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Fiber Optic Video Transmission for Fixed Cameras 1-Channel Composite Video over Fiber



System Design

Fiber Optic Video Transmitter & Receiver VOS-1000FT/R can transmission 1-Channel digital composite video over fiber for fixed camera, no audio, no data.

Audio

Stand-alone or rack-mount. All units of VOS-1000FT/R come in an insert card version. The cards can be inserted into 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-1000FT/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
- Uncompressed Digital Composite Video over one fiber
- 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
- Produce according to customer's specifications, providing OEM

Typical Configuration



Composite Video over Fiber

Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power	Maximum Transmission
Transmitter	Receiver			Budget	Distance
VOS-1000FMT	VOS-1000FMR	Multi-Mode	1310nm	16dB	2km
VOS-1000FST	VOS-1000FSR	Single-Mode	1310nm	12dB	20km
VOS-1000FST-4	VOS-1000FSR-4	Single-Mode	1310nm	18dB	40km
VOS-1000FST-6	VOS-1000FSR-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 $50/125~\mu m$ 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

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Number of Channels: 1-Channel Video

Input/output impedance: BNC 75Ω

Input/output Compatibility: PAL, NTSC, SECAM

Input/output voltage: 1.0 Voltp-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

Connectors

Video: 75Ω BNC (Gold Center Pin)

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

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

Shipping Weight: 1.2kg (include TX & RX)

Environmental

Operating Temperature: -45° C $\sim +75^{\circ}$ C Storage Temperature: -45° C $\sim +85^{\circ}$ C

Relative Humidity: 0%~95% (non-condensing)

MTBF: >100,000 hours

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