



12G / 3G-SDI Fiber Extenders

Balanced Audio, AES/EBU

Genlock, Time Code, Intercom

Remote Control, Tally

Gigabit Ethernet

Fiber Optic Systems for Broadcast Selection Guide

VOSCOM's 12G-SDI / 3G-SDI Fiber Optic Extender provides for the digital transmission of fully uncompressed 12G-SDI, 6G-SDI, 3G-SDI & HD-SDI over fiber. support 4K UHD, 1080p video, use our 4-Channel 12G-SDI even can support 8K Video.

12G-SDI Fiber Optic Extender is an excellent choice for transporting SMPTE 2082 (12G-SDI), SMPTE 2081(6G-SDI), SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI), DVB-ASI compliant video signals over long or short distances with one fiber. In addition, the system also support Balanced or Unbalanced audio, RS422 / RS485 / RS232 serial data, Loopback output, Contact Closure and IP Ethernet transmission.

Also can customize GENLOCK, Time Code, Return Analog Video, Return 12G/3G-SDI, Remote Control, Intercom (HEADSET), Balanced Audio with XLR connector, Tally, etc.

Features

- Available in 12G-SDI and 3G-SDI Versions.
- 1~16 x Camera Feeds & 8x SDI Return Channels
- Tri-Level or Bi-Level Genlock Output
- 8x Mic Level Inputs / outputs with Phantom Power
- 8x Line Level Analog Audio Inputs / outputs
- 8x Digital Audio AES/EBU Inputs / outputs
- 1~4 x RS-232/422/485 Serial Data Channels
- 1~4 x Contact Closure for Tally
- 1~4 x Gigabit Ethernet LAN Extensions

Applications

- Truck to Control Room Links
- Control Room to Studio Links
- Outside Broadcast "B-Unit" Interconnects
- Live Music & Entertainment
- Live Cinematic Multi-cam
- Live Sports Broadcast
- ENG, EFP
- High-Definition Video Surveillance
- High-Definition Pro Audio Visual



12G-SDI with Remote & Tally
V-mount



Duplex 12G-SDI



3G-SDI + Data + Ethernet



4-Channel 12G-SDI



16-Channel 12G-SDI
19inch 1U



8 x 3G-SDI + 2 x Balanced Audio
+ 2 x Gigabit Ethernet

VOSCOM 12G/3G-SDI Fiber Optic Converters offer customized solutions, with multiple functions, interfaces, and sizes for customers to choose from. Particularly in the broadcast and television industry, different cameras have distinct requirements for the functions, interfaces, and sizes of fiber optic converters. Our products adopt a modular design, which enables us to meet customers' diverse needs quickly and conveniently.

You can freely configure according to the functions, interfaces, and sizes below, and then contact us.

Multiple Functions:

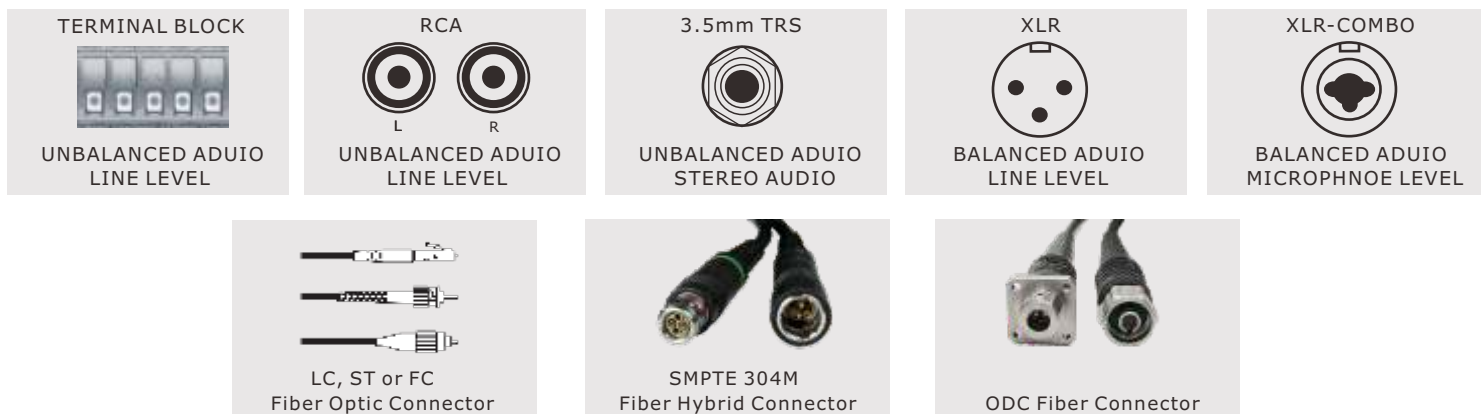
Transmitter

Support Signals

Receiver



Multiple Interfaces:



Multiple sizes:



Specification

• Digital Video Number of Channels: 1~16 Channels 12G/3G-SDI Connector: 75 Ohm BNC (Gold Center Pin) Data Rate: 12Gbps, 6Gbps, 3Gbps, 1.5Gbps, 270Mbps, Standards: SMPTE 2082(12G-SDI), SMPTE 2081(6G-SDI), SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)	• Unbalanced Audio Number of Channels: 1~16 Channels Connector: Terminal Block / RCA / 3.5mm Audio input/output Level: +4dBu nominal Audio Type: Unbalanced, Line Level Audio in/output impedance: 600Ω Frequency Response : 20Hz ~ 20KHz Signal-to-Noise Ratio(SNR): > 82 dB Distortion: <0.05%
• Analog Video, CVBS Number of Channels: 1~2 Channels Connector: 75 Ohm BNC (Gold Center Pin) Type: Analog NTSC, PAL	• Balanced Audio Number of Channels: 1~16 Channels Connector: XLR Audio input/output Level: +4dBu nominal Audio Type: Balanced, Line / Mic Level Audio in/output impedance: 600Ω Frequency Response : 20Hz ~ 20KHz Signal-to-Noise Ratio(SNR): > 90 dB Distortion: <0.05%
• Video, Genlock Number of Channels: 1-Channel Connector: 75 Ohm BNC (Gold Center Pin) Type: Analog Black Burst (NTSC, PAL), HD Tri-Level	• AES/EBU Number of Channels: 1~16 Channels Standards: AES3, IEC60958, S/PDIF, EIAJCP1201 Input Level: 0.2 to 10V p-p, 110Ω Output Level: 2 to 7V p-p, 110Ω In/output impedance: 110Ω (Balanced) Input Sample Rate : 32 to 96 khz Output Sample Rate : 48 khz Return Loss: >15db, 100 khz to 6 Mhz Output Jitter: <20ns
• Time Code Number of Channels: 1-Channel Input: Unbalanced, 15Vp-p max Output: Unbalanced, 3Vp-p	• Ethernet Number of Channels: 1~4 Channels Data Rate: 100/1000Mbps Connector: RJ-45, Auto MDI/MDI-X
• Serial Data Number of Channels: 1~4 Channels Connector: Terminal Block Data Type: Rs485 or Rs232 or RS422 Data Rate: DC to 1Mbps	• Optical Wavelengths: 1310nm~1610nm Fiber Type: Single-mode up to 60km Connector: ST, LC or FC
• Tally/GPIO Number of Channels: 1~4 Channels Connector: Terminal Block Data Formats: Dry Contact Closure Status: Normally Open (Default) Response Time: 2 ms Relay/Contact Rating: 0.5 A @ 120VAC 0.25 A @ 240VAC 1A@30VDC 5A@6VDC Max output power: 30W	• Mechanical Size: V-mount, Stand-alone 19inch 1U, 2U or 4U

Ordering Information

Part Number	Description
12G-SDI Fiber Optic Extender series (common models)	
VOS-4K6S	1-Channel Bi-Directional 12G-SDI + Intercom + Time Code + Remote + Tally + Gigabit Ethernet, SMPTE 304M Hybrid Cable, V-mount
VOS-4K5S	1-Channel Bi-Direcitonal 12G-SDI with Remote & Tally up to 10km, ODC Fiber Connector, V-mount
VOS-12G-T/R-MINI	Mini Type, 1-Channel 12G-SDI Fiber Optic Extender
VOS-1H12G-T/R	1-Channel 12G-SDI Fiber Optic Extender with SFP optical module
VOS-1DH12G-T/R	1-Channel Bi-Directional 12G-SDI Fiber Optic Extender, with SFP optical module
VOS-2H12G-T/R	2-Channel 12G-SDI over Fiber
VOS-4H12G-T/R	4-Channel 12G-SDI over Fiber
VOS-8H12G-T/R	8-Channel 12G-SDI over Fiber
VOS-16H12G-T/R	16-Channel 12G-SDI over Fiber
VOS-1H12G-DET/R	1-Channel 12G-SDI + 1 Duplex Data + IP Ethernet
VOS-2H12G-DET/R	2-Channel 12G-SDI + 1 Duplex Data + IP Ethernet
VOS-1H12G-ADCET/R	1-Ch 12G-SDI + 2 Duplex Audio + 1 Duplex Data + Contact Closure + 100M Ethernet
VOS-1H12GR1-ADCET/R	1-Ch 12G-SDI + 1 Return 12G-SDI + 2 Duplex Unbalanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-2H12GR1-ADCET/R	2-Ch 12G-SDI + 1 Return 12G-SDI + 2 Duplex Unbalanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-1H12G-BLADCET/R	1-Channel 12G-SDI + 2 Duplex Balanced Audio (XLR) + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-2H12GR1-BLADCET/R	2-Ch 12G-SDI + 1 Return 12G-SDI + 2 Duplex Balanced Audio (XLR) + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-4H12G-BLA2ET/R	4-Channel 12G-SDI + 2 Duplex Balanced Audio (XLR) + 2 x Gigabit Ethernet
VOS-8H12G-BLA2ET/R	8-Channel 12G-SDI + 2 Duplex Balanced Audio (XLR) + 2 x Gigabit Ethernet

Details link: <https://www.voscom.com/sdi-fiber-optic-extender/>

Ordering Information

Part Number	Description
3G-SDI Fiber Optic Extender series (common models)	
VOS-3G-T/R-Mini	Mini Type, 1-Channel 3G-SDI Fiber Optic Extender
VOS-1H3G-T/R	1-Channel 3G-SDI to Fiber Converter with SFP optical module
VOS-2H3G-T/R	2-Channel 3G-SDI over Fiber
VOS-4H3G-T/R	4-Channel 3G-SDI over Fiber
VOS-8H3G-T/R	8-Channel 3G-SDI over Fiber
VOS-16H3G-T/R	16-Channel 3G-SDI over Fiber
VOS-1H3G-DET/R	1-Channel 3G-SDI + 1 Duplex Data + IP Ethernet
VOS-2H3G-DET/R	2-Channel 3G-SDI + 1 Duplex Data + IP Ethernet
VOS-1H3G-ADCET/R	1-Ch 3G-SDI + 2 Duplex Audio + 1 Duplex Data + Contact Closure + 100M Ethernet
VOS-1H3GR1-ADCET/R	1-Ch 3G-SDI + 1 Return 3G-SDI + 2 Duplex Unbalanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-2H3GR1-ADCET/R	2-Ch 3G-SDI + 1 Return 3G-SDI + 2 Duplex Unbalanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-1H3G-BLADCET/R	1-Channel 3G-SDI + 2 Duplex Balanced Audio (XLR) + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-2H3GR1-BLADCET/R	2-Ch 3G-SDI + 1 Return 3G-SDI + 2 Duplex Balanced Audio (XLR) + 1 Duplex Data + 1 Duplex Contact Closure + Gigabit Ethernet
VOS-4H3G-BLA2ET/R	4-Channel 3G-SDI + 2 Duplex Balanced Audio (XLR) + 2 x Gigabit Ethernet
VOS-8H3G-BLA2ET/R	8-Channel 3G-SDI + 2 Duplex Balanced Audio (XLR) + 2 x Gigabit Ethernet

Details link: <https://www.voscom.com/sdi-fiber-optic-extender/>

VOSCOM's Audio over Fiber Converter / Extender support 1~8 Channel broadcast quality audio over one multi-mode or single-mode optical fiber. The audio over fiber extender ensures high quality signals with no interference, they are typically used in applications for Rental, Staging, Theater, Stadiums, Theme Parks, Broadcast/Studio, Audio Visual systems, Public Address Systems and Professional AV applications, etc.

The Audio over Fiber Converter support Analog or Digital audio, Balanced or Unbalanced Audio, Line level or Micro Level. and the audio connectors support terminal block, RCA, 3.5mm TRS jack, XLR and XLR-COMBO. These versatile options empower customers to select the ideal setup for their specific requirements, whether for professional audio systems, home entertainment, or on-the-go applications. The wide range of supported connectors and signal levels ensures seamless integration into diverse audio environments—from studio-grade recording setups to casual multimedia setups—making the converter a flexible choice for any audio transmission need.

Features

- Analog Audio or Digital Audio
- Balanced or Unbalanced Audio
- Line Level or Microphone Level
- 8x Mic Level Inputs / outputs with Phantom Power
- 8x Line Level Analog Audio Inputs / outputs
- 8x Digital Audio AES/EBU Inputs / outputs
- Terminal Block, RCA, 3.5mm TRS Jack
- XLR Connector for Line Level Balanced Audio
- XLR-COMBO Connector for Mic Level Audio

Applications

- Broadcast / Studio
- Audio Visual systems
- Public Address Systems
- Live Music & Entertainment
- Live Cinematic Multi-cam
- Live Sports Broadcast
- ENG, EFP
- High-Definition Video Surveillance
- High-Definition Pro Audio Visual



Balanced Audio over Fiber
Mic Level



Balanced Audio over Fiber
Line Level



AES/EBU over Fiber



Unbalanced Audio over Fiber
Terminal Block



Unbalanced Audio over Fiber
RCA Connector



Stereo Audio over Fiber
3.5mm Jack

Ordering Information

Part Number	Description
VOS-0100FT/R	1-Channel Simplex Analog Audio, Terminal Block Connector
VOS-0200FT/R	2-Channel Simplex Analog Audio, Terminal Block Connector
VOS-0400FT/R	4-Channel Simplex Analog Audio, Terminal Block Connector
VOS-0800FT/R	8-Channel Simplex Analog Audio, Terminal Block Connector
VOS-0100DT/R	1-Channel Duplex Analog Audio, Terminal Block Connector
VOS-0200DT/R	2-Channel Duplex Analog Audio, Terminal Block Connector
VOS-0400DT/R	4-Channel Duplex Analog Audio, Terminal Block Connector
VOS-1TRS35-FT/R	1-Channel Simplex Analog Stereo Audio, 3.5mm TRS Jack
VOS-1TRS35-DT/R	1-Channel Duplex Analog Stereo Audio, 3.5mm TRS Jack
VOS-2RCA-FT/R	2-Channel Simplex Analog Audio (1-Channel Stereo), RCA Connector
VOS-2RCA-DT/R	2-Channel Duplex Analog Audio (1-Ch Duplex Stereo), RCA Connector
VOS-2XLR-FT/R	2-Channel Simplex Analog Balanced Audio, XLR Connector, Line Level
VOS-2XLR-DT/R	2-Channel Duplex Analog Balanced Audio, XLR Connector, Line Level
VOS-4XLR-FT/R	4-Channel Simplex Analog Balanced Audio, XLR Connector, Line Level
VOS-4XLR-DT/R	4-Channel Duplex Analog Balanced Audio, XLR Connector, Line Level
VOS-8XLR-FT/R	8-Channel Simplex Analog Balanced Audio, XLR Connector, Line Level
VOS-2XLRC-DT/R	2-Channel Duplex Analog Balanced Audio, XLR-COMBO Connector, Microphone Level
VOS-4XLRC-FT/R	4-Channel Simplex Analog Balanced Audio, XLR-COMBO Connector, Microphone Level
VOS-2AES-DT/R	2-Channel Duplex Digital AES/EBU Balanced Audio, XLR Connector
VOS-4AES-FT/R	4-Channel Simplex Digital AES/EBU Balanced Audio, XLR Connector

Details link: <https://www.voscom.com/audio-over-fiber/>

VOSCOM's VGA, DVI, HDMI Fiber Extender and Fiber Converter are the perfect choice for both large and small Pro Audio Visual installations. Featuring computer and HDTV video resolutions up to 4K. We've got everything you need to extend any digital or analog video signal over fiber with exceptional quality using our plug-and-play solutions.

VGA, DVI, HDMI Fiber Optic Extender System is a flexible professional solution for long distance transmission of high resolution video signals through single fiber optic cable, also support stereo audio, RS485 & RS232 data, Loopback output, USB & IP Ethernet. fiber optic extenders ensures high quality signals with no interference, applications include specialized Media Display, Security Systems, Industrial Monitoring, Airport / Airplane / Metro / Railway and large-scale conference stadiums, where long distance transmission of computer video signals are necessary.

Features

- HDMI over Fiber, up to 4K@60Hz
- HDMI with Audio, Rs232 & USB over Fiber
- DVI over Fiber extender, up to 4K@30Hz
- VGA over Fiber extender
- (KVM) VGA over Fiber with Audio, Rs232 & USB
- HDMI 2.0, 4K UHD, 4096×2160
- Support HDCP
- Support EDID
- Mini type, stand-alone or rack-mount

Applications

- MRI / Medical Remote Image Display
- Entertainment / Casino / Local Event Displays
- Airport / Airplane / Metro / Railway Monitoring / Displays
- Radar Study / Weather / Space Systems
- Advertisement / Media Display
- Entertainment / Casino / Local Event Displays
- Live Music & Entertainment
- High-Definition Video Surveillance
- High-Definition Pro Audio Visual



Mini HDMI over Fiber Extender



HDMI with Rs232 over Fiber



HDMI with Audio, Rs232 & USB KVM Fiber Extender



Mini DVI over Fiber Extender



DVI with Rs232 over Fiber



VGA with Audio, Rs232 & USB KVM Fiber Extender



Products Service:

Telephone: 86-571-87389389

Email: sales@voscom.com

Support:

support@voscom.com

Headquarters Information:

HANGZHOU VOSCOM OPTICAL CO., LTD

Huayang Industry Park #1 A311,

NO.79 Baijiayuan Road,

Hangzhou , P.R.CHINA 310023

Tel: +86-571-87389389

Web: www.voscom.com

E-Mail: sales@voscom.com

support@voscom.com

Distributor Information: