

### HD-SDI Fiber Optic Extender

1-Channel Duplex HD-SDI + 2 Duplex Audio + 1 Duplex Data



#### System Design

VOS-1DHD-ADT/R provides for the digital transmission of 1-Channel uncompressed duplex HD-SDI (SMPTE 292) or 270Mbps SD-SDI (SMPTE 259M) 1080p HD video over fiber, support 2 duplex analog audio, 1 duplex Rs232/Rs485 data, 1 duplex or 2 simplex contact closure 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. This unit only can support 19inch 1U Rack.



Single-Mode or Multi-Mode, VOS-1DHD-ADT/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.

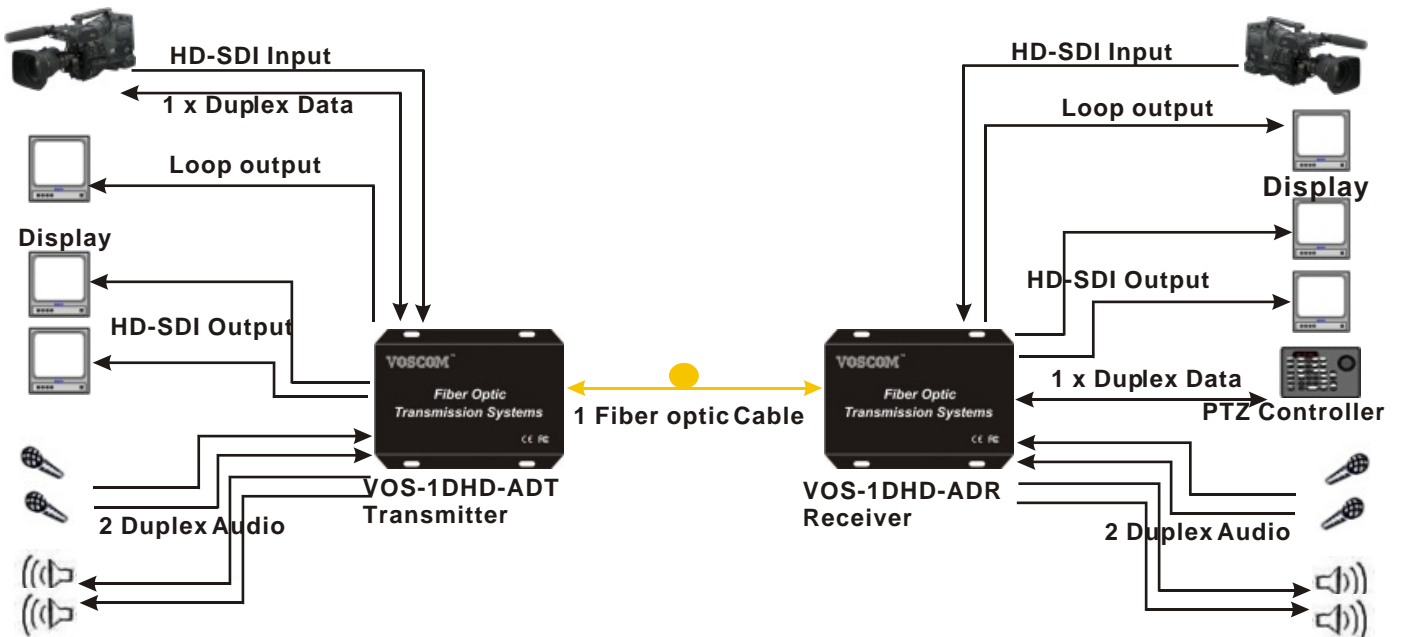
Contact Closure

#### Features

- Extends uncompressed HD-SDI or SD-SDI video over fiber
- Supports 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

Ethernet

#### Typical Configuration



# HD-SDI Fiber Optic Extenders

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1DHD-ADMT	VOS-1DHD-ADMR	Multi-Mode	1310/1470/1550nm	16dB	300m
VOS-1DHD-ADST	VOS-1DHD-ADSR	Single-Mode	1310/1470/1550nm	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.

## Specification

<ul style="list-style-type: none"> <li>• Video                             <ul style="list-style-type: none"> <li>Number of Channels: 1-Channel Duplex HD-SDI</li> <li>Data Rate: 1.485 Gbps; 270 Mbps</li> <li>Standards: SMPTE 292M, SMPTE 259M or DVB-ASI</li> <li>Max Resolution: 1920 x 1080 @ 60Hz</li> <li>Equalization: Automatic up to 200m at 1.485 Gbps and 350m at 270 Mbps of Belden 1694A</li> <li>Return Loss: &gt; 15dB to 1.485Gbps</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>Audio Connector: Terminal Block</li> <li>Data Connector: Terminal Block</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>• Audio                             <ul style="list-style-type: none"> <li>Number of Channels: 2-Ch Duplex Analog Audio</li> <li>Audio in/output impedance: 600 Ohm Unbalanced</li> <li>Bandwidth: 20Hz ~ 20KHz</li> <li>Bit Resolution: 24-Bit</li> <li>Signal-to-Noise Ratio(SNR): &gt; 80 dB</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@4A</li> <li>Power Adapter: AC 100V~240V (Built-in)</li> <li>Power Consumption: &lt; 10W</li> <li>19inch 1U Dimensions: 483mm × 255mm × 46mm</li> <li>Shipping Weight: 8kg (include TX &amp; RX)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Data                             <ul style="list-style-type: none"> <li>Data Formats: 1-Channel Duplex RS232 &amp; Rs485 Data</li> <li>Data Rate: DC to 115.2Kbps</li> <li>Bit Error Rate: 10E-9</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>