

### Fiber Optic Video & Data Transmission for PTZ Cameras 16-Channel Composite Video + 1 Bi-Direction Data

**16** →  
Video

#### System Design

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

VOS-16010FDT/R can transmission 16-Channel digital composite video and 1 bi-direction data, the data support RS485,RS232,RS422 protocols. It is also designed for applications that require control of *PTZ cameras*.



Audio

*Stand-alone or rack-mount.* All units of VOS-16010FDT/R come in an insert card version. The cards can be inserted into our 14-slot, 19inch 10U rack-mountable card cage (VOS-CH10).

← **1** →  
Data

*Single-Mode or Multi-Mode,* VOS-16010FDT/R only can support FC , ST Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget.

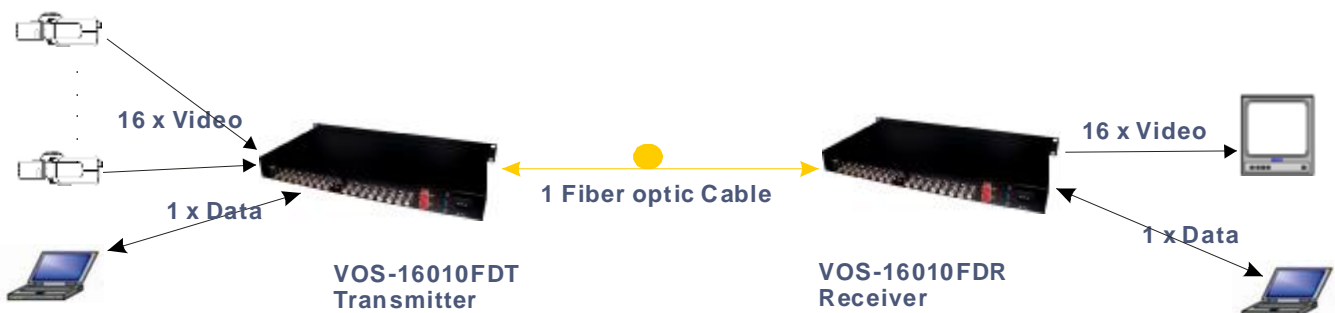


Ethernet

#### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- Compatible with all PAL, NTSC, SECAM Video Systems
- Data support RS485(2-wire or 4-wire),RS232,RS422, Contact Closure
- Multi-mode Fiber Support for Distances up to 1.0 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



# Fiber Optic Video Transmission

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-16010FDMT	VOS-16010FDMR	Multi-Mode	850nm/1310nm	10dB	1.0km
VOS-16010FDST	VOS-16010FDSR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-16010FDST-4	VOS-16000FDSR-4	Single-Mode	1310nm/1550nm	18dB	40km

### 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>
Number of Channels: 16-Channel Video Input/output impedance: BNC 75 $\Omega$ 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: < 1.5% Differential Phase: < 1.5° Tilt: < 5% Signal-to-Noise Ratio(SNR): > 67 dB	Video: 75 $\Omega$ BNC Data: Rj-45 Optical: FC , ST Optional Stand-Alone Power: Screw terminal block Rack Power: AC line cord
<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>
Data Formats: RS485(2-wire or 4-wire), RS232/422,Contact Closure Data Rate: DC to 115.2Kbps Bit Error Rate: 10E-9	Input Power Requirements: DC 5V@4A Power Adapter: AC 100V~240V Power Consumption: < 10W Stand-Alone Dimensions: 483mm $\times$ 250mm $\times$ 44.5mm Card for 10U Dimensions: 452mm $\times$ 250mm $\times$ 40mm Shipping Weight: 6.0kg (include TX & RX)
	<ul style="list-style-type: none"> <li>• <b>Environmental</b></li> </ul>
	Operating Temperature: -45° C~+75° C Storage Temperature: -45° C~+85° C Relative Humidity: 0%~95% (non-condensing) MTBF: >100,000 hours