Fiber Optic Video & Data Transmission for PTZ Camera
1-Channel Video + 1 Return Rs485 Data over Fiber

1
Video

1
Data

Ethernet

Audio

System Design

Fiber Optic Video & Data Transmitter & Receiver VOS-1010FBT/R can transmission 1-Channel digital composite video and 1 return rs485 data. It is designed for PTZ cameras.

Stand-alone or rack-mount. All units of VOS-1010FBT/R come in an insert card version. The cards can be inserted into our 14-slot, 19inch 2U, 4u or 6U rack-mountable card cage (VOS-CH02, VOS-CH04 or VOS-CH06).

Single-Mode or Multi-Mode, VOS-1010FBT/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.
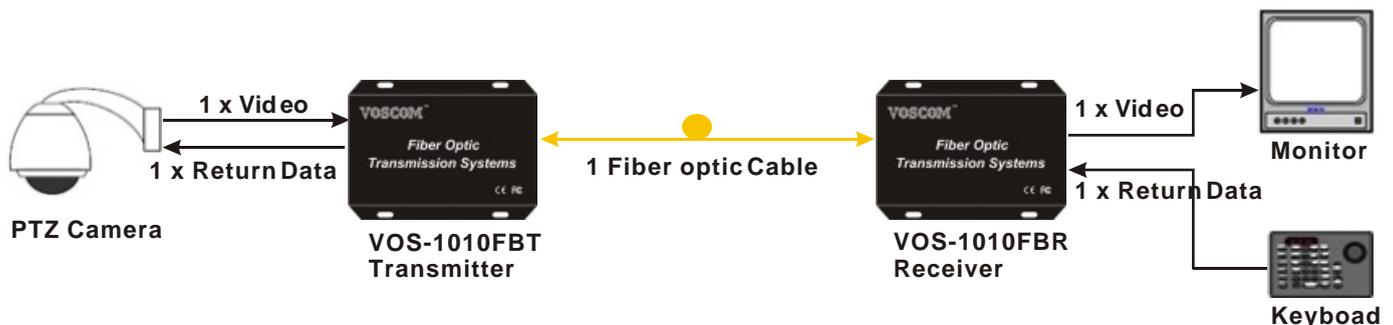
Features

- 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

1 x Video
1 x Return Data
PTZ Camera
VOS-1010FBT Transmitter
1 Fiber optic Cable
VOS-1010FBR Receiver
1 x Video
Monitor
1 x Return Data
Keyboad

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1010FBMT	VOS-1010FBMR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-1010FBST	VOS-1010FBSR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-1010FBST-4	VOS-1010FBSR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-1010FBST-6	VOS-1010FBSR-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:	1-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
Data Rate:	DC to 115.2Kbps
Bit Error Rate:	10E-9

• Connectors

Video:	75Ω BNC (Gold Center Pin)
Data:	3 Pin 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:	95mm × 70mm × 25mm
Card for 2U Rack Dimensions:	95mm × 70mm × 25mm
Card for 4U Rack Dimensions:	145mm × 170mm × 20mm
Shipping Weight:	1.2kg (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