

### Fiber Optic Serial Data Transmission 1-Channel Duplex Rs422 Serial Data over Fiber

#### System Design

##### Fiber Optic Serial Data Transmitter & Receiver

VOS-1FOM-D422T/R provides for the digital transmission of 1-Channel duplex Rs422 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.

**Stand-alone or rack-mount.** All units of VOS-1FOM-D422T/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).

**Single-Mode or Multi-Mode,** VOS-1FOM-D422T/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.



Data

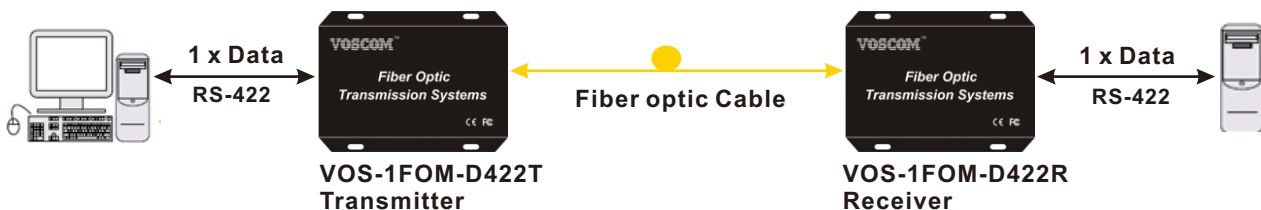
Audio

Ethernet

#### 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 Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1FOM-D422MT	VOS-1FOM-D422MR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-1FOM-D422ST	VOS-1FOM-D422SR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-1FOM-D422ST-4	VOS-1FOM-D422SR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-1FOM-D422ST-6	VOS-1FOM-D422SR-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

### • Serial Data

Number of Channels: 1-Channel Duplex RS422  
Serial Data  
Data Formats: RS422 Data  
Data Rate: DC to 1Mbps  
Bit Error Rate: < 10E-9

### • Connectors

Serial 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@1A  
Power Adapter: AC 100V~240V  
Power Consumption: < 3W  
Stand-Alone Dimensions: 104mm x 104mm x 28mm  
Shipping Weight: 1.0kg (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