

Fiber Optic Video, Audio & Data Transmission

2-Ch Video + 2 Duplex Audio + 1 Duplex Data + IP Ethernet

2 →
Video

System Design

Fiber Optic Video, Audio & Data Transmitter & Receiver VOS-22101FDDET/R provides for the digital transmission of 2-Channel Composite Video, 2 duplex analog audio, 1 duplex data and 10M/100M IP ethernet. Data support RS485, RS232, RS422 protocols.

↔ **2** ↔
Audio

Stand-alone or rack-mount. All units of VOS-22101FDDET/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).

↔ **1** ↔
Data

Single-Mode or Multi-Mode, VOS-22101FDDET/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.

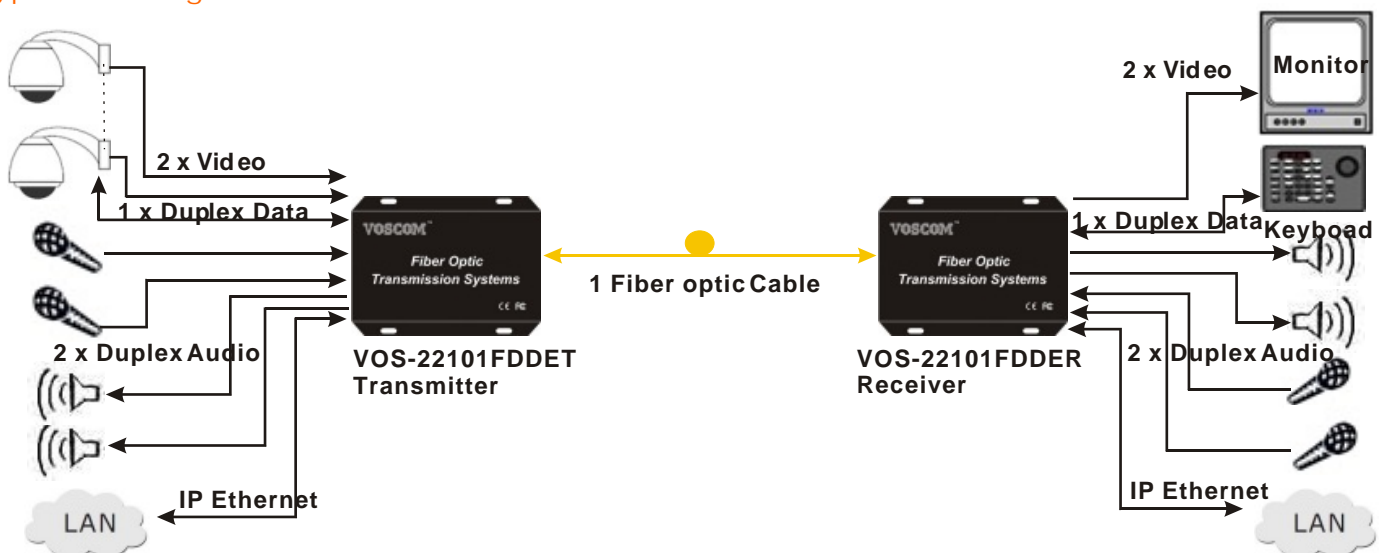
↔ **1** ↔
Ethernet



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
- Stand alone or rack-mount

Typical Configuration



Video, Audio & Data over Fiber

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
VOS-22101FDDEMT	VOS-22101FDDEMR	Multi-Mode	1310nm/1550nm	16dB	2km
VOS-22101FDDEST	VOS-22101FDDESR	Single-Mode	1310nm/1550nm	12dB	20km
VOS-22101FDDEST-4	VOS-22101FDDESR-4	Single-Mode	1310nm/1550nm	18dB	40km
VOS-22101FDDEST-6	VOS-22101FDDESR-6	Single-Mode	1310nm/1550nm	25dB	60km

Specification

<ul style="list-style-type: none"> • Video <ul style="list-style-type: none"> Number of Channels: 2-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$^{\circ}$ Tilt: < 5% Signal-to-Noise Ratio(SNR): > 67 dB 	<ul style="list-style-type: none"> • Ethernet/IP <ul style="list-style-type: none"> Standard: Ethernet IEEE 802.3 Data Rate: 10/100 Mbps Connector: RJ-45, Auto MDI/MDI-X
<ul style="list-style-type: none"> • Audio <ul style="list-style-type: none"> Number of Channels: 2-Channel Duplex 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 	<ul style="list-style-type: none"> • Connectors <ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> • Data <ul style="list-style-type: none"> Data Formats: RS485(2-wire or 4-wire), RS232/422, Contact Closure Data Rate: DC to 115.2Kbps Bit Error Rate: 10E-9 	<ul style="list-style-type: none"> • Electrical & Mechanical <ul style="list-style-type: none"> Input Power Requirements: DC 5V@2A Power Adapter: AC 100V~240V Power Consumption: < 3W Stand-Alone Dimensions: 142mm \times 107mm \times 25mm Card for 4U Rack Dimensions: 145mm \times 170mm \times 20mm Shipping Weight: 1.8kg (include TX & RX)
	<ul style="list-style-type: none"> • Environmental <ul style="list-style-type: none"> Operating Temperature: -45$^{\circ}$ C ~ +75$^{\circ}$ C Storage Temperature: -45$^{\circ}$ C ~ +85$^{\circ}$ C Relative Humidity: 0%~95% (non-condensing) MTBF: >100,000 hours