

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

**4**  
Video

#### 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.

Audio

**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 rack-mountable card cage (VOS-CH04 ).

**1**  
Data

**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 500m.

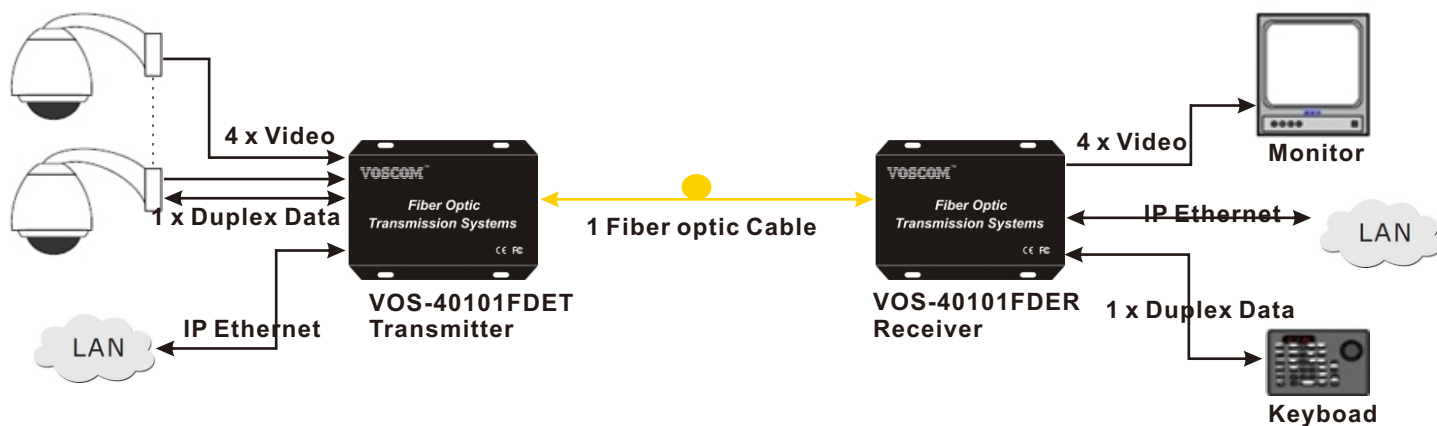
**1**  
Ethernet

#### 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 60km
- 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-40101FDEMT	VOS-40101FDEMR	Multi-Mode	1310nm/1550nm	16dB	500m
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 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

<b>• Video</b>		<b>• Connectors</b>	
Number of Channels:	4-Channel Video	Video:	75 $\Omega$ BNC (Gold Center Pin)
Input/output impedance:	BNC 75 $\Omega$	Data:	Terminal Block
Input/output Compatibility:	PAL, NTSC, SECAM	Optical:	FC/PC or ST/PC Optional
Input/output voltage:	1.0 Volt p-p	Stand-Alone Power:	Screw terminal block
Bandwidth:	6.5MHz	Rack Power:	AC line cord
Bit Resolution:	8-Bit Digital Transmission	<b>• Electrical &amp; Mechanical</b>	
Differential Gain:	< 1.5%	Input Power Requirements:	DC 5V@2A
Differential Phase:	< 1.5°	Power Adapter:	AC 100V~240V
Tilt:	< 5%	Power Consumption:	< 3W
Signal-to-Noise Ratio(SNR):	> 67 dB	Stand-Alone Dimensions:	172mm x 167mm x 28mm
<b>• Data</b>		Shipping Weight:	2.0kg (include TX & RX)
Data Formats:	RS485(2-wire or 4-wire), RS232/422	<b>• Environmental</b>	
Data Rate:	DC to 1Mbps	Operating Temperature:	-45°C~+75°C
Bit Error Rate:	10E-9	Storage Temperature:	-45°C~+85°C
<b>• Ethernet/IP</b>		Relative Humidity:	0%~95% (non-condensing)
Standard:	Ethernet IEEE 802.3	MTBF:	>100,000 hours
Data Rate:	10/100 Mbps		
Connector:	RJ-45, Auto MDI/MDI-X		