Fiber Optic Video & Data Transmission
4-Channel Video + 1 Duplex Data + IP Ethernet

4 Video

Audio

1 Data

1 Ethernet

System Design

Fiber Optic Video & Data Transmitter & Receiver VOS-40101FDET/R can transmission 4-Channel digital composite video, 1 duplex data, and 10M/100M Ethernet, Data support RS485, RS232, RS422 protocols. Ideal for Broadcast /Studio ,CCTV and Professional AV applications.

Stand-alone or rack-mount. All units of VOS-40101FDET/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-40101FDET/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.
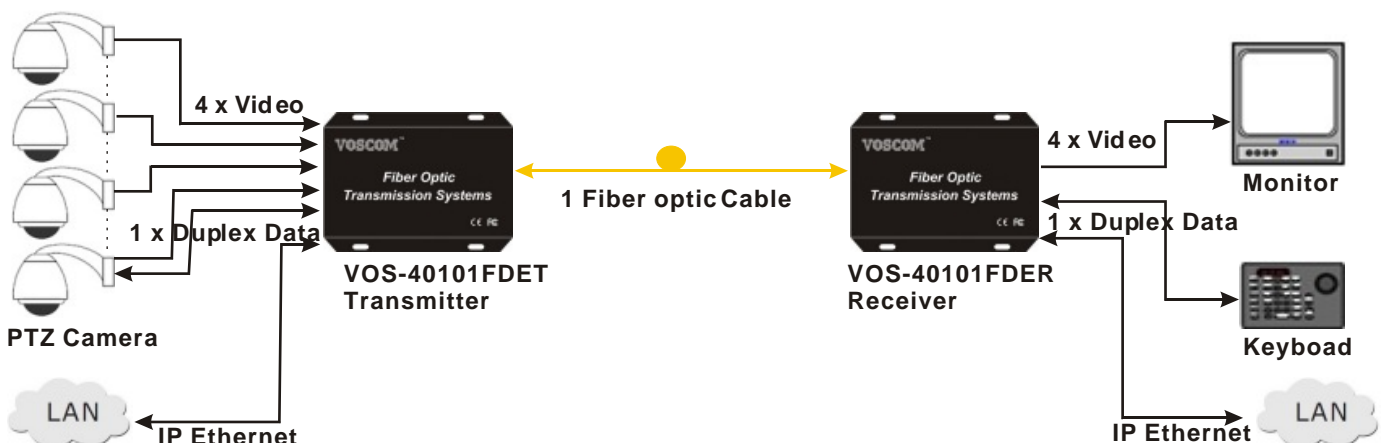
Features

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

4 x Video

1 x Duplex Data

PTZ Camera

VOS-40101FDET
Transmitter

1 Fiber optic Cable

VOS-40101FDER
Receiver

4 x Video

Monitor

1 x Duplex Data

Keyboad

LAN

IP Ethernet

IP Ethernet

LAN

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-40101FDEMT	VOS-40101FDEMR	Multi-Mode	1310nm/1550nm	12dB	1.5km
VOS-40101FDEST	VOS-40101FDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-40101FDEST-4	VOS-40101FDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-40101FDEST-6	VOS-40101FDESR-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

• Ethernet/IP

Standard:	Ethernet IEEE 802.3
Data Rate:	10/100 Mbps
Connector:	RJ-45,Auto MDI/MDI-X

• 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