

### 3G-SDI Fiber Optic Extender 1-Channel 3G-SDI Video over Fiber

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3G-SDI

#### System Design

VOS-1H3G-T/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, no audio, no data, and support one loopback output for local display, and dual outputs for two displays in the remote end.



Audio

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

Data

Single-Mode or Multi-Mode, VOS-1H3G-T/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.

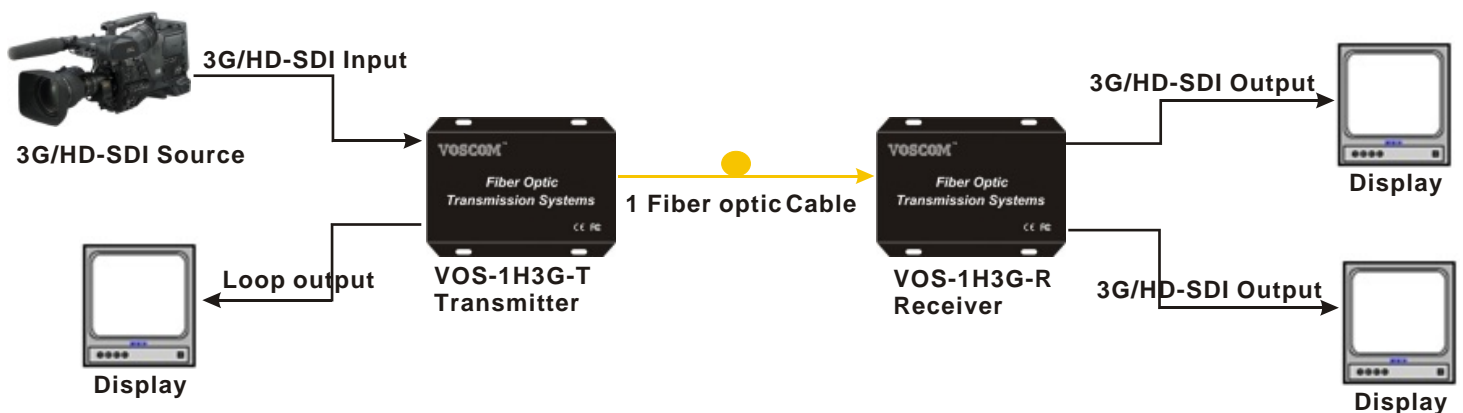


Ethernet

#### 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
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Produce according to customer's specifications, providing OEM

#### Typical Configuration



# 3G-SDI Fiber Optic Extenders

## Ordering Information

| Model Number |             | Fiber Mode  | Wavelengths   | Optical Power Budget | Maximum Transmission Distance |
|--------------|-------------|-------------|---------------|----------------------|-------------------------------|
| Transmitter  | Receiver    |             |               |                      |                               |
| VOS-1H3G-MT  | VOS-1H3G-MR | Multi-Mode  | 1310nm/1550nm | 16dB                 | 300m                          |
| VOS-1H3G-ST  | VOS-1H3G-SR | 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                             <ul style="list-style-type: none"> <li>Number of Channels: 1-Channel 3G/HD/SD-SDI</li> <li>Data Rate: 19.4 Mbps to 2.97 Gbps</li> <li>Standards: SMPTE 424M, SMPTE 292M, SMPTE 259M or DVB-ASI</li> <li>Max Resolution: 1920 x 1080 @ 60Hz</li> <li>Equalization: Automatic up to 100m of Belden 1694A at 3.0 Gbps, 200m at 1.485 Gbps and 350m at 270 Mbps</li> <li>Return Loss: &gt; 15dB to 1.485Gbps:<br/>&gt; 10dB to 2.97 Gbps</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Connectors                             <ul style="list-style-type: none"> <li>Video Connector: 75 Ohm BNC (Gold Center Pin)</li> <li>Optical Connector: FC/PC or ST/PC Optional</li> <li>Stand-Alone Power: Screw terminal block</li> <li>Rack Power: AC line cord</li> </ul> </li> </ul>  |
|  | <ul style="list-style-type: none"> <li>• Electrical &amp; Mechanical                             <ul style="list-style-type: none"> <li>Input Power Requirements: DC 5V@2A</li> <li>Power Adapter: AC 100V~240V</li> <li>Power Consumption: &lt; 5W</li> <li>Stand-Alone Dimensions: 200mm × 135mm × 38mm</li> <li>Card for 4U Rack Dimensions: 145mm × 170mm × 20mm</li> <li>Shipping Weight: 2.5kg (include TX &amp; RX)</li> </ul> </li> </ul> |
|  | <ul style="list-style-type: none"> <li>• Environmental                             <ul style="list-style-type: none"> <li>Operating Temperature: -45° C ~ +75° C</li> <li>Storage Temperature: -45° C ~ +85° C</li> <li>Relative Humidity: 0%~95% (non-condensing)</li> <li>MTBF: &gt;100,000 hours</li> </ul> </li> </ul>  |