

### 10-Bit Digitally Encoded Fiber Optic Video Transmission 1-Channel Composite Video & 1 Return Data

1 →  
Video

#### System Design

*10-Bit Digitally Encoded Fiber Optic Video Transmitter & Receiver* VOS-1010FBT/R-10B can transmission 1-Channel 10-Bit Digitally Encoded broadcast quality video and one return data that delivers a sharper image with better color quantification and faster, more efficient codecs. The data support RS485, RS232, RS422 protocols. It is also designed for applications that require control of *PTZ cameras*.

Audio

← 1  
Data

*Stand-alone or rack-mount.* All units of VOS-1010FBT/R-10B come in an insert card version. The cards can be inserted into our 14-slot, 19inch 4U rack-mountable card cage (VOS-CH04).

*Single-Mode or Multi-Mode,* VOS-1010FBT/R-10B can support FC or ST Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget.

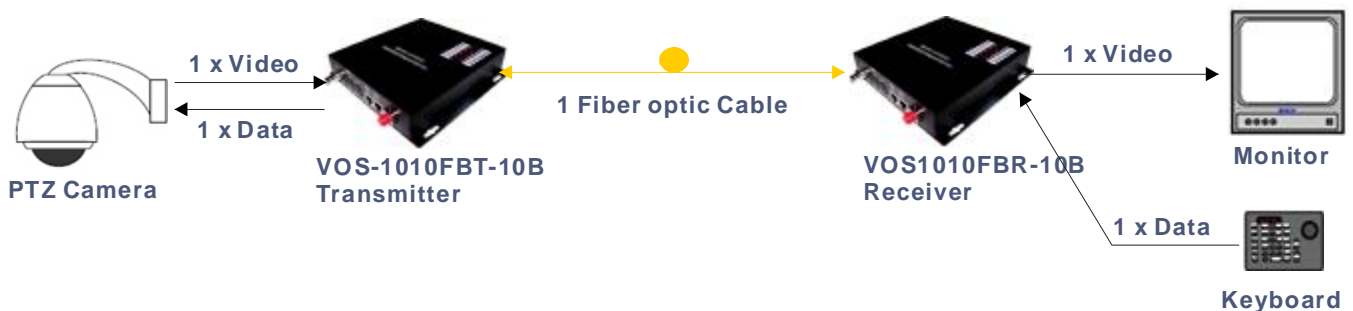
Ethernet



#### Features

- 10-Bit Digitally Encoded Video Transmission
- Support Point-to-Point or Daisy-Chain connection
- Compatible with all PAL, NTSC, SECAM Video Systems
- Data support RS485 (2-wire or 4-wire), RS232, RS422, Contact Closure
- 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
- Support Coarse Wavelength Division Multiplexing (CWDM)
- Stand alone or rack-mount
- Produce according to customer's specifications, providing OEM

#### Typical Configuration



# 10-Bit Digitally Video Transmission

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1010FBMT-10B	VOS-1010FBMR-10B	Multi-Mode	850nm/1310nm	16dB	2km
VOS-1010FBST-10B	VOS-1010FBSR-10B	Single-Mode	1310nm/1550nm	12dB	20km

### Note:

- The Optical Power Budget data fit Multit-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></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Connectors</b></li> </ul>
<ul style="list-style-type: none"> <li>Number of Channels: 1-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: 10-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</li> <li>Data: 3 Pin Terminal Block</li> <li>Optical: FC , ST 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>• <b>Data</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Electrical &amp; Mechanical</b></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> 36mm</li> <li>Card for 4U Rack Dimensions: 145mm <math>\times</math> 170mm <math>\times</math> 20mm</li> <li>Shipping Weight: 2.0kg (include TX &amp; RX)</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Environmental</b></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>