

# Fiber Optic Serial Data Transmission 8-Channel Duplex Rs232 Serial Data over Fiber

# System Design

Video

Fiber Optic Serial Data Transmitter & Receiver VOS-8FOM-D232T/R provides for the digital transmission of 8-Channel duplex Rs232 serial data signal over one fiber.

Applications for PTZ Control for CCTV Surveillance Systems, Access Control System, Industirlia control, Data Control for Manufacturing / Assembly Platforms, ITS...etc.

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Data

Stand-alone or rack-mount. All units of VOS-8FOM-D232T/R come in an insert card version. The cards can be inserted into our our 14-slot, 19inch 4U or 6U rack-mountable card cage (VOS-CH04 or VOS-CH06). The card version of this model require two slots widths.

Audio

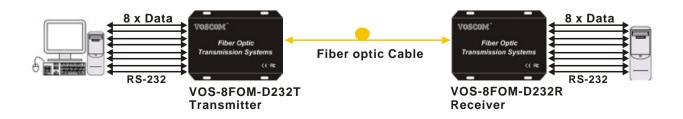
Ethernet

Single-Mode or Multi-Mode, VOS-8FOM-D232T/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
- Rs232 Serial data over one fiber
- 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



# Serial Data over Fiber

## Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power	Maximum Transmission
Transmitter	Receiver	Tibel Wode	waverengths	Budget	Distance
VOS-8FOM-D232MT	VOS-8FOM-D232MR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-8FOM-D232ST	VOS-8FOM-D232SR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-8FOM-D232ST-4	VOS-8FOM-D232SR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-8FOM-D232ST-6	VOS-8FOM-D232SR-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

### Serial Data

Number of Channels: 8-Channel Duplex Rs232

Serial Data

Data Formats: Rs232 Data

Data Rate: DC to 115.2Kbps

Bit Error Rate: < 10E-9

### Connectors

Serial Data: RJ-45

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:  $176.5 \text{mm} \times 158 \text{mm} \times 59 \text{mm}$ Card for 4U Rack Dimensions:  $145 \text{mm} \times 170 \text{mm} \times 45.4 \text{mm}$ 

Shipping Weight: 2.5kg (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

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