12G / 3G-SDI over Fiber

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



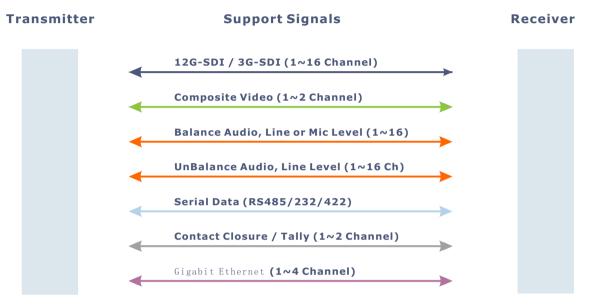
8 x 3G-SDI + 2 x Balanced Audio + 2 x Gigabit Ethernet

Customized Support

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:



Multiple Interfaces:

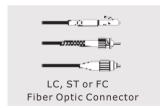
















Multiple sizes:









Ordering Information

Part Number	Description
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-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-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/

3G-SDI Fiber Optic Extender, Mini Type 1-Channel 3G-SDI/HD-SDI Video over Fiber



Audio



Data

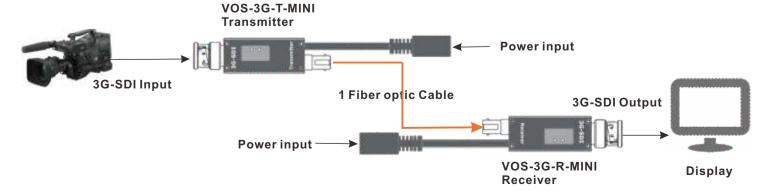
VOSCOM Mini 3G-SDI Fiber Converter support 1-Channel uncompressed 3G-SDI over one core fiber, also support HD-SDI and SD-SDI. Integrated design combining video processing and optic-electric conversion, with high level of integration and small size, offer unmatched flexibility and cost efficiency. 3G-SDI over one single-mode fiber, the distance up to 10km.

Ethernet

VOSCOM 3G-SDI Fiber converters use a compact, low-profile enclosure that works well in tight spaces around and behind equipment racks, trucks and on camera. and the converters meet all relevant SMPTE specifications, and offering electrical isolation to eliminate potential ground loop problems for a rugged, versatile solution that is suitable for a variety of applications.

Features

- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Support Single-mode fiber up to 10km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Plug and Play



Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical	Maximum Transmission
Transmitter	Receiver	Fiber Mode	wavelengths	Power Budget	Distance
VOS-3G-T-MINI	VOS-3G-R-MINI	Single-Mode	1470nm	12dB	10km

Note:

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

• Video

Number of Channels: 1-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
Fiber Type:		Input Power Requirements: Power Adapter: Power Consumption: Stand-Alone Dimensions: Shipping Weight:	AC100V~240V <1.5W
• Connectors		• Environmental	
Video Connector: Optical Connector: Power Connector:	·	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C

3G-SDI Fiber Optic Extender 1-Channel 3G-SDI Video over Fiber



System Design

VOS-1H3G-T/R provides for the digital transmission of 1-Channel uncompressed 3G-SDI, HD-SDI or SD-SDI 1080p video over fiber and support one loop output for local display, dual outputs for two displays in the remote end.

Audio

Stand-alone or rack-mount. All 3G-SDI video over Fiber of VOS-1H3G-T/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 2U or 4U rack (VOS-CH02, VOS-CH04).



Panel

Data

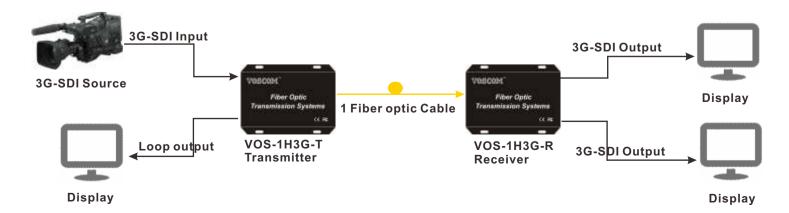




Ethernet

Features

- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Standard SFP Module with LC connector support Single-mode 20km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Plug and Play



Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical	Maximum Transmission
Transmitter	Receiver	ribermode	wavelengths	Power Budget	Distance
VOS-1H3G-T	VOS-1H3G-R	Single-Mode	1310nm	12dB	20km

Note:

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

• Video

Number of Channels: 1-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
Optical Connector: Wavelengths: Fiber Type: Rate: Tx Output Power: Receiver Sensitivity:	1310nm Single-Mode, Singe-Fiber 3Gbps >-6dB		AC100V~240V
• Connectors		• Environmental	
Optical Connector:	75 Ohm BNC (Gold Center Pin) IEC169-8 standard LC (SFP) DC Power Connector	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C 0%~95% (non-condensing)

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3G-SDI Fiber Optic Extender 2-Channel 3G-SDI / HD-SDI over Fiber



System Design

VOS-2H3G-T/R provides for the digital transmission of 2-Channel uncompressed 3G-SDI, HD-SDI or SD-SDI 1080p video over fiber and support one loop output for local display, dual outputs for two displays in the remote end.

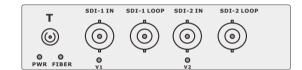
Audio

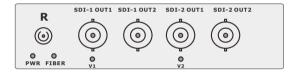
Stand-alone or rack-mount. All 3G-SDI video over Fiber of VOS-2H3G-T/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack (VOS-CH04).



Panel

Data

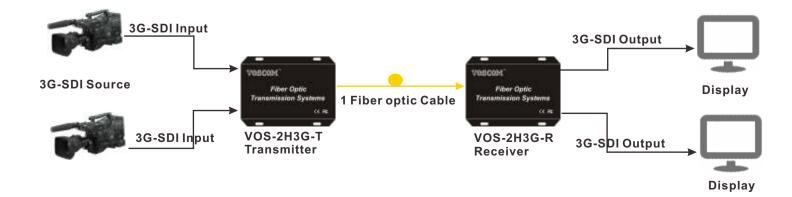




Ethernet

Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Standard SFP Module with LC connector support Single-mode 20km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount



Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical	Maximum
Transmitter	Receiver	riberMode	waveleligtiis	Power Budget	Transmission Distance
VOS-2H3G-T	VOS-2H3G-R	Single-Mode	1310/1470nm	12dB	20km

Note:

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

• Video

Number of Channels: 2-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
'	3Gbps >-6dB		AC100V~240V
• Connectors		• Environmental	
Optical Connector:	75 Ohm BNC (Gold Center Pin) IEC169-8 standard ST, FC or LC optional DC Power Connector	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C

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3G-SDI Fiber Optic Extender 4-Channel 3G-SDI / HD-SDI over Fiber



System Design

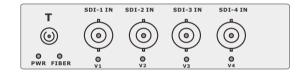
VOS-4H3G-T/R provides for the digital transmission of 4-Channel uncompressed 3G-SDI, HD-SDI or SD-SDI 1080p video over fiber

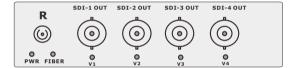
Stand-alone or rack-mount. All 3G-SDI video over Fiber of VOS-4H3G-T/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack (VOS-CH04).

Audio

Data Panel

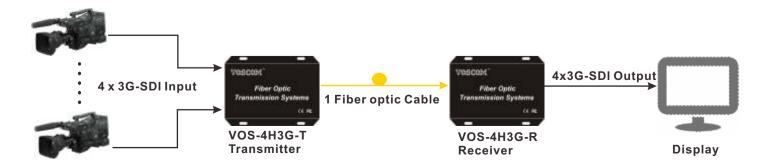
Ethernet





Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Standard SFP Module with LC connector support Single-mode 20km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount



Ordering Information

Model Number		Fiber Mode Wavelengths	Mayolongtha	Optical	Maximum
Transmitter	Receiver	Fiber Mode	wavelengths	Power Budget	Transmission Distance
VOS-4H3G-T	VOS-4H3G-R	Single-Mode	1470~1610nm	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: 4-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
'	3Gbps >-6dB		AC100V~240V
• Connectors		• Environmental	
Optical Connector:	75 Ohm BNC (Gold Center Pin) IEC169-8 standard ST, FC or LC optional DC Power Connector	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C 0%~95% (non-condensing)

3G-SDI Fiber Optic Extender 8-Channel 3G-SDI / HD-SDI over Fiber

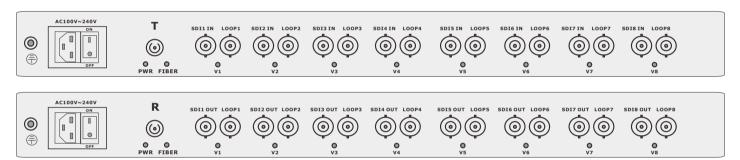


System Design

VOS-8H3G-T/R provides 8-Channel uncompressed 3G-SDI, HD-SDI or SD-SDI 1080p video over fiber and support one loop output for local display, dual outputs for two displays in the remote end.

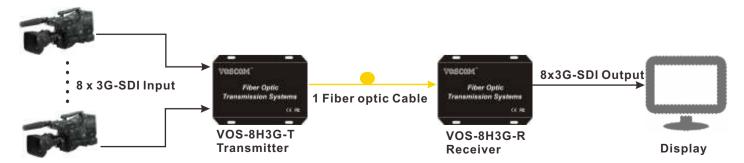


Panel



Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Standard SFP Module with LC connector support Single-mode 20km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- 19inch 1U rack-mount



Ordering Information

Model Number		Fiber Mode Waveleng	Wavelengths	Optical	Maximum
Transmitter	Receiver	Fiber Mode	wavelengths	Power Budget	Transmission Distance
VOS-8H3G-T	VOS-8H3G-R	Single-Mode	1310~1610nm	12dB	20km

Note:

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

• Video

Number of Channels: 8-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
Wavelengths: Fiber Type:	3Gbps >-6dB	Power Consumption: 19inch 1U Rack:	AC100V~240V (Built-in) <20W 445mm x 220mm x 44.5mm 6.0kg (include TX & RX)
• Connectors		• Environmental	
	75 Ohm BNC (Gold Center Pin) IEC169-8 standard ST, FC or LC optional AC line cord	'	

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3G-SDI Fiber Optic Extender 16-Channel 3G-SDI / HD-SDI over Fiber

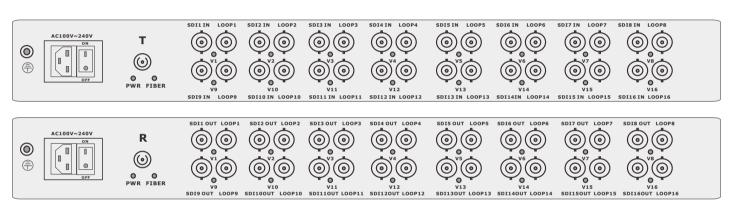


System Design

VOS-16H3G-T/R provides 16-Channel uncompressed 3G-SDI, HD-SDI or SD-SDI 1080p video over fiber and support one loop output for local display, dual outputs for two displays in the remote end.

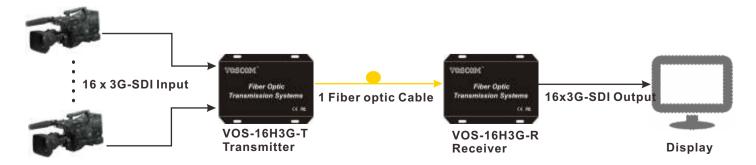


Panel



Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Standard SFP Module with LC connector support Single-mode 20km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- 19inch 1U rack-mount



Ordering Information

Model Number		Fiber Mode	Wayolongtha	Optical	Maximum
Transmitter	Receiver	ribei Mode	Wavelengths	Power Budget	Transmission Distance
VOS-16H3G-T	VOS-16H3G-R	Single-Mode	1310~1610nm	12dB	20km

Note:

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

• Video

Number of Channels: 16-Channel 3G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

• Optical		• Electrical & Mechanical	
Wavelengths: Fiber Type:	3Gbps >-6dB	Power Consumption: 19inch 1U Rack:	AC100V~240V (Built-in) <30W 445mm x 220mm x 44.5mm 8.0kg (include TX & RX)
• Connectors		• Environmental	
	75 Ohm BNC (Gold Center Pin) IEC169-8 standard ST, FC or LC optional AC line cord	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C 0%~95% (non-condensing)

3G-SDI Fiber Optic Extender 1-Channel 3G-SDI + 1 Duplex Data + Ethernet



System Design

VOS-1H3G-DET/R provides 1-Channel uncompressed 3G-SDI, data (Rs485, Rs232 or Rs422) and Ethernet.

Audio

 $\label{eq:stand-alone or rack-mount.} All \ 3G-SDI \ video \ over \ Fiber \ of \ VOS-1H3G-DET/R \ comes \ in \ an insert \ card \ version. \ The \ cards \ can \ be inserted into our 16-slot, 19inch \ 4U \ rack \ (VOS-CH04).$



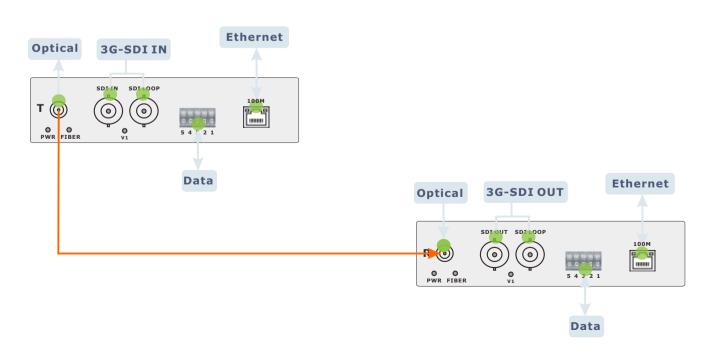


Ethernet

Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Plug and Play

Panel & Configuration



Ordering Information

Model Number		Fiber Mode	Wayolongtha	Optical	Maximum
Transmitter	Receiver	ribei Mode	Wavelengths	Power Budget	Transmission Distance
VOS-1H3G-DET	VOS-1H3G-DER	Single-Mode	1310/1550/1470nm	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: 1-Channel 3G-SDI

Connector: 75 Ohm BNC (Gold Center Pin)

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select

Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 1080p @ 60Hz

Tx Output Power: >-6dB

Receiver Sensitivity: >-14dB

• Data *	• Ethernet	
Number of Channels: 1-Channel Duplex Data Connector: Terminal Block Data Type: Rs485 or Rs232 or RS422 Data Rate: DC to 1Mbps	Number of Channels: 1 Data Rate: 1 Connector: R	
	• Electrical & Mechanical	
* Note: the device can support 1-Channel Rs422 or Rs232 & Rs485 data, but this must be configured by the factory, so please choose the configuration prior to placing the order.	Power Adapter: A	0C 5V@2A CC100V~240V S5W 92mm x 167mm x 28mm
• Optical	Shipping Weight: 2	0kg (include TX & RX)
Optical Connector: ST, FC or LC optional	• Environmental	
Wavelengths: 1310/1470/1550nm Fiber Type: Single-Mode 20km Rate: 3Gbps	Operating Temperature: -2	

www.voscom.com 2

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

MTBF: >100,000 hours

VOSCOM



3G-SDI Fiber Optic Extender

1-Ch 3G-SDI with Audio, Data, Tally & Ethernet



System Design

VOS-1H3G-ADCET/R provides 1-Channel 3G-SDI/HD-SDI, 2 duplx audio, 1 duplex data(Rs485, Rs232 or Rs422), conatct closure for tally and Ethernet.



Stand-alone or rack-mount. All 3G-SDI video over Fiber of VOS-1H3G-ADCET/R comes in an insert card version. The cards can be inserted into our 16-slot, 19inch 4U rack (VOS-CH04).



Features

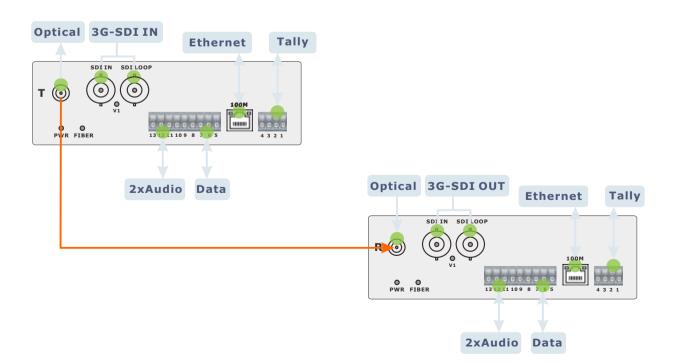


- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)



- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Plug and Play

Panel & Configuration





Ordering Information

Part Number	Description
VOS-1H3G-ADCET/R	1-Channel 3G-SDI + 2 Duplex Audio + 1 Duplex Data + 1 Duplex Contact Closure + 100M Ethernet, Single-mode 20km, Single-Fiber

Specification			
• Video		• Audio	
Data Rate:	75 Ohm BNC (Gold Center Pin) 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)	Connector: Audio input/output Level: Audio Type: Audio in/output impedance: Frequency Response:	Unbalanced, Line Level 600Ω 20Hz ~ 20KHz 48KHz, 24K bit rate > 82 dB
		• Ethernet	
	1-Channel Duplex Data Terminal Block		1-Channel 10/100 Mbps RJ-45, Auto MDI/MDI-X
, ·	Rs485 or Rs232 or RS422	• Optical	
* Note: the device can support Rs422, Rs232 or Rs485 data type, but this must be configured by the factory, so please choose the configuration prior to placing the order.		Wavelengths: Fiber Type:	ST, FC or LC optional 1310/1470/1550nm Single-Mode 20km 3Gbps
• Tally *		Receiver Sensitivity:	
	1-Ch Duplex or 2-Ch Simplex Terminal Block	• Electrical & Mechanical	
		Input Power Requirements: Power Adapter: Power Consumption: Stand-Alone Dimensions: Shipping Weight:	
Max output power:	5A@6VDC	• Electrical & Mechanical	
* Note: the device can support 1	duplex or 2 Simplex contact closure, factory, so please choose the configuration	Operating Temperature: Storage Temperature: Relative Humidity: MTBF:	-40°C~+85°C 0%~95% (non-condensing)

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1-Channel 3G-SDI + 2 Duplex Balanced Audio

+ Data, Contact Closure & Gigabit Ethernet







System Design

VOS-1H3G-BLADCET/R provides 1-Channel 3G-SDI and 2 duplex balanced audio, also with serial data, contact closure for tally, and Gigabit Ethernet.



Ethernet

Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
 - Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
 - LED Status Provide Rapid Indication of Operating Parameters
 - No EMI or RFI and no ground loops
 - 19inch 1U Rack

Panel & Configuration



Ordering Information

Part Number	Description
VOS-1H3G-BLADCET/R	1-Channel 3G-SDI + 2 Duplex Balanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-1H3GR1-BLADCET/R	1-Channel 3G-SDI + 1 Return 3G-SDI + 2 Duplex Balanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-2H3G-BLADCET/R	2-Channel 3G-SDI + 2 Duplex Balanced Audio + 2 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-2H3GR1-BLADCET/R	2-Channel 3G-SDI + 1 Return 3G-SDI + 2 Duplex Balanced Audio + 1 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet

Specification

prior to placing the order.

Specification			
• Video		• Audio	
Connector: Data Rate:	1~2-Channel 3G-SDI 75 Ohm BNC (Gold Center Pin) 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)		Balanced, Line Level or Mic 600Ω $20\text{Hz} \sim 20\text{KHz}$ $> 90\text{ dB}$
Max Resolution:	1080p @ 60Hz	• Ethernet	
	1-Channel Duplex Data Terminal Block		1-Channel 1000 Mbps RJ-45, Auto MDI/MDI-X
Data Type:	: Rs485 or Rs232 or RS422	• Optical	
Data Rate: DC to 1Mbps * Note: the device can support Rs422, Rs232 or Rs485 data type, but this must be configured by the factory, so please choose the configuration prior to placing the order.		Fiber Type:	1310-1610nm
• Tally *			>-6dB >-14dB
Number of Channels: 1-Ch Duplex or 2-Ch Simplex		• Electrical & Mechanical	
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 * Note: the device can support 1 duplex or 2 Simplex contact closure, but this must be configured by the factory, so please choose the configuration	: Dry Contact Closure : Normally Open (Default) : 2 ms : 0.5 A @ 120VAC 0.25 A @ 240VAC	Power Adapter: Power Consumption: 19inch 1U Rack: Shipping Weight:	AC100V~240V (Built-in) <30W 445mm x 220mm x 44.5mm 6.0kg (include TX & RX)
		• Electrical & Mechanical	
	30W duplex or 2 Simplex contact closure,	Operating Temperature: Storage Temperature: Relative Humidity:	

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MTBF: >100,000 hours



2-Channel 3G-SDI + 1 Return 3G-SDI (for Genlock) + 2 Duplex Audio + Data + Tally + Gigabit Ethernet



Audio





System Design

VOS-2H3GR1-ADCET/R provides 2-Channel 3G-SDI and 1-Channel Return 3G-SDI, also with 2 duplex analog audio, serial data, contact closure for tally, and Gigabit Ethernet.



Closure

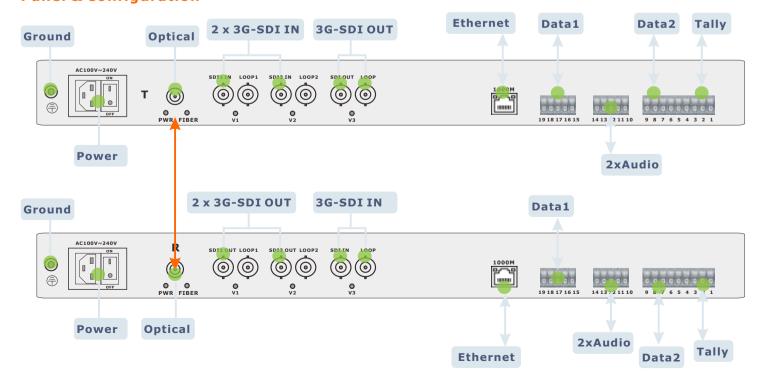
Features

- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream



- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- 19inch 1U Rack

Panel & Configuration



Ordering Information

Part Number	Description
VOS-2H3GR1-ADCET/R	2-Ch 3G-SDI + 1 Return 3G-SDI + 2 Duplex Audio + 2 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-1H3GR1-ADCET/R	1-Ch 3G-SDI + 1 Return 3G-SDI + 2 Duplex Audio + 2 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-2H3G-ADCET/R	2-Channel 3G-SDI + 2 Duplex Audio + 2 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet
VOS-4H3G-ADCET/R	4-Channel 3G-SDI + 2 Duplex Audio + 2 Duplex Data + 1 Duplex Contact Closure + 1000M Ethernet

prior to placing the order.

Specification			
• Video		• Audio	
Connector: Data Rate:	2~4-Channel 3G-SDI 75 Ohm BNC (Gold Center Pin) 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)		Unbalanced, Line Level 600Ω 20Hz ~ 20KHz > 82 dB
Max Resolution:	1080p @ 60Hz	• Ethernet	
• Data * Number of Channels: 2-Channel Duplex Data Connector: Terminal Block			1-Channel 1000 Mbps RJ-45, Auto MDI/MDI-X
Data Type:	: Rs485 or Rs232 or RS422	• Optical	
* Note: the device can support R must be configured by the factory, placing the order.	Data Rate: DC to 1Mbps Te: the device can support Rs422, Rs232 or Rs485 data type, but this be configured by the factory, so please choose the configuration prior to g the order.		ST, FC or LC optional Single-Mode 20km 1310-1610nm >-6dB
• Tally *		Tx Output Power: Receiver Sensitivity:	
	1-Ch Duplex or 2-Ch Simplex	• Electrical & Mechanical	
Data Formats:	0.5 A @ 120VAC	Power Adapter: Power Consumption: 19inch 1U Rack: Shipping Weight:	AC100V~240V (Built-in) <30W 445mm x 220mm x 44.5mm 6.0kg (include TX & RX)
	0.25 A @ 240VAC 1A@30VDC, 5A@6VDC	• Electrical & Mechanical	
		·	

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MTBF: >100,000 hours



4-Channel 3G-SDI (or 2 Duplex) + 2 Duplex Balanced Audio + 2 x Gigabit Ethernet





Data

System Design

VOS-4H3G-BLA2ET/R provides 4-Channel 3G-SDI (or 2 Duplex 3G-SDI) and 2 duplex balanced audio, and 2-Channel Gigabit Ethernet.

Contact Closure

Features



- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- 19inch 1U Rack

Panel & Configuration 4 x 3G-SDI IN 2 x Ethernet 2xAudio IN 2xAudio OUT **Optical** Ground Т Power 4 x 3G-SDI OUT 2 x Ethernet 2xAudio OUT 2xAudio IN Ground R Optical Power

Ordering Information

Part Number	Description
VOS-4H3G-BLA2ET/R	4-Channel 3G-SDI + 2 Duplex Balanced Audio + 2 x 1000M Ethernet
VOS-2H3GR2-BLA2ET/R	2-Channel 3G-SDI + 2 Return 3G-SDI (2 Duplex 3G-SDI) + 2 Duplex Balanced Audio + 2 x 1000M Ethernet

Specification

• Video		• Audio	
Number of Channels: 4-Channel 3G-SDI (or 2 Duplex 3G-SDI) Connector: 75 Ohm BNC (Gold Center Pin) Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select Standards: SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI),	Number of Channels:	+4dBu nominal Balanced, Line Level or Mic 600Ω 20Hz ~ 20KHz > 90 dB	
Max Resolution:	SMPTE 259M (SD-SDI) 1080p @ 60Hz	• Ethernet	
Max Resolution.			2-Channel 1000 Mbps RJ-45, Auto MDI/MDI-X
		• Optical	
• Data *		Connector: Fiber Type: Wavelengths: Tx Output Power: Receiver Sensitivity:	1310-1610nm >-6dB
		• Electrical & Mechanical	
• Tally *		Power Adapter: Power Consumption: 19inch 1U Rack: Shipping Weight:	AC100V~240V (Built-in) <30W 445mm x 220mm x 44.5mm 6.0kg (include TX & RX)
•		• Electrical & Mechanical	
		Operating Temperature: Storage Temperature: Relative Humidity:	

VOS-8H3G-BLA2ET/R

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8-Channel 3G-SDI (or 4 Duplex) + 2 Duplex Balanced Audio + 2 x Gigabit Ethernet





Data

System Design

 $\textbf{VOS-8H3G-BLA2ET/R} \ provides \ 8-Channel \ 3G-SDI \ (or \ 4 \ Duplex \ 3G-SDI) \ and \ 2 \ duplex \ balanced \ audio, and \ 2-Channel \ Gigabit \ Ethernet.$

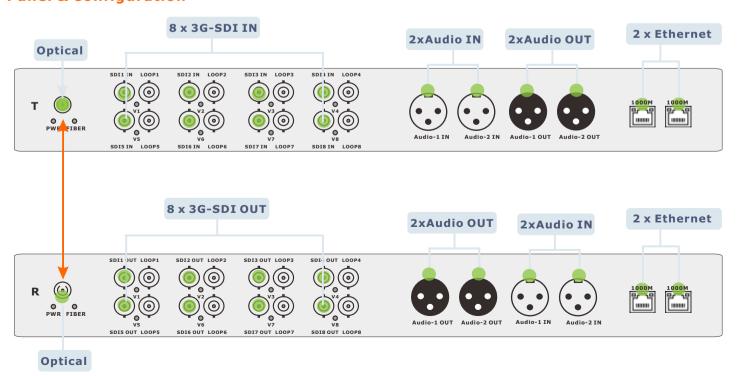
Contact Closure

Features



- Multi-channel 3G-SDI transmission over one core fiber with CWDM
- Support SMPTE 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 3G,1.5G, 270M SDI data rates
- Supports embedded digital audio stream
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- 19inch 1U Rack

Panel & Configuration



Ordering Information

Part Number	Description
VOS-8H3G-BLA2ET/R	8-Channel 3G-SDI + 2 Duplex Balanced Audio + 2 x 1000M Ethernet
VOS-4H3GR4-BLA2ET/R	4-Channel 3G-SDI + 4 Return 3G-SDI (4 Duplex 3G-SDI) + 2 Duplex Balanced Audio + 2 x 1000M Ethernet

Specification

Specification			
• Video		• Audio	
Data Rate:	(or 4 Duplex 3G-SDI) 75 Ohm BNC (Gold Center Pin) 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, - Auto Select SMPTE 424M (3G-SDI), SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)		Balanced, Line Level or Mic 600Ω $20\text{Hz} \sim 20\text{KHz}$ $> 90\text{ dB}$
Max Resolution:		• Ethernet	
			2-Channel 1000 Mbps RJ-45, Auto MDI/MDI-X
		• Optical	
• Data *		Connector: Fiber Type: Wavelengths: Tx Output Power: Receiver Sensitivity:	1310-1610nm >-6dB
		·	> 140D
• Tally *		Power Adapter: Power Consumption: 19inch 1U Rack: Shipping Weight:	AC100V~240V (Built-in) <30W 445mm x 220mm x 44.5mm 6.0kg (include TX & RX)
,		• Electrical & Mechanical	
		Operating Temperature: Storage Temperature: Relative Humidity:	

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MTBF: >100,000 hours