Fiber Optic Video, Audio & Data Transmission
1-Channel Video + 2 Simplex Audio + 1 Duplex Data

1 → Video

2 → Audio

← **1** → Data

Ethernet

System Design

Fiber Optic Video, Audio & Data Transmitter & Receiver VOS-1210FFDT/R provides for the digital transmission of 1-Channel Composite Video, 2 simplex analog audio and 1 duplex data. Data supportRS485, RS232, RS422 protocols.

Stand-alone or rack-mount. All units of VOS-1210FFDT/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-1210FFDT/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.
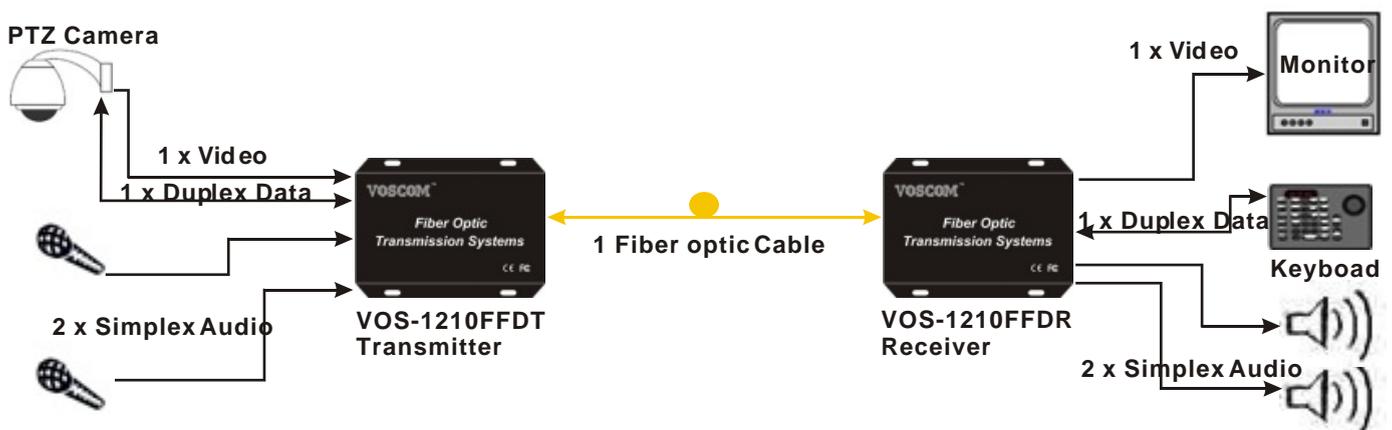
Features

- Support Point-to-Point or Daisy-Chain connection
- Uncompressed Digital Composite Video over one fiber
- 24-Bit Digitally Encoded Audio 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 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

Typical Configuration

PTZ Camera

1 x Video
1 x Duplex Data
2 x Simplex Audio

VOS-1210FFDT Transmitter

1 Fiber optic Cable

VOS-1210FFDR Receiver

1 x Video → **Monitor**

1 x Duplex Data → **Keyboad**

2 x Simplex Audio

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-1210FFDMT	VOS-1210FFDMR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-1210FFDST	VOS-1210FFDSR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-1210FFDST-4	VOS-1210FFDSR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-1210FFDST-6	VOS-1210FFDSR-6	Single-Mode	1310nm/1550nm	25dB	60km

Specification

• Video

Number of Channels:	1-Channel Video
Input/output impedance:	BNC 75Ω
Input/output Compatibility:	PAL, NTSC, SECAM
Input/output voltage:	1.0 Volt p-p
Bandwidth:	6.5MHZ
Bit Resolution:	8-Bit Digital Transmission
Differential Gain:	< 1.5%
Differential Phase:	< 1.5°
Tilt:	< 5%
Signal-to-Noise Ratio(SNR):	> 67 dB

• Audio

Number of Channels:	2-Channel Simplex Audio
Audio input/output Level:	6 dBm
Audio in/output impedance:	600Ω Unbalanced
Bandwidth:	20Hz ~ 20KHz
Bit Resolution:	24-Bit
Signal-to-Noise Ratio(SNR):	> 80 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

• Connectors

Video:	75Ω BNC (Gold Center Pin)
Audio:	Terminal Block
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:	142mm × 107mm × 25mm
Card for 4U Rack Dimensions:	145mm × 170mm × 20mm
Shipping Weight:	1.8kg (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