

### Fiber Optic Video & Data Transmission for PTZ Cameras 2-Channel Video + 1 Return Rs485 Data over Fiber

**2** →  
Video

#### System Design

##### Fiber Optic Video & Data Transmitter & Receiver

VOS-2010FBT/R can transmission 2-Channel digital composite video and 1 return rs485 data. It is designed for PTZ cameras.

**Stand-alone or rack-mount.** All units of VOS-2010FBT/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).



Audio

← **1**  
Data

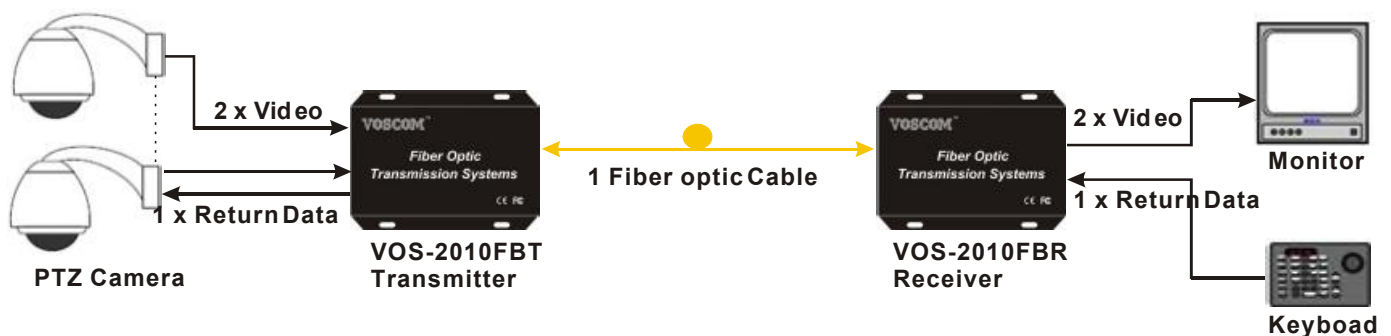
**Single-Mode or Multi-Mode,** VOS-2010FBT/R can support FC/PC or ST/PC Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km or Multi-mode 2km.

Ethernet

#### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- 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
- Produce according to customer's specifications, providing OEM

#### Typical Configuration



# Video & Data over Fiber

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-2010FBMT	VOS-2010FBMR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-2010FBST	VOS-2010FBSR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-2010FBST-4	VOS-2010FBSR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-2010FBST-6	VOS-2010FBSR-6	Single-Mode	1310nm/1550nm	25dB	60km

### Note:

- The Optical Power Budget data fit Mult-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>• <b>Video</b> <ul style="list-style-type: none"> <li>Number of Channels: 2-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> </li> <li>• <b>Data</b> <ul style="list-style-type: none"> <li>Data Formats: Rs485</li> <li>Data Rate: DC to 115.2Kbps</li> <li>Bit Error Rate: 10E-9</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Connectors</b> <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> </li> <li>• <b>Electrical &amp; Mechanical</b> <ul style="list-style-type: none"> <li>Input Power Requirements: DC 5V@2A</li> <li>Power Adapter: AC 100V~240V</li> <li>Power Consumption: &lt; 3W</li> <li>Stand-Alone Dimensions: 142mm <math>\times</math> 107mm <math>\times</math> 25mm</li> <li>Card for 4U Rack Dimensions: 145mm <math>\times</math> 170mm <math>\times</math> 20mm</li> <li>Shipping Weight: 1.8kg (include TX &amp; RX)</li> </ul> </li> <li>• <b>Environmental</b> <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> </li> </ul>
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