

### Fiber Optic Video & Data Transmission 2-Channel Video + 1 Duplex Data + IP Ethernet

**2** →  
Video

#### System Design

Fiber Optic Video & Data Transmitter & Receiver  
VOS-20101FDET/R can transmission 2-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-20101FDET/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).

← **1** →  
Data

Single-Mode or Multi-Mode, VOS-20101FDET/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 2km.

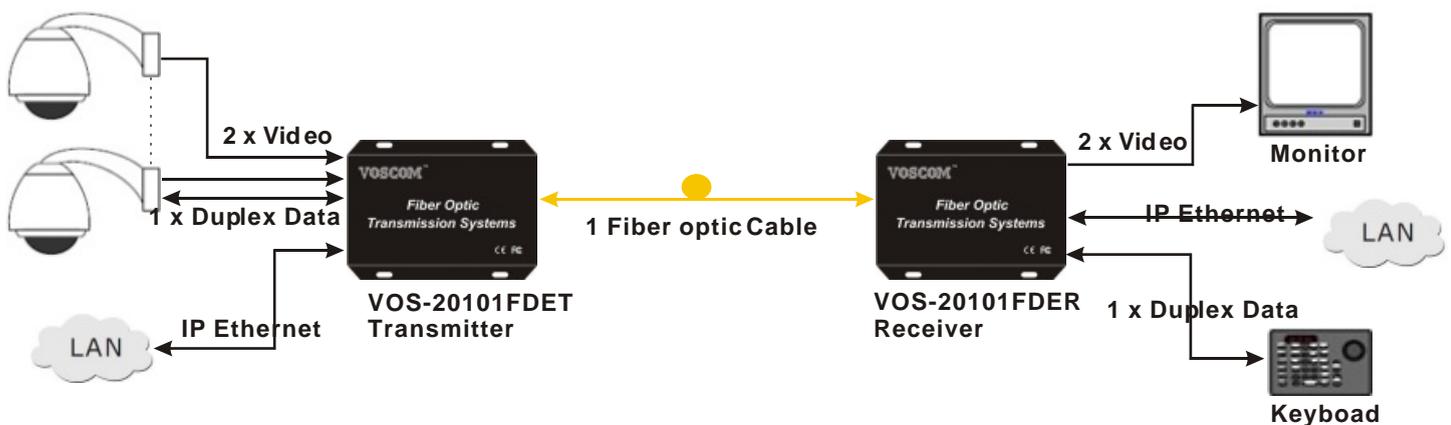
← **1** →  
Ethernet

#### 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 2.0 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-20101FDEMT	VOS-20101FDEMR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-20101FDEST	VOS-20101FDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-20101FDEST-4	VOS-20101FDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-20101FDEST-6	VOS-20101FDESR-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> <p>Number of Channels: 2-Channel Video            Input/output impedance: BNC 75<math>\Omega</math>            Input/output Compatibility: PAL, NTSC, SECAM            Input/output voltage: 1.0 Volt p-p            Bandwidth: 6.5MHz            Bit Resolution: 8-Bit Digital Transmission            Differential Gain: &lt; 1.5%            Differential Phase: &lt; 1.5°            Tilt: &lt; 5%            Signal-to-Noise Ratio(SNR): &gt; 67 dB</p>	<ul style="list-style-type: none"> <li>• Connectors</li> </ul> <p>Video: 75<math>\Omega</math> BNC (Gold Center Pin)            Data: Terminal Block            Optical: FC/PC or ST/PC Optional            Stand-Alone Power: Screw terminal block            Rack Power: AC line cord</p>
<ul style="list-style-type: none"> <li>• Data</li> </ul> <p>Data Formats: RS485(2-wire or 4-wire), RS232/422, Contact Closure            Data Rate: DC to 115.2Kbps            Bit Error Rate: 10E-9</p>	<ul style="list-style-type: none"> <li>• Electrical &amp; Mechanical</li> </ul> <p>Input Power Requirements: DC 5V@2A            Power Adapter: AC 100V~240V            Power Consumption: &lt; 3W            Stand-Alone Dimensions: 142mm <math>\times</math> 107mm <math>\times</math> 25mm            Card for 4U Rack Dimensions: 145mm <math>\times</math> 170mm <math>\times</math> 20mm            Shipping Weight: 1.8kg (include TX &amp; RX)</p>
<ul style="list-style-type: none"> <li>• Ethernet/IP</li> </ul> <p>Standard: Ethernet IEEE 802.3            Data Rate: 10/100 Mbps            Connector: RJ-45, Auto MDI/MDI-X</p>	<ul style="list-style-type: none"> <li>• Environmental</li> </ul> <p>Operating Temperature: -45° C ~ +75° C            Storage Temperature: -45° C ~ +85° C            Relative Humidity: 0%~95% (non-condensing)            MTBF: &gt;100,000 hours</p>