

### Fiber Optic Video & Data Transmission 8-Channel Video + 1 Duplex Data + IP Ethernet

**8** →  
Video

#### System Design

Fiber Optic Video & Data Transmitter & Receiver  
VOS-80101FDET/R can transmission 8-Channel digital composite video, 1 duplex data, and 10M/100M Ethernet, Data support RS485, RS232, RS422 protocols. Ideal for Broadcast /Studio ,CCTV and Professional AV applications.

Audio

Stand-alone or rack-mount. All units of VOS-80101FDET/R come in an insert card version. The cards can be inserted into our 14-slot,19inch 4U or 6U rack-mountable card cage (VOS-CH04 or VOS-CH06). One 8-Channel video card require two slots widths.

↔ **1** ↔  
Data

Single-Mode or Multi-Mode, VOS-80101FDET/R can support FC/PC or ST/PC Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km or Multi-mode 1.2km.

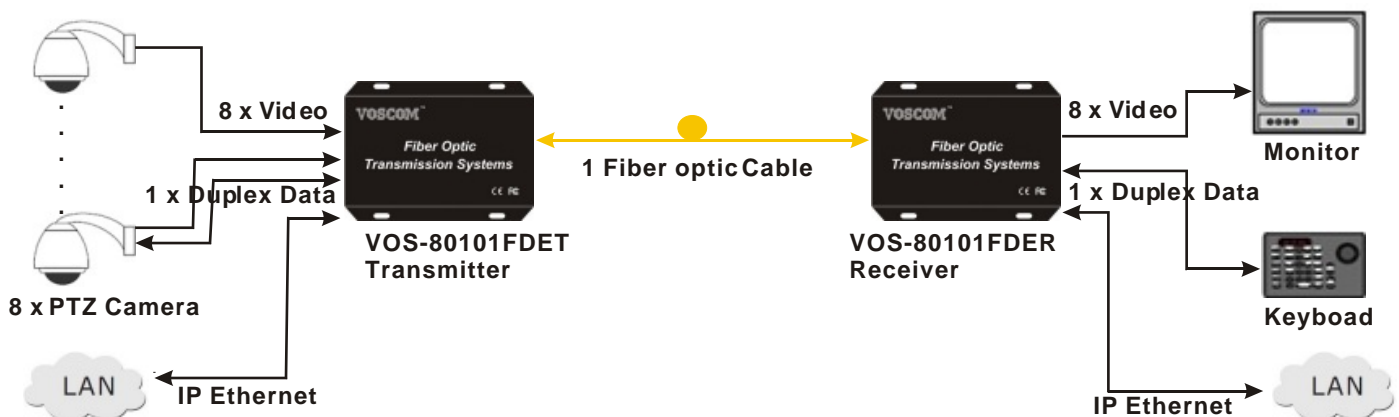
↔ **1** ↔  
Ethernet



#### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- Data support RS485(2-wire or 4-wire),RS232,RS422, Contact Closure
- Compatible with all PAL, NTSC,SECAM Video Systems
- Multi-mode Fiber Support for Distances up to 1.2 km
- Single-Mode Fiber Support for Distances up to 100 km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- Stand alone or rack-mount

#### Typical Configuration



# Video & Data over Fiber

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-80101FDEMT	VOS-80101FDEMR	Multi-Mode	1310nm/1550nm	10dB	1.2km
VOS-80101FDEST	VOS-80101FDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-80101FDEST-4	VOS-80101FDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-80101FDEST-6	VOS-80101FDESR-6	Single-Mode	1310nm/1550nm	25dB	60km

### Note:

- The Optical Power Budget data fit Multi-mode(62.5/125  $\mu$  m), Single-Mode(9/125  $\mu$  m).
- When using 50/125  $\mu$  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"> <li>• Video</li> </ul>	<ul style="list-style-type: none"> <li>• Connectors</li> </ul>
<ul style="list-style-type: none"> <li>Number of Channels: 8-Channel Video</li> <li>Input/output impedance: BNC 75<math>\Omega</math></li> <li>Input/output Compatibility: PAL, NTSC, SECAM</li> <li>Input/output voltage: 1.0 Volt p-p</li> <li>Bandwidth: 6.5MHZ</li> <li>Bit Resolution: 8-Bit Digital Transmission</li> <li>Differential Gain: &lt; 1.5%</li> <li>Differential Phase: &lt; 1.5°</li> <li>Tilt: &lt; 5%</li> <li>Signal-to-Noise Ratio(SNR): &gt; 67 dB</li> </ul>	<ul style="list-style-type: none"> <li>Video: 75<math>\Omega</math> BNC (Gold Center Pin)</li> <li>Data: Terminal Block</li> <li>Optical: FC/PC or ST/PC Optional</li> <li>Stand-Alone Power: Screw terminal block</li> <li>Rack Power: AC line cord</li> </ul>
<ul style="list-style-type: none"> <li>• Data</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical &amp; Mechanical</li> </ul>
<ul style="list-style-type: none"> <li>Data Formats: RS485(2-wire or 4-wire), RS232/422, Contact Closure</li> <li>Data Rate: DC to 115.2Kbps</li> <li>Bit Error Rate: 10E-9</li> </ul>	<ul style="list-style-type: none"> <li>Input Power Requirements: DC 5V@3A</li> <li>Power Adapter: AC 100V~240V</li> <li>Power Consumption: &lt; 5W</li> <li>Stand-Alone Dimensions: 176.5mm <math>\times</math> 158mm <math>\times</math> 59mm</li> <li>Card for 4U Rack Dimensions: 145mm <math>\times</math> 170mm <math>\times</math> 45.4mm</li> <li>Shipping Weight: 2.5kg (include TX &amp; RX)</li> </ul>
<ul style="list-style-type: none"> <li>• Ethernet/IP</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental</li> </ul>
<ul style="list-style-type: none"> <li>Standard: Ethernet IEEE 802.3</li> <li>Data Rate: 10/100 Mbps</li> <li>Connector: RJ-45, Auto MDI/MDI-X</li> </ul>	<ul style="list-style-type: none"> <li>Operating Temperature: -45° C ~ +75° C</li> <li>Storage Temperature: -45° C ~ +85° C</li> <li>Relative Humidity: 0% ~ 95% (non-condensing)</li> <li>MTBF: &gt; 100,000 hours</li> </ul>