

### 3G-SDI Fiber Optic Extender

#### 1-Channel 3G-SDI + 1 Duplex Data + IP Ethernet

1 →

3G-SDI

#### System Design

VOS-1H3G-DET/R provides for the digital transmission of 1-Channel uncompressed 2.97Gbps 3G-SDI (SMPTE 424M), 1.485 Gbps HD-SDI (SMPTE 292) or 270 Mbps SD-SDI (SMPTE 259M) 1080p HD video over fiber, support 1 duplex RS232/RS485 data, and 1-channel 10M/100M IP ethernet, also support one loopback output for local display, and dual outputs for two displays in the remote end.

Audio



↔ 1 ↔

Data

Stand-alone or rack-mount. All 3G-SDI video over Fiber of VOS-1H3G-DET/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack-mountable (VOS-CH04-HD16).



↔ 1 ↔

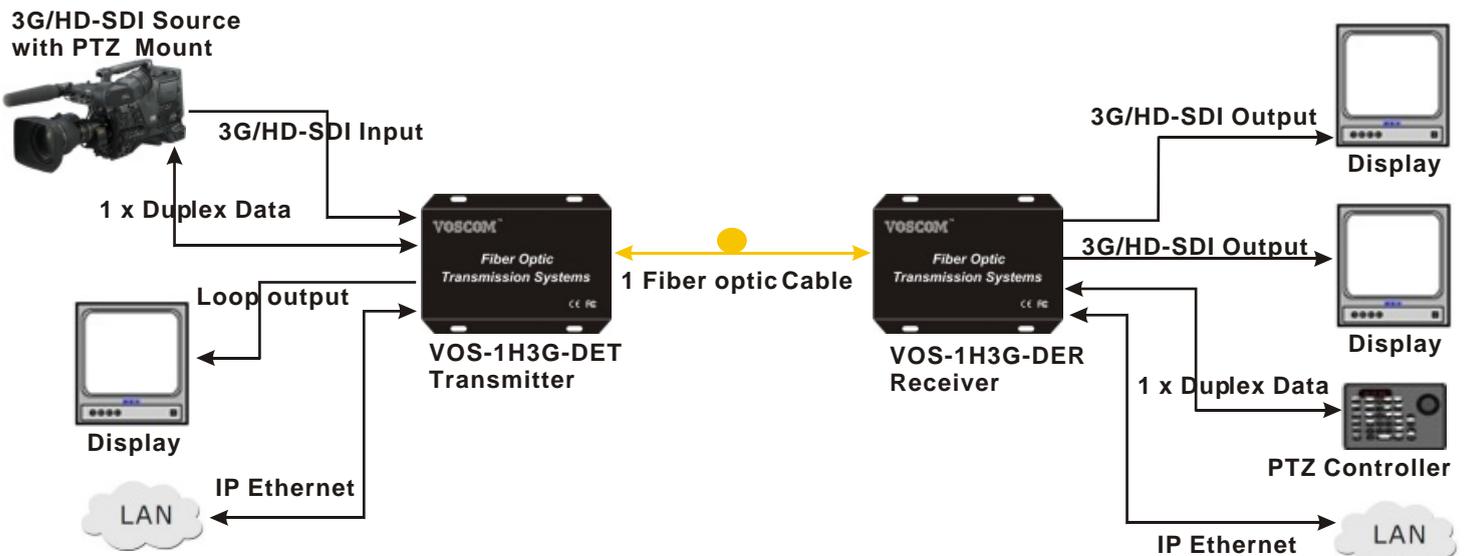
Ethernet

Single-Mode or Multi-Mode, VOS-1H3G-DET/R can support FC/PC or ST/PC optical connector, the transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km, Multi-mode 300m.

#### Features

- Extends uncompressed multi-rate 3G-SDI, HD-SDI or SD-SDI video over fiber
- Supports SMPTE 424M, SMPTE 292M, SMPTE 259M or DVB-ASI compliant
- Supports embedded digital audio stream
- Multi-mode Fiber Support for Distances up to 300m
- Single-Mode Fiber Support for Distances up to 20 km
- Real-Time Video Transmission for Exceptional Quality and Resolution
- No EMI or RFI and no ground loops

#### Typical Configuration



# 3G-SDI Fiber Optic Extenders

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1H3G-DEMT	VOS-1H3G-DEMR	Multi-Mode	1310nm/1550nm	16dB	300m
VOS-1H3G-DEST	VOS-1H3G-DESR	Single-Mode	1310nm/1550nm	12dB	20km

### Note:

- The Optical Power Budget data fit Multit-mode(62.5/125  $\mu$ m), Single-Mode(9/125  $\mu$ m).
- When using 50/125  $\mu$ m multimode fiber, subtract 3 dB from the optical power budget.
- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter is manufactured by third party and is supplied with fitted screw-terminal output cables. Power adapter included (for standalone) US, European, UK or Australian power plug.
- Please feel free to consult factory for any special requirement and customization

## Specification

<ul style="list-style-type: none"> <li>• Video</li> </ul>	<ul style="list-style-type: none"> <li>• Connectors</li> </ul>
<p>Number of Channels: 1-Channel 3G/HD/SD-SDI            Data Rate: 19.4 Mbps to 2.97 Gbps            Standards: SMPTE 424M, SMPTE 292M, SMPTE 259M or DVB-ASI            Max Resolution: 1920 x 1080 @ 60Hz            Equalization: Automatic up to 100m of Belden 1694A at 3.0 Gbps, 200m at 1.485 Gbps and 350m at 270 Mbps            Return Loss: &gt; 15dB to 1.485Gbps:            &gt; 10dB to 2.97 Gbps</p>	<p>Video Connector: 75 Ohm BNC (Gold Center Pin)            Data Connector: Terminal Block            Optical Connector: FC/PC or ST/PC Optional            Stand-Alone Power: Screw terminal block            Rack Power: AC line cord</p>
<ul style="list-style-type: none"> <li>• Data</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical &amp; Mechanical</li> </ul>
<p>Data Formats: 1-Channel Duplex Rs232 &amp; RS485 Data            Data Rate: DC to 115.2Kbps            Bit Error Rate: 10E-9</p>	<p>Input Power Requirements: DC 5V@2A            Power Adapter: AC 100V~240V            Power Consumption: &lt; 5W            Stand-Alone Dimensions: 200mm x 135mm x 38mm            Card for 4U Rack Dimensions: 145mm x 170mm x 20mm            Shipping Weight: 2.5kg (include TX &amp; RX)</p>
<ul style="list-style-type: none"> <li>• Ethernet/IP</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental</li> </ul>
<p>Standard: Ethernet IEEE 802.3            Data Rate: 10/100 Mbps            Connector: RJ-45, Auto MDI/MDI-X</p>	<p>Operating Temperature: -45° C ~ +75° C            Storage Temperature: -45° C ~ +85° C            Relative Humidity: 0%~95% (non-condensing)            MTBF: &gt;100,000 hours</p>