VOSCOM

Fiber Optic Serial Data Transmission
1-Channel Duplex Rs485 Serial Data over Fiber

Video

Data

Audio

Ethernet

System Design

Fiber Optic Serial Data Transmitter & Receiver
VOS-1FOM-D485T/R provides for the digital transmission of 1-Channel
duplex Rs485 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-D485T/R
come in an insert card version. The cards can be inserted into
our our 14-slot, 19inch 2U, 4U or 6U rack-mountable card
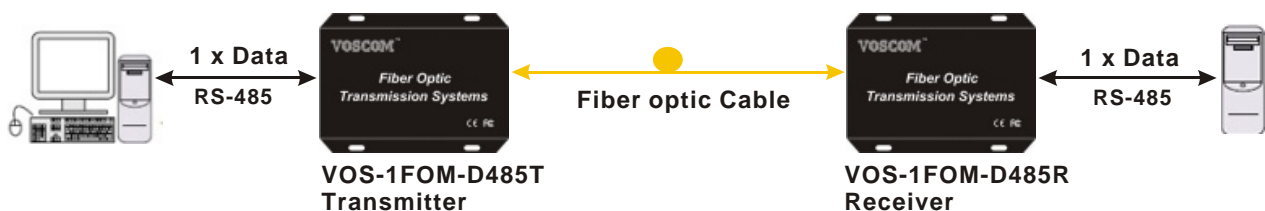cage (VOS-CH02, VOS-CH04 or VOS-CH06).

Single-Mode or Multi-Mode,VOS-1FOM-D485T/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
- Rs485 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

1 x Data

RS-485

VOS-1FOM-D485T
Transmitter

Fiber optic Cable

VOS-1FOM-D485R
Receiver

1 x Data

RS-485

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1FOM-D485MT	VOS-1FOM-D485MR	Multi-Mode	1310nm	16dB	2km
VOS-1FOM-D485ST	VOS-1FOM-D485SR	Single-Mode	1310nm	12dB	20km
VOS-1FOM-D485ST-4	VOS-1FOM-D485SR-4	Single-Mode	1310nm	18dB	40km
VOS-1FOM-D485ST-6	VOS-1FOM-D485SR-6	Single-Mode	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:	1-Channel Duplex Rs485 Serial Data
Data Formats:	Rs485 Data, 2-wire
Data Rate:	DC to 115.2Kbps
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@2A
Power Adapter:	AC 100V~240V
Power Consumption:	< 3W
Stand-Alone Dimensions:	95mm × 70mm × 25mm
Card for 2U Rack Dimensions:	95mm × 70mm × 25mm
Card for 4U Rack Dimensions:	145mm × 170mm × 20mm
Shipping Weight:	1.2kg (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