# Voscom

# HD-SDI Fiber Optic Extender 1-Channel HD-SDI + 1 Duplex Data



## System Design

VOS-1HD-DT/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 1 duplex RS232/RS485 data, also support one loopback output for local display, and dual outputs for two displays in the remote end.

Audio





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







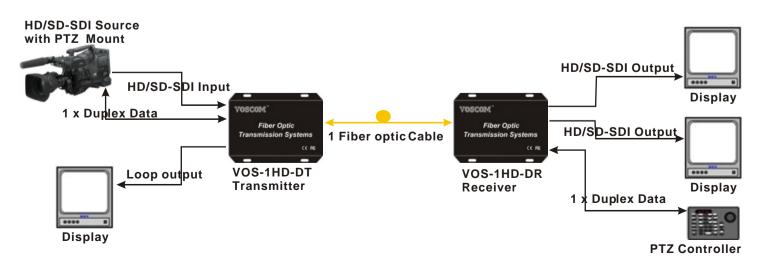


# Ethernet

#### **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
- 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



# **HD-SDI Fiber Optic Extenders**

# Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power	Maximum Transmission
Transmitter	Receiver	TIDEL WOOL	waverengths	Budget	Distance
VOS-1HD-DMT	VOS-1HD-DMR	Multi-Mode	1310nm/1550nm	16dB	300m
VOS-1HD-DST	VOS-1HD-DSR	Single-Mode	1310nm/1550nm	12dB	20km

#### Note:

- The Optical Power Budget data fit Mulit-mode(62.5/125 μm), Single-Mode(9/125 μm).
- When using 50/125 μm 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

• Video			
Number of Channels: Data Rate: Standards:	1-Ch HD-SDI or SD-SDI 1.485 Gbps; 270 Mbps SMPTE 292M, SMPTE 259M or DVB-ASI		
Max Resolution: Equalization: Return Loss:	Automatic up to 200m at 1.485 Gbps and 350m at 270 Mbps of Belden 1694A		
	7 10db to 1.400 dbp3.		
• Data			
Data Formats:  Data Rate: Bit Error Rate:	1-Channel Duplex Rs232 & RS485 Data DC to 115.2Kbps 10E-9		

#### Connectors

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

#### • Electrical & Mechanical

Input Power Requirements: DC 5V@2A

Power Adapter: AC 100V~240V

Power Consumption: < 5W

Stand-Alone Dimensions:  $200 \text{mm} \times 135 \text{mm} \times 38 \text{mm}$ Card for 4U Rack Dimensions:  $145 \text{mm} \times 170 \text{mm} \times 20 \text{mm}$ Shipping Weight: 2.5 kg (include TX & RX)

#### • Environmental

Operating Temperature:  $-45^{\circ}$  C $\sim +75^{\circ}$  C Storage Temperature:  $-45^{\circ}$  C $\sim +85^{\circ}$  C

Relative Humidity: 0%~95% (non-condensing)

MTBF: >100,000 hours

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