

HD-SDI Fiber Optic Extender

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

1

HD-SDI

System Design

VOS-1HD-ADT/R provides for the digital transmission of 1-Channel uncompressed 1.485 Gbps HD-SDI (SMPTE 292) or 270 Mbps SD-SDI (SMPTE 259M) 1080p HD video over fiber, support 2 duplex analog audio, 1 duplex RS232/RS485 data, also support one loopback output for local display, and dual outputs for two displays in the remote end.



2

Audio

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

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Data

Single-Mode or Multi-Mode, VOS-1HD-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.

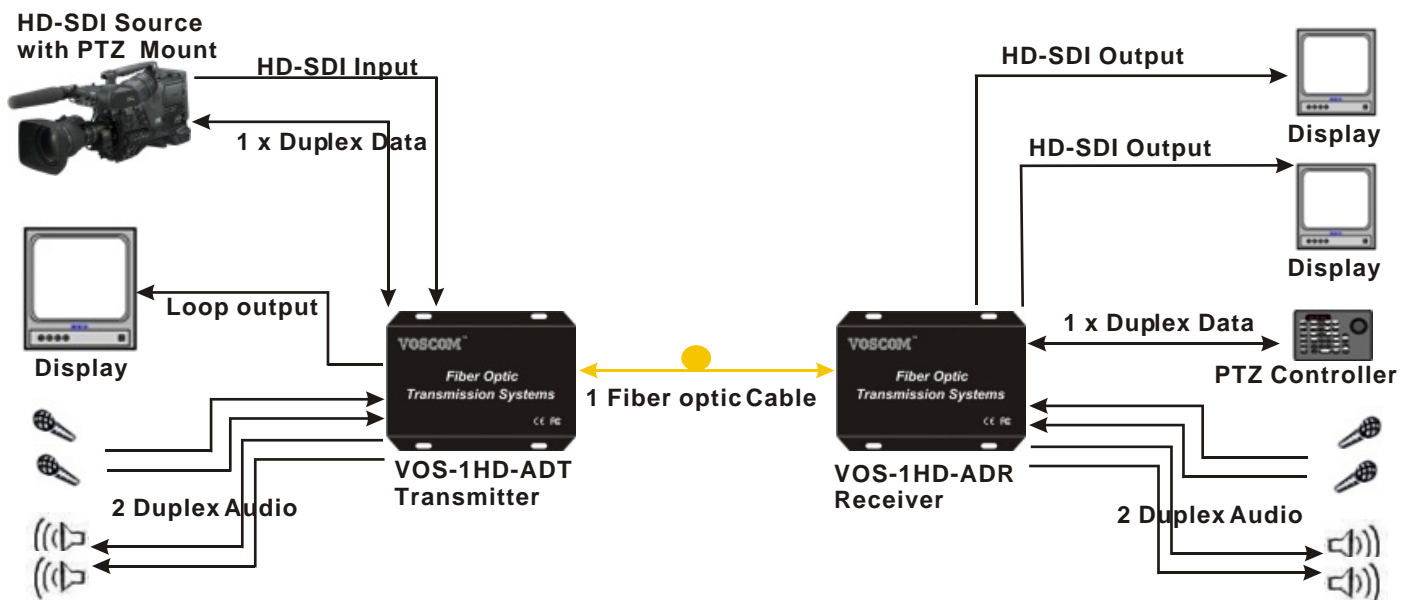


Ethernet

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
- Real-Time Video Transmission for Exceptional Quality and Resolution
- No EMI or RFI and no ground loops

Typical Configuration



HD-SDI Fiber Optic Extenders

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1HD-ADMT	VOS-1HD-ADMR	Multi-Mode	1310nm/1550nm	16dB	300m
VOS-1HD-ADST	VOS-1HD-ADSR	Single-Mode	1310nm/1550nm	12dB	20km

Note:

- The Optical Power Budget data fit Multit-mode(62.5/125 μ m),Single-Mode(9/125 μ m).
- When using 50/125 μ 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"> • Video <ul style="list-style-type: none"> Number of Channels: 1-Ch HD-SDI or SD-SDI Data Rate: 1.485 Gbps; 270 Mbps Standards: SMPTE 292M, SMPTE 259M or DVB-ASI Max Resolution: 1920 x 1080 @ 60Hz Equalization: Automatic up to 200m at 1.485 Gbps and 350m at 270 Mbps of Belden 1694A Return Loss: > 15dB to 1.485Gbps: 	<ul style="list-style-type: none"> • Connectors <ul style="list-style-type: none"> Video Connector: 75 Ohm BNC (Gold Center Pin) Audio Connector: Terminal Block Data Connector: Terminal Block Optical Connector: FC/PC or ST/PC Optional Stand-Alone Power: Screw terminal block Rack Power: AC line cord
<ul style="list-style-type: none"> • Audio <ul style="list-style-type: none"> Number of Channels: 2-Ch Duplex Analog Audio Audio in/output impedance: 600 Ohm Unbalanced Bandwidth: 20Hz ~ 20KHz Bit Resolution: 24-Bit Signal-to-Noise Ratio(SNR): > 80 dB 	<ul style="list-style-type: none"> • Electrical & Mechanical <ul style="list-style-type: none"> Input Power Requirements: DC 5V@2A Power Adapter: AC 100V~240V Power Consumption: < 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 & RX)
<ul style="list-style-type: none"> • Data <ul style="list-style-type: none"> Data Formats: 1-Channel Duplex RS232 & RS485 Data Data Rate: DC to 115.2Kbps Bit Error Rate: 10E-9 	<ul style="list-style-type: none"> • Environmental <ul style="list-style-type: none"> Operating Temperature: -45° C ~ +75° C Storage Temperature: -45° C ~ +85° C Relative Humidity: 0%~95% (non-condensing) MTBF: >100,000 hours