST03 | One Channel 3G HD SDI (Video Rx), SM ST, 50Km, Rack Card      |
|             | *** Please Consult Factory for Additional Model Numbers***    |



# Technical Specifications

## **HDTV Equipment Series**

Model DL100

| System:      |                                    |  |  |
|--------------|------------------------------------|--|--|
| Error Rate   | 1 in 10 <sup>12</sup> or Better    |  |  |
| Indicators   | PWR, Video                         |  |  |
| Optical:     |                                    |  |  |
| Transmitter  | DFB Laser                          |  |  |
| Tx           | 1310nm                             |  |  |
| Receiver     | PIN                                |  |  |
| RX           | 1310nm                             |  |  |
| 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:    |                                    |  |  |
| Standalone   | 1.25" x 4.5" x 3.5"                |  |  |
| Rackcard     | 19" x 8" x 3.5"                    |  |  |

| 3G HD-SDI Video Interface: |   |  |  |
|----------------------------|---|--|--|
| Channel                    | 1 x 3G HD-SDI                                     |  |  |
| Format                     | SMPTE 259M, 292M, 344M                            |  |  |
|                            | 372M, and 424M                                    |  |  |
| Speed                      | 143Mps~2.97 Gbps                                  |  |  |
| Full HD Revolution         | 1280 x 720P @ 50/60fps<br>1920 x 1080P @ 50/60fps |  |  |
| Ciava al Lavral            | <u>'</u>  |  |  |
| Signal Level               | 800mVp-p +/-10%                                   |  |  |
| Connector                  | BNC   |  |  |
| Impedance                  | 75 Ohms   |  |  |
| Indicator                  | TXLEDs or RXLEDs                                  |  |  |
| Power:                     |   |  |  |
| Standalone                 | +12 VDC   |  |  |
| Rack Card                  | 90 ~ 240 VAC                                      |  |  |

# **Application**

