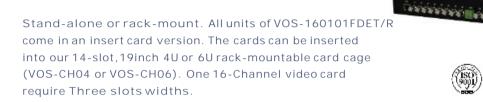
# Voscom

# Fiber Optic Video & Data Transmission 16-Channel Video + 1 Duplex Data + IP Ethernet



## System Design

Fiber Optic Video & Data Transmitter & Receiver VOS-160101FDET/R can transmission 16-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.











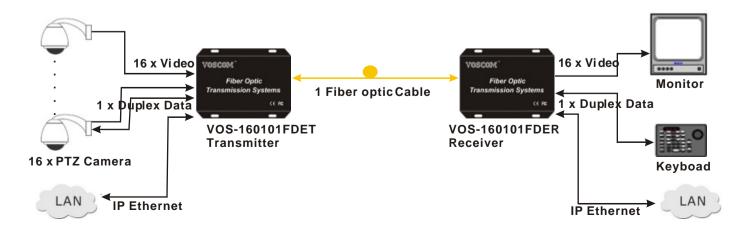
Data

Single-Mode or Multi-Mode, VOS-160101FDET/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 1.0km.

## **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 1.0 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

## Typical Configuration



## Video & Data over Fiber

### Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power	Maximum Transmission
Transmitter	Receiver			Budget	Distance
VOS-160101FDEMT	VOS-160101FDEMR	Multi-Mode	1310nm/1550nm	10dB	1.0km
VOS-160101FDEST	VOS-160101FDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-160101FDEST-4	VOS-160101FDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-160101FDEST-6	VOS-160101FDESR-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

V	id	0	$\cap$

Number of Channels: 16-Channel Video

Input/output impedance: BNC 75Ω

Input/output Compatibility: PAL, NTSC, SECAM

Input/output voltage: 1.0 Voltp-p

Bandwidth: 6.5MHZ

Bit Resolution: 8-Bit Digital Transmission

Differential Gain: < 1.5% Differential Phase: < 1.5°

'nase: < 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: 75 Ω 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@4A

Power Adapter: AC 100V~240V (Built-in)

Power Consumption: < 10W

Stand-Alone Dimensions: 483mm × 250mm × 44.5mm
Card for 4U Dimensions: 145mm × 170mm × 65mm

Shipping Weight: 6.0kg (include TX & RX)

#### Environmental

Operating Temperature:  $-45^{\circ}$  C $\sim +75^{\circ}$  C Storage Temperature:  $-45^{\circ}$  C $\sim +85^{\circ}$  C

Relative Humidity: 0%~95% (non-condensing)

MTBF: >100,000 hours

www.voscom.com 2