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

4 → Video

Audio

2 ↔ Data

Ethernet

System Design

Fiber Optic Video & Data Transmitter & Receiver VOS-4020FDT/R can transmission 4-Channel digital 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.

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).

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.
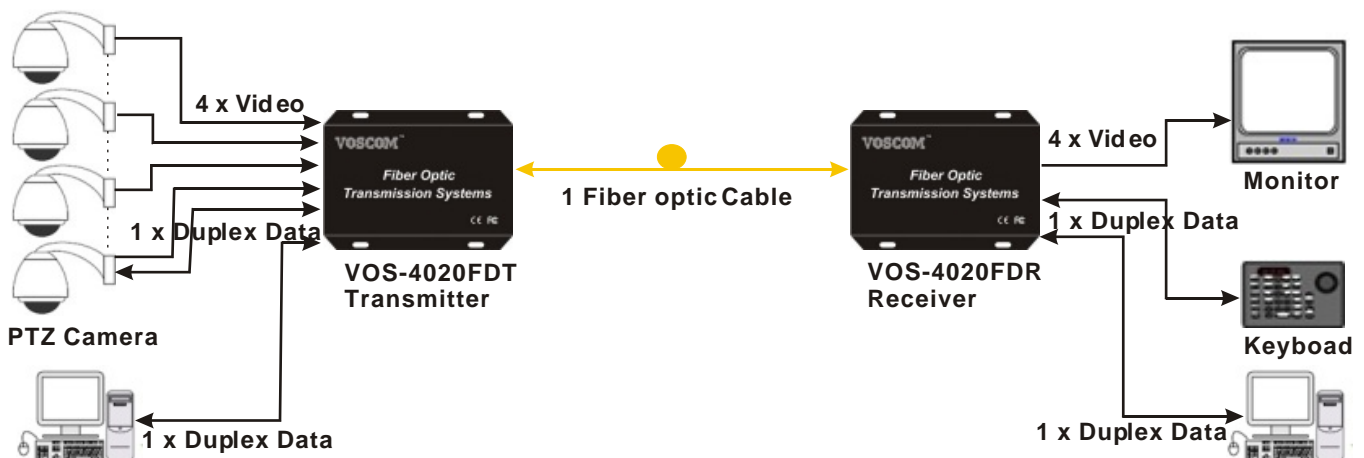
Features

- 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 1.5 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

PTZ Camera

4 x Video

1 x Duplex Data

1 x Duplex Data

VOS-4020FDT Transmitter

1 Fiber optic Cable

VOS-4020FDR Receiver

4 x Video

1 x Duplex Data

Monitor

Keyboad

1 x Duplex Data

Ordering Information

| Model Number | | Fiber Mode | Wavelengths | Optical Power Budget | Maximum Transmission Distance |
Transmitter	Receiver				
VOS-4020FDMT	VOS-4020FDMR	Multi-Mode	1310nm/1550nm	12dB	1.5km
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 Mulit-mode(62.5/125 μm),Single-Mode(9/125 μm).
- When using 50/125 μm 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 75Ω
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,Contact Closure
Data Rate:	DC to 115.2Kbps
Bit Error Rate:	10E-9

• Connectors

Video:	75Ω 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@3A
Power Adapter:	AC 100V~240V
Power Consumption:	< 5W
Stand-Alone Dimensions:	176.5mm × 158mm × 36mm
Card for 4U Rack Dimensions:	145mm × 170mm × 20mm
Shipping Weight:	2.2kg (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