

1-Channel 3G-SDI + 2 Duplex Audio + 1 Duplex Data + 1 Duplex or 2 Simplex Contact Closure + IP Ethernet

- 1 → 3G-SDI
- ↔ 2 ↔ Audio
- ↔ 1 ↔ Data
- ↔ 1 ↔ OR 2 ↔ Contact Closure
- ↔ 1 ↔ Ethernet

### System Design

VOS-1H3G-ADCET/R provides for the digital transmission of 1-Channel uncompressed 2.97Gbps 3G-SDI (SMPTE 424M), 1.485 Gbps 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.



Stand-alone or rack-mount. VOS-1H3G-ADCET/R can come in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack-mountable (VOS-CH04-HD16).

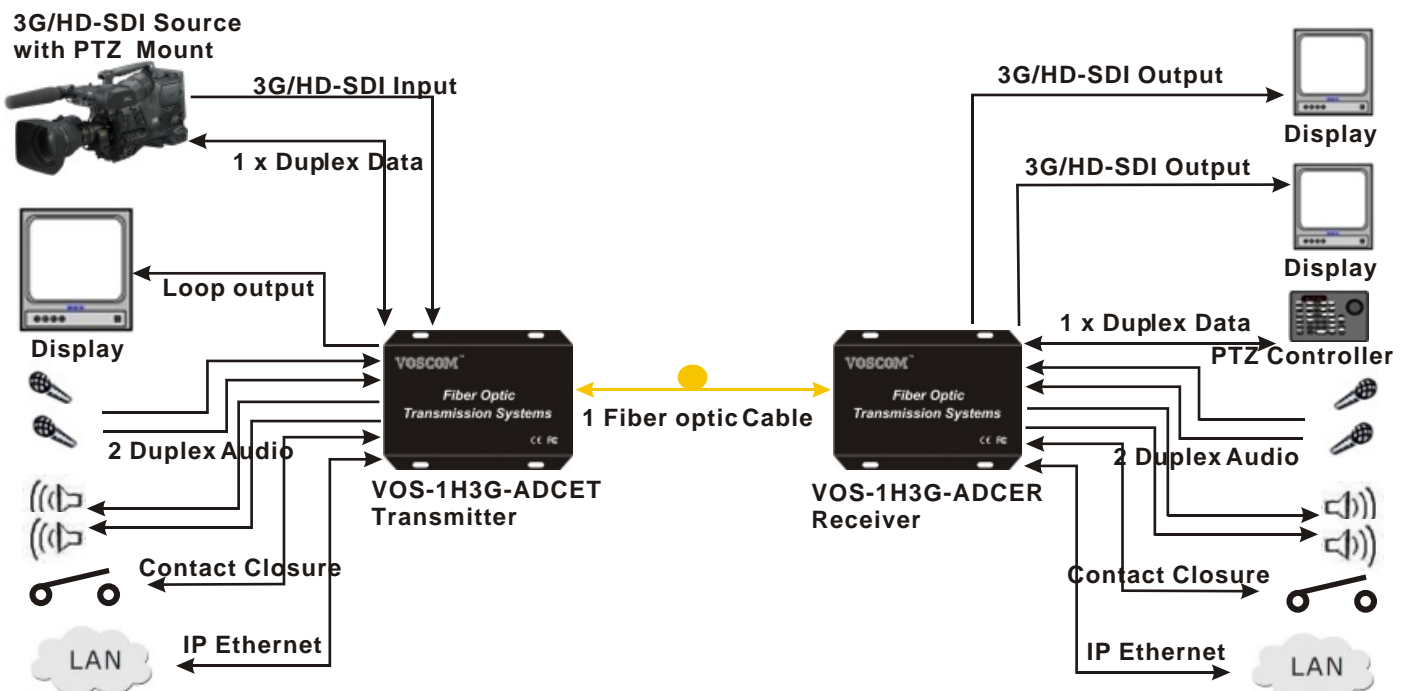
Single-Mode or Multi-Mode, VOS-1H3G-ADCET/R can support FC/PC or ST/PC optical connector, the transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km, Multi-mode 300m.



### 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

### Typical Configuration



# 3G-SDI Fiber Optic Extenders

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1H3G-ADCEMT	VOS-1H3G-ADCEMR	Multi-Mode	1310nm/1550nm	16dB	300m
VOS-1H3G-ADCEST	VOS-1H3G-ADCESR	Single-Mode	1310nm/1550nm	12dB	20km

### Note:

- The Optical Power Budget data fit Mult-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 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: &gt; 10dB to 2.97 Gbps</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>• 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>• Ethernet/IP           <ul style="list-style-type: none"> <li>Standard: Ethernet IEEE 802.3</li> <li>Data Rate: 10/100 Mbps</li> <li>Connector: RJ-45, Auto MDI/MDI-X</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Contact Closure *</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>Number of Channels: 1-Channel Duplex CC or 2-Channel Simplex CC</li> <li>Data Formats: Contact Closure, TTL</li> <li>Data Rate: DC to 200Kbps</li> <li>Response Time: 2 ms</li> <li>Relay/Contact Rating: 0.5A@(125VAC/30VDC)</li> <li>Bit Error Rate: &lt; 10E-9</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 x 135mm x 38mm</li> <li>Card for 4U Rack Dimensions: 145mm x 170mm x 20mm</li> <li>Shipping Weight: 2.5kg (include TX &amp; RX)</li> </ul> </li> </ul>
<p>* Note: the device can support 2 simplex or 1 duplex contact closure, but it only can be configured by factory, so you need to choose the configuration before the order.</p>	<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>