

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.

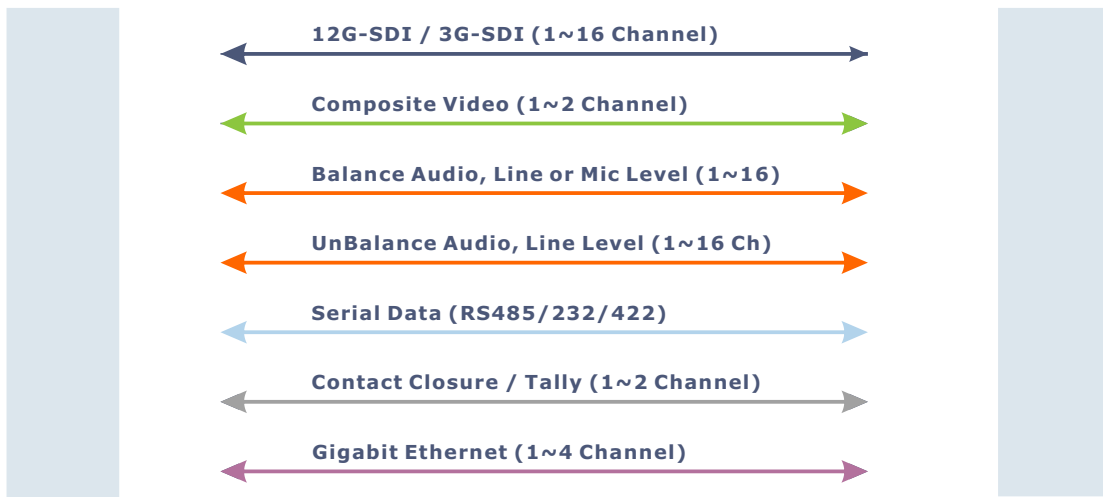
You can freely configure according to the functions, interfaces, and sizes below, and then contact us.

### Multiple Functions:

#### Transmitter

#### Support Signals

#### Receiver



### Multiple Interfaces:

|   |  |  |  |  |
|---|--|--|--|--|
| <b>TERMINAL BLOCK</b><br><br><b>UNBALANCED AUDIO LINE LEVEL</b> | <b>RCA</b><br><br><b>UNBALANCED AUDIO LINE LEVEL</b> | <b>3.5mm TRS</b><br><br><b>UNBALANCED AUDIO STEREO AUDIO</b> | <b>XLR</b><br><br><b>BALANCED AUDIO LINE LEVEL</b> | <b>XLR-COMBO</b><br><br><b>BALANCED AUDIO MICROPHONE LEVEL</b> |
| <br><b>LC, ST or FC Fiber Optic Connector</b>                   | <br><b>SMPT 304M Fiber Hybrid Connector</b>          | <br><b>ODC Fiber Connector</b>                               |  |  |

### Multiple sizes:

|                    |                        |                           |                           |
|--------------------|------------------------|---------------------------|---------------------------|
| <br><b>V-mount</b> | <br><b>Stand-alone</b> | <br><b>19inch 1U Rack</b> | <br><b>19inch 2U Rack</b> |
|--------------------|------------------------|---------------------------|---------------------------|

### Specification

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

## Ordering Information

| Part Number  | Description   |
|--|---|
| <b>12G-SDI Fiber Optic Extender series (common models)</b> |   |
| 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/>

### 12G-SDI with Time Code, Intercom, Tally, Remote & Ethernet Camera Adapter to Base Station via SMPTE Hybrid Fiber

1  
12G-SDI

1  
Time Code

1  
Intercom

1  
Remote

1  
Tally

1  
Ethernet



#### System Design

VOSCOM CineLock series, VOS-4K6S can transport 1-Channel 12G-SDI with PGM (Return 12G-SDI) signal from the camera to Base Station up to 300 meters via fiber cable. Full camera control is provided by the camera manufacturer's control panel via remote or a Gigabit Ethernet path. also support Time code / Genlock, Intercom and Tally.

The system puts all of the signals needed for multicamera 4K/UHD TV production onto a SMPTE hybrid fiber cable, ensuring robust, trouble-free connectivity on any studio or remote production.

#### Features

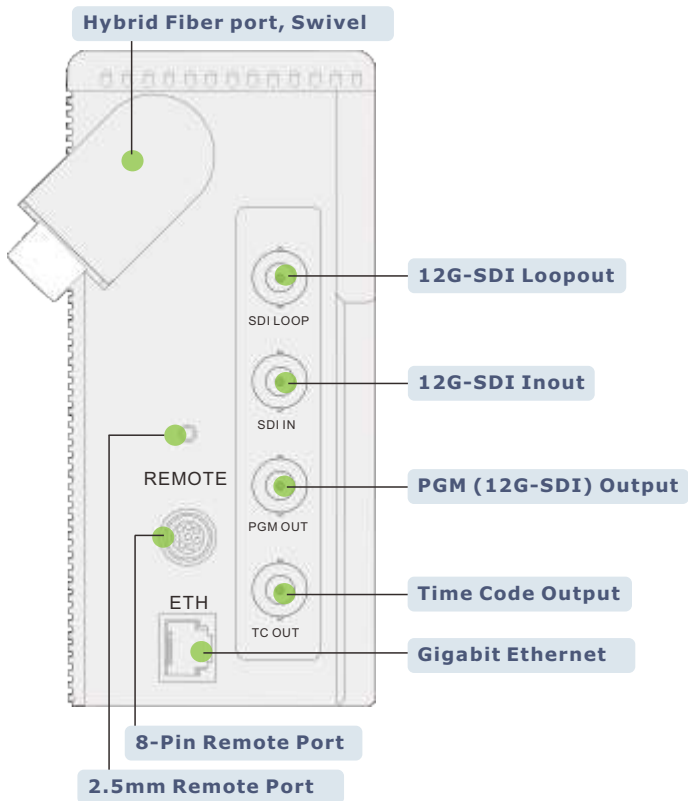
- Support 1-Channel 12G-SDI and PGM (one Return 12G-SDI)
- Support Hybrid Fiber Connector 3K.93C, SMPTE 304M
- Support Clear-com or Telex's Party Line intercom, compatible with 4-wire intercom.
- support Time Code or Genlock
- Support Tally, Remote control and Gigabit Ethernet
- Compatible with V-mount or A-mount camcorders
- LED Status Provide Rapid Indication of Operating Parameters
- Support two D-Tap 14.8V power output

#### System Diagram

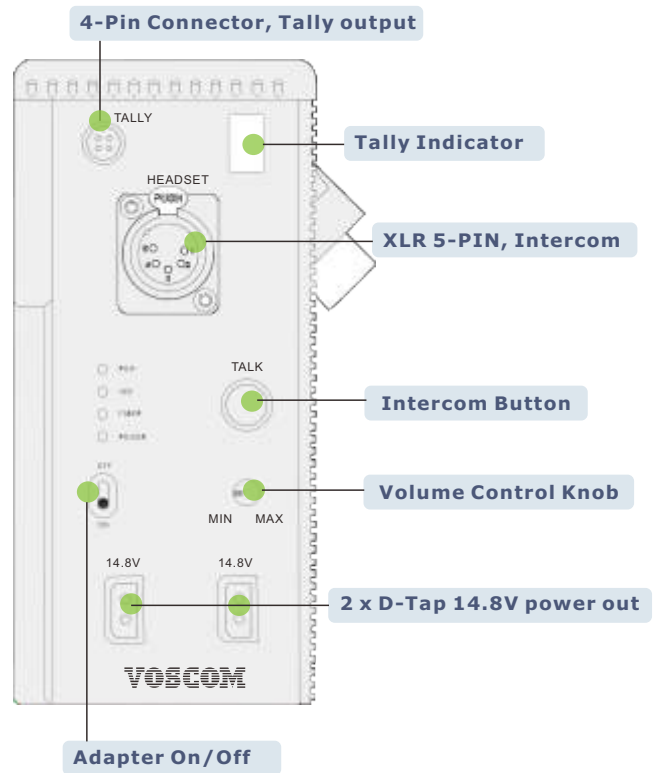


# CineLock Series VOS-4K6S

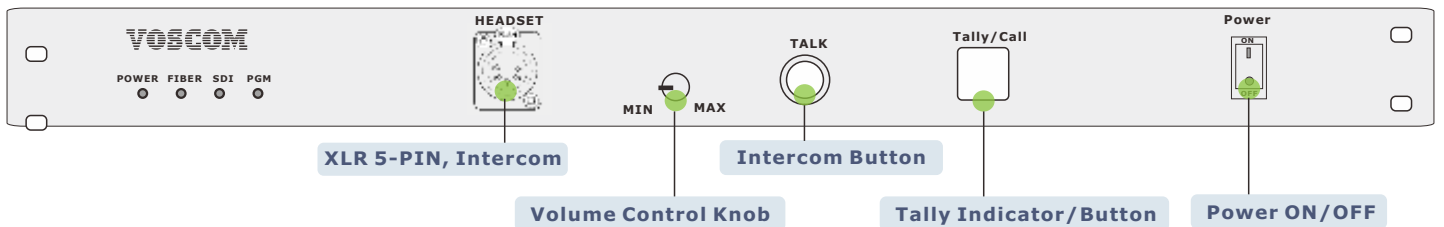
## Camera Adapter Left Panel



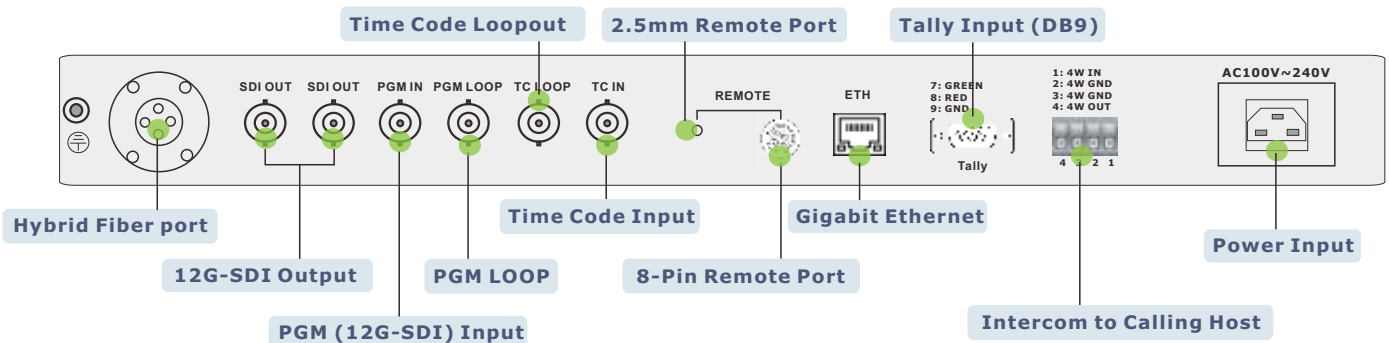
## Camera Adapter Right Panel



## Base Station Front Panel



## Base Station Rear Panel



# CineLock Series

## VOS-4K6S

### Ordering Information

| Part Number | Description  |
|-------------|--|
| VOS-4K6S-CU | <b>Camera Unit:</b> 1-Channel 12G-SDI + PGM (Return 12G-SDI) + Time Code + Remote + Intercom + Tally + Gigabit Ethernet, SMPTE 304M, 3K.93C Hybrid Connector<br>V-mount or A-mount<br>2 x D-tap 14.8V power output |
| VOS-4K6S-BU | <b>Base Unit:</b> 1-Channel 12G-SDI + PGM (Return 12G-SDI) + Time Code + Remote + Intercom + Tally + Gigabit Ethernet, SMPTE 304M, 3K.93C Hybrid Connector<br>19inch 1U rack<br>AC100V~240V power input            |

### Specification

|  |  |
|--|--|
| <b>• 12G-SDI</b><br><br>Number of Channels: 1-Ch Bi-Directional 12G-SDI<br>Connector: 75 Ohm BNC<br>Data Rate: 12G-SDI, 6G-SDI<br>3G-SDI, HD-SDI - Auto Select<br>Standards: SMPTE 2082(12G-SDI),<br>SMPTE 2081(6G-SDI),<br>SMPTE 424M (3G-SDI),<br>SMPTE 292M (HD-SDI)<br><br>Max Resolution: 4K UHD @ 60Hz | <b>• Time Code</b><br><br>Type: SMPTE / EBU<br>Input: Unbalanced, 15Vp-p max<br>Output: Unbalanced, 3Vp-p max<br>Connector: BNC  |
| <b>• Intercom</b><br><br>Number of Channels: 2<br>Connector: 5-pin XLR, Headset (Camera)<br>5-pin XLR, Headset (Base)<br>4-wire to Calling Host (Base)<br>Level: +4dBu nominal   | <b>• Ethernet</b><br><br>Number of Channels: 1-Channel<br>Data Rate: 1000 Mbps<br>Connector: RJ-45, Auto MDI/MDI-X   |
| <b>• Remote</b><br><br>Connector1: 8-pin Remote port<br>for RCP-1500/3500<br><br>Connector2: 2.5mm Remote port<br>for RCP RM-30BP  | <b>• Optical</b><br><br>Standard: SMPTE 304M<br>Connector: 3K.93C EDW (Camera unit)<br>3K.93C FXW (Base unit)<br><br>Distance: 300meters   |
| <b>• Tally</b><br><br>Channels: 2<br>Connector: 4-pin (Camera unit)<br>DB-9(Base unit)   | <b>• Electrical &amp; Mechanical</b><br><br><b>Camera Unit</b><br>Output Power: A type:50W, V type: 50W<br>Power Adpater: DC14.8V<br>Size: 105mm x 74mm x 158mm<br>Weight: 1.35kg<br><br><b>Base Unit</b><br>Output Power: DC:300W<br>Power Adpater: AC100~240V<br>Size: 440mm x 325mm x 45mm (1U)<br>Weight: 3.0kg<br><br>Operating Temperature: 0°C ~+50°C<br>Relative Humidity: 0%~95% (non-condensing) |

### Bi-Directional 12G-SDI with Remote & Tally Camera Adapter to Base Station over Fiber

← 1 →  
12G-SDI

← 1 →  
Remote

← 1 →  
Tally



#### System Design

VOSCOM CineLock series, VOS-4K5S can transport 1-Channel 12G-SDI with PGM (Return 12G-SDI) signal from the camera to Base Station up to 10km via fiber cable. Full camera control is provided by the camera manufacturer's control panel via remote, the remote support 2.5mm port and 8-PIN remote port, It can perfectly interoperate with RCP, like SONY RM-30BP, RCP-1500/3500, etc . The system puts all of the signals needed for multicamera 4K/UHDTV production onto one fiber cable, ensuring robust, trouble-free connectivity on any studio or remote production.

#### Features

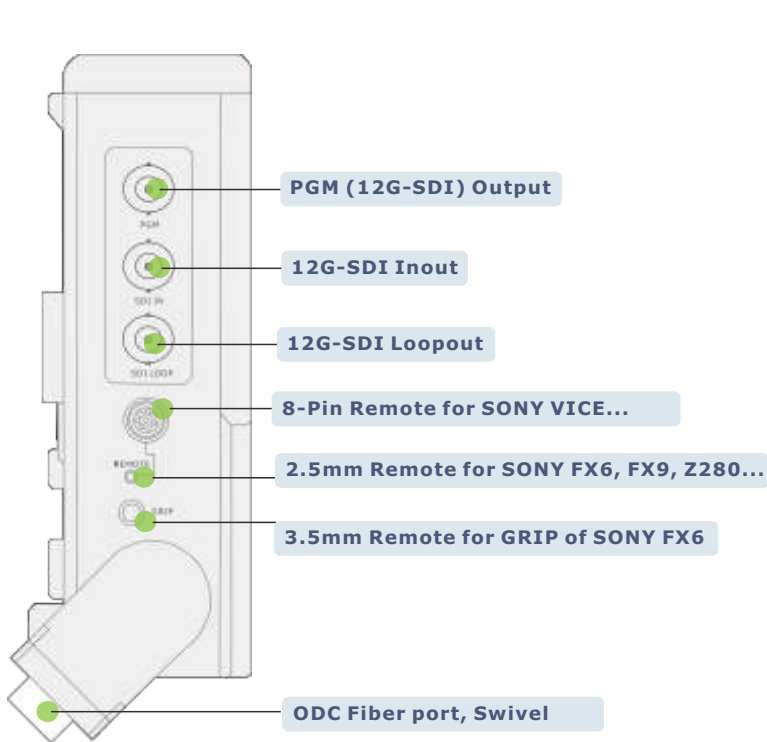
- Support 1-Channel 12G-SDI and PGM (one Return 12G-SDI)
- Support SMPTE 2082 / 2081 / 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 12G, 6G, 3G, 1.5G, 270M SDI data rates
- Coax inputs are equalized(EQ), Coax outputs are with driving function (CD)
- Support Battery Mount (V or A-mount), also support 9~18V power input
- Support Remote 2.5mm and 8-Pin port, and 3.5mm for GRIP of SONY Fx6
- Support 12-pin port Hirose for the LENS control
- Dual Fiber or Single-fiber, ODC connector, up to 10km
- LED Status Provide Rapid Indication of Operating Parameters

#### System Diagram

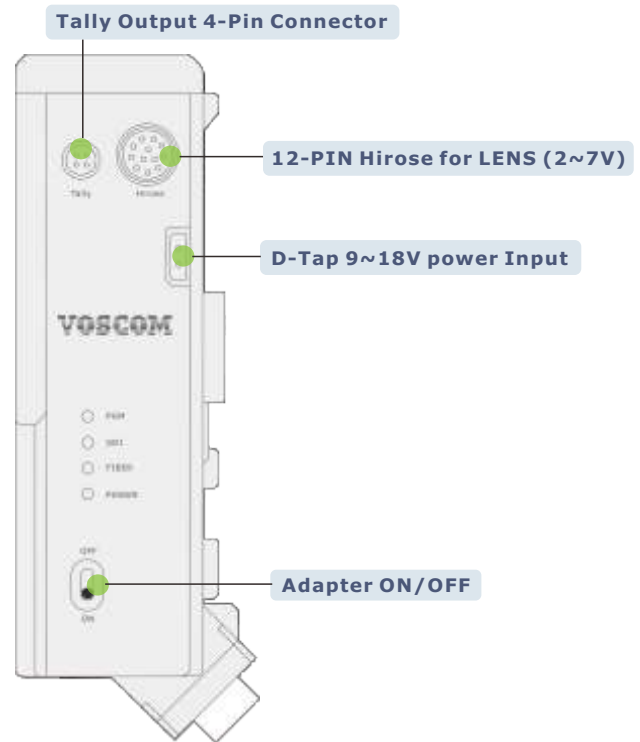


# CineLock Series VOS-4K5S

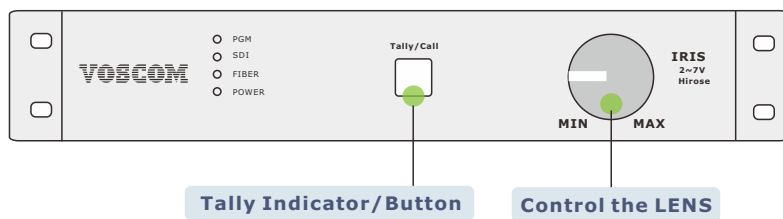
## Camera Adapter Left Panel



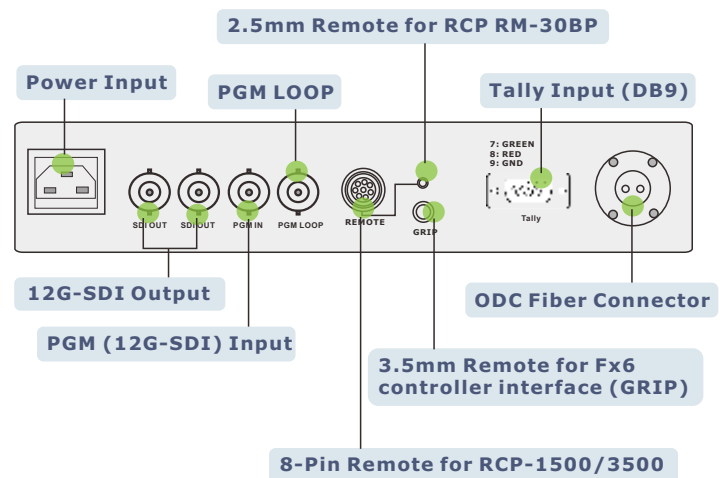
## Camera Adapter Right Panel



## Base Station Front Panel



## Base Station Rear Panel



### Ordering Information

| Part Number | Description  |
|-------------|--|
| VOS-4K5S-CU | <b>Camera Unit:</b> 1-Channel 12G-SDI + PGM (Return 12G-SDI) + Remote + Tally<br>V-mount or A-mount<br>Battery power supply or D-tap power input |
| VOS-4K5S-BU | <b>Base Unit:</b> 1-Channel 12G-SDI + PGM (Return 12G-SDI) + Remote + Tally<br>Stand-alone<br>AC100V~240V power input                            |

### Specification

|   |   |
|---|---|
| <p><b>• 12G-SDI</b></p> <p>Number of Channels: 1-Ch Bi-Directional 12G-SDI<br/> Connector: 75 Ohm BNC<br/> Data Rate: 12G-SDI, 6G-SDI<br/> 3G-SDI, HD-SDI - Auto Select<br/> Standards: SMPTE 2082(12G-SDI),<br/> SMPTE 2081(6G-SDI),<br/> SMPTE 424M (3G-SDI),<br/> SMPTE 292M (HD-SDI)<br/> Max Resolution: 4K UHD @ 60Hz</p> | <p><b>• Optical</b></p> <p>Optical Connector: ODC<br/> Fiber Type: Single-Mode, Dual-Fiber<br/> Distance: 10km<br/> Rate: 12Gbps<br/> Tx Output Power: 0~-3dB<br/> Receiver Sensitivity: &gt;-12dB</p>  |
| <p><b>• Remote</b></p> <p>Connector1: 8-pin Remote port<br/>for RCP-1500/3500<br/> Connector2: 2.5mm Remote port<br/>for RCP RM-30BP<br/> Connector3: 3.5mm Remote port<br/>for GRIP of SONY FX6</p>  | <p><b>• Electrical &amp; Mechanical</b></p> <p><b>Camera Unit</b><br/> Battery: V or A-mount, 9~18VDC<br/> Power Input: D-Tap 9~18V input<br/> Size: 95mm x 47mm x 158mm<br/> Weight: 0.8kg</p> <p><b>Base Unit</b><br/> Power Adpater: AC100~240V<br/> Size: 210mm x 180mm x 44mm<br/> Weight: 1.5kg</p> |
| <p><b>• Tally</b></p> <p>Channels: 2<br/> Connector: 4-pin (Camera unit)<br/> DB-9(Base unit)</p>   | <p>Operating Temperature: 0°C ~+50°C<br/> Relative Humidity: 0%~95% (non-condensing)</p>  |

### 12G-SDI Fiber Optic Extender, Mini Type 4K UHD 1-Channel 12G-SDI, 6G-SDI, 3G-SDI

1 →

12G-SDI

Audio

Data

**VOSCOM** Mini 12G-SDI Fiber Converter support 1-Channel uncompressed 12G-SDI over one core fiber, also support 6G-SDI, 3G-SDI and HD-SDI. Integrated design combining video processing and optic-electric conversion, with high level of integration and small size, offer unmatched flexibility and cost efficiency. 12G-SDI over one single-mode fiber, the distance up to 10km.

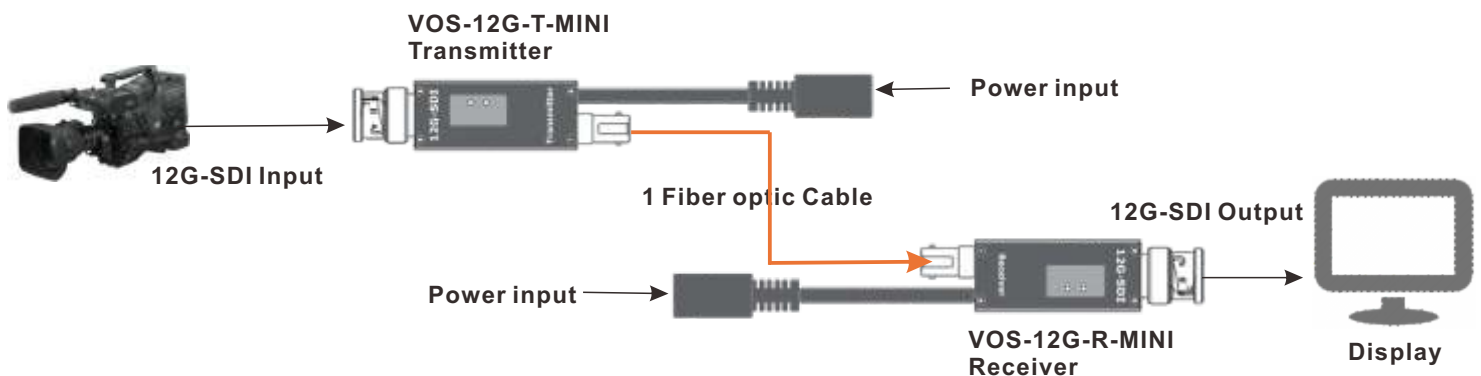
Ethernet

VOSCOM 12G-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 2082 / 2081 / 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 12G, 6G, 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

#### Typical Configuration



# 12G-SDI Fiber Optic Extender

## Ordering Information

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

### Note:

- The Optical Power Budget data fit Multit-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 12G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, 5.934 Gbps, 5.940 Gbps, 11.868 Gbps, 11.880 Gbps - Auto Select

Standards: SMPTE 2082(12G-SDI), SMPTE 2081(6G-SDI), SMPTE 424M (3G-SDI)  
SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 4K UHD 2160 @ 60Hz

### • Optical

Optical Connector: ST Optical connector  
Fiber Type: Single-Mode, Single-Fiber  
Rate: 12Gbps  
Tx Output Power: 0~-3dB  
Receiver Sensitivity: -12dB

### • Electrical & Mechanical

Input Power Requirements: DC 5V  
Power Adapter: AC100V~240V  
Power Consumption: <1.5W  
Stand-Alone Dimensions: 72mm x 18mm x 18mm  
Shipping Weight: 0.5kg (include TX & RX)

### • Connectors

Video Connector: 75 Ohm BNC (Gold Center Pin)  
IEC169-8 standard  
Optical Connector: ST Optical connector  
Power Connector: DC 3.5 x 1.35mm

### • Environmental

Operating Temperature: -20°C ~+70°C  
Storage Temperature: -40°C~+85°C  
Relative Humidity: 0%~95% (non-condensing)  
MTBF: >100,000 hours

## 12G-SDI Fiber Optic Extender 4K UHD 1-Channel 12G-SDI / 6G-SDI / 3G-SDI

**1** →  
**12G-SDI**

### System Design

VOS-1H12G-T/R enables fiber-optic transmission of 1-channel uncompressed 12G-SDI, 6G-SDI, or 3G-SDI. It features a loop output for local monitoring and dual outputs for remote displays.

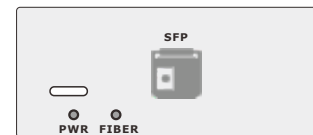
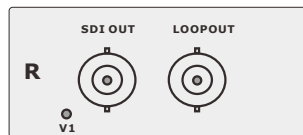
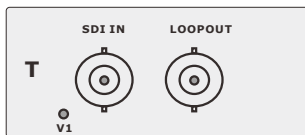


Audio

**Stand-alone or rack-mount.** All 12G-SDI video over Fiber of VOS-1H12G-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).

Data

### Panel

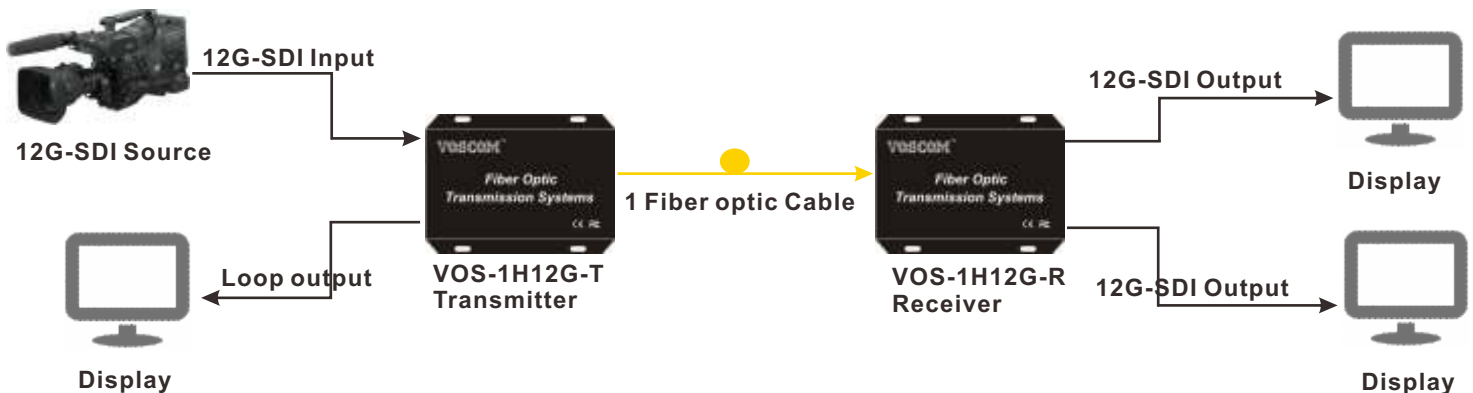


Ethernet

### Features

- Support SMPTE 2082 / 2081 / 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 12G, 6G, 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

### Typical Configuration



# 12G-SDI Fiber Optic Extender

## Ordering Information

| Model Number |             | Fiber Mode  | Wavelengths | Optical Power Budget | Maximum Transmission Distance |
|--------------|-------------|-------------|-------------|----------------------|-------------------------------|
| Transmitter  | Receiver    |             |             |                      |                               |
| VOS-1H12G-T  | VOS-1H12G-R | Single-Mode | 1270~1330nm | 12dB                 | 20km                          |

### Note:

- The Optical Power Budget data fit Multit-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 12G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, 5.934 Gbps, 5.940 Gbps, 11.868 Gbps, 11.880 Gbps - Auto Select

Standards: SMPTE 2082(12G-SDI), SMPTE 2081(6G-SDI), SMPTE 424M (3G-SDI)  
SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 4K UHD 2160 @ 60Hz

### • Optical

Optical Connector: LC (SFP)  
Fiber Type: Single-Mode, Single-Fiber  
Rate: 12Gbps  
Tx Output Power: >-6dB  
Receiver Sensitivity: >-14dB

### • Electrical & Mechanical

Input Power Requirements: DC 5V@300mA  
Power Adapter: AC100V~240V  
Power Consumption: <1.5W  
Stand-Alone Dimensions: 100mm x 55mm x 25mm  
Shipping Weight: 0.5kg (include TX & RX)

### • Connectors

Video Connector: 75 Ohm BNC (Gold Center Pin)  
IEC169-8 standard  
Optical Connector: LC (SFP)  
Power Connector: Type-C

### • Environmental

Operating Temperature: -20°C ~+75°C  
Storage Temperature: -40°C~+85°C  
Relative Humidity: 0%~95% (non-condensing)  
MTBF: >100,000 hours

## 12G-SDI Fiber Optic Extender 4K UHD 1-Channel Bi-Directional 12G-SDI

1  
12G-SDI

### System Design

VOS-1DH12G-T/R enables fiber-optic transmission of 1-channel uncompressed Bi-Directional 12G-SDI, 6G-SDI, or 3G-SDI, with a 1/4-inch screw mount, conveniently powered via a V-mount portable power supply.

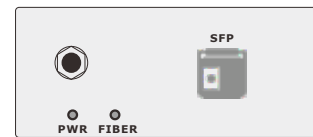
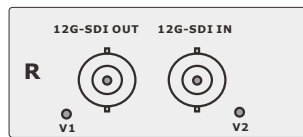
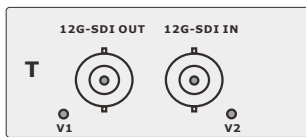


Audio

**Stand-alone or rack-mount.** All 12G-SDI video over Fiber of VOS-1DH12G-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).

Data

### Panel

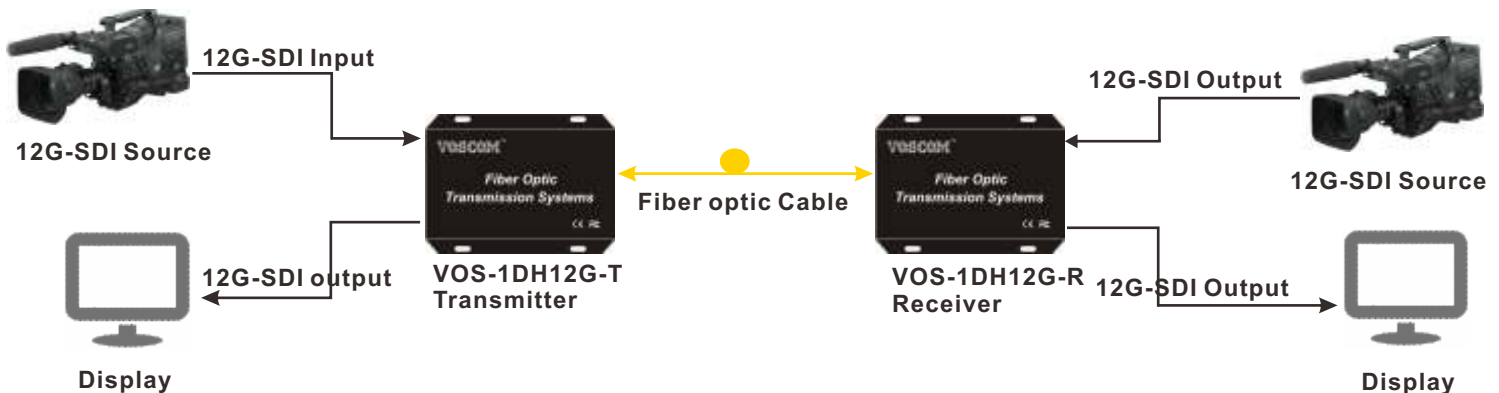


Ethernet

### Features

- Support SMPTE 2082 / 2081 / 424M / 292M / 259M or DVB-ASI compliant
- Automatic detection and re-clocking of 12G, 6G, 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 10km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Plug and Play

### Typical Configuration



# 12G-SDI Fiber Optic Extender

## Ordering Information

| Model Number |              | Fiber Mode  | Wavelengths | Optical Power Budget | Maximum Transmission Distance |
|--------------|--------------|-------------|-------------|----------------------|-------------------------------|
| Transmitter  | Receiver     |             |             |                      |                               |
| VOS-1DH12G-T | VOS-1DH12G-R | Single-Mode | 1270~1330nm | 12dB                 | 10km                          |

### Note:

- The Optical Power Budget data fit Multit-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.
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- Please feel free to consult factory for any special requirement and customization

## Specification

### • Video

Number of Channels: 1-Channel Bi-Directional 12G-SDI

Data Rate: 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, 5.934 Gbps, 5.940 Gbps, 11.868 Gbps, 11.880 Gbps - Auto Select

Standards: SMPTE 2082(12G-SDI), SMPTE 2081(6G-SDI), SMPTE 424M (3G-SDI)  
SMPTE 292M (HD-SDI), SMPTE 259M (SD-SDI)

Max Resolution: 4K UHD 2160 @ 60Hz

### • Optical

Optical Connector: LC (SFP)  
Fiber Type: Single-Mode, Single-Fiber  
Rate: 12Gbps  
Tx Output Power: 0~-3dB  
Receiver Sensitivity: >-12dB

### • Electrical & Mechanical

Input Power Requirements: DC 5V~36V  
Power Adapter: AC100V~240V  
Power Consumption: <1.5W  
Stand-Alone Dimensions: 98mm x 70mm x 26mm  
Shipping Weight: 0.5kg (include TX & RX)

### • Connectors

Video Connector: 75 Ohm BNC (Gold Center Pin)  
IEC169-8 standard  
Optical Connector: LC (SFP)  
Power Connector: DC 5.5-2.1mm

### • Environmental

Operating Temperature: -20°C ~+75°C  
Storage Temperature: -40°C~+85°C  
Relative Humidity: 0%~95% (non-condensing)  
MTBF: >100,000 hours