

# Fiber Optic Audio Transmission 1-Channel Simplex Analog Audio over Fiber

# System Design

Video

Fiber Optic Audio Transmitter & Receiver VOS-0100FT/R provides for the 24-Bit digitally transmission of 1-Channel Simplex Analog Audio. Ideal for Broadcast /Studio, CCTV audio and Professional AV applications.



Stand-alone or rack-mount. All units of VOS-0100FT/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).

Data

Single-Mode or Multi-Mode, VOS-0100FT/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.





#### Ethernet

### **Features**

- Support Point-to-Point or Daisy-Chain connection
- 24-Bit Digitally Encoded Audio 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**



# Analog Audio over Fiber

# Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power	Maximum Transmission
Transmitter	Receiver			Budget	Distance
VOS-0100FMT	VOS-0100FMR	Multi-Mode	1310nm	16dB	2km
VOS-0100FST	VOS-0100FSR	Single-Mode	1310nm	12dB	20km
VOS-0100FST-4	VOS-0100FSR-4	Single-Mode	1310nm	18dB	40km
VOS-0100FST-6	VOS-0100FSR-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

• Audio

Number of Channels: 1-Channel Simplex Audio

Audio input/output Level: 6 dBm

Audio in/output impedance:  $600 \Omega$  Unbalanced

Bandwidth: 20Hz ~ 20KHz

Bit Resolution: 24-Bit

Signal-to-Noise Ratio(SNR): > 80 dB

#### Connectors

Audio: 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

 $\begin{array}{ll} \text{Stand-Alone Dimensions:} & 95\text{mm} \times 70\text{mm} \times 25\text{mm} \\ \text{Card for 2U Rack Dimensions:} & 95\text{mm} \times 70\text{mm} \times 25\text{mm} \\ \text{Card for 4U Rack Dimensions:} & 145\text{mm} \times 170\text{mm} \times 20\text{mm} \end{array}$ 

Shipping Weight: 1.2kg (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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