

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

# System Design

Video

Fiber Optic Audio Transmitter & Receiver 20100078 provides for the 24-Bit digitally transmission of 1-Channel Duplex Analog Audio. Ideal for Broadcast /Studio, CCTV audio and Professional AV applications.



Stand-alone or rack-mount. All units of 20100078 come in an insert card version. The cards can be inserted into our our 14-slot, 19inch 4U or 6U rack-mountable cardcage (TBD).



Single-Mode or Multi-Mode, 20100078 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 I	Fiber Mode	Wavelengths	Optical Power	Maximum Transmission		
Transmitter	Receiver	T IDEI WOULE	wavelengths	Budget	Distance	
Same unit 201000+,	, transmitter+receiver is lode and SingleMode	Multi-Mode	1310nm/1550nm	16dB	2km	
used for both MultiMod		Single-Mode	1310nm/1550nm	12dB	20km	
TBD	TBD	Single-Mode	1310nm/1550nm	18dB	40km	
TBD	TBD	Single-Mode	1310nm/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 Duplex Audio

Audio input/output Level: 6 dBm

Audio in/output impedance: 600 Ω 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

 $\begin{tabular}{lll} Stand-Alone Dimensions: & 142mm \times 107mm \times 25mm \\ Card for 4U Rack Dimensions: & 145mm \times 170mm \times 20mm \\ \end{tabular}$ 

Shipping Weight: 1.8kg (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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