

## Fiber Optic Video & Data Transmission for PTZ Cameras 4-Channel Video + 2 Duplex Data over Fiber

**4** →  
**Video**

### System Design

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

VOS-4020FDT/R can transmission 4-Channel composite video and 2 duplex 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-4020FDT/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).

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**Data**

**Single-Mode or Multi-Mode,** VOS-4020FDT/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 1.5km.

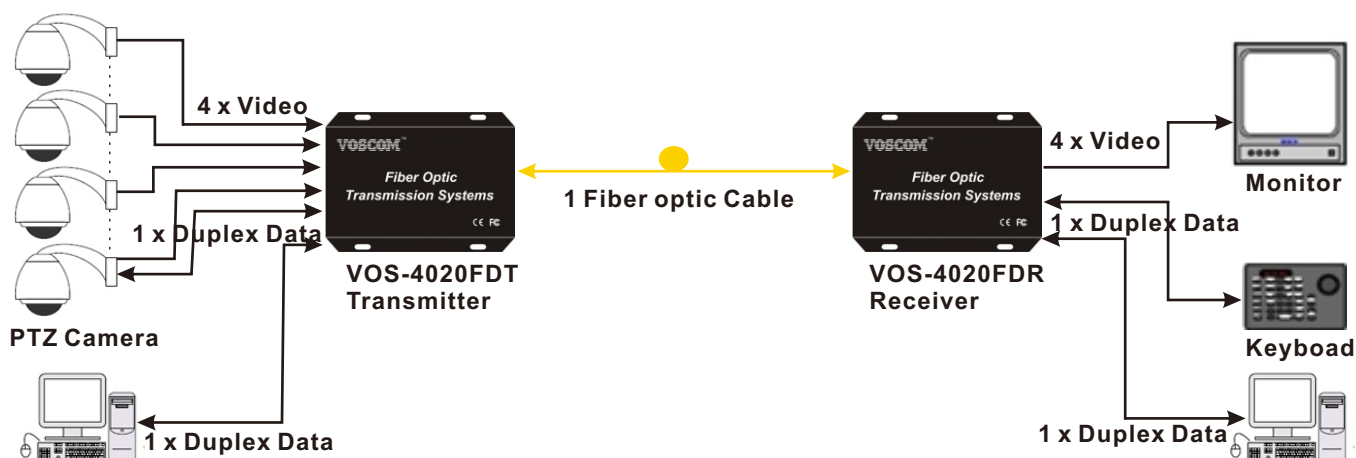
**Ethernet**

### Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Composite Video over one fiber
- Compatible with AHD, HD-TVI, HD-CVI and Normal Analog Video
- 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 500m
- 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-4020FDMT	VOS-4020FDMR	Multi-Mode	1310nm/1550nm	12dB	500m
VOS-4020FDST	VOS-4020FDSR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-4020FDST-4	VOS-4020FDSR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-4020FDST-6	VOS-4020FDSR-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

### • Video

Number of Channels: 4-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

### • Data

Data Formats: RS485(2-wire or 4-wire), RS232/422  
Data Rate: DC to 1Mbps  
Bit Error Rate: 10E-9

### • Connectors

Video: 75 $\Omega$  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

### • Electrical & Mechanical

Input Power Requirements: DC 5V@2A  
Power Adapter: AC 100V~240V  
Power Consumption: < 3W  
Stand-Alone Dimensions: 172mm x 167mm x 28mm  
Shipping Weight: 2.0kg (include TX & RX)

### • Environmental

Operating Temperature: -45°C~+75°C  
Storage Temperature: -45°C~+85°C  
Relative Humidity: 0%~95% (non-condensing)  
MTBF: >100,000 hours