DIREKTRONIK
20100080

Fiber Optic Audio Transmission
4-Channel Duplex Analog Audio over Fiber

System Design

Video

Fiber Optic Audio Transmitter & Receiver
20100080 provides for the 24-Bit digitally transmission of
4-Channel Duplex Analog Audio. Ideal for Broadcast /Studio,
CCTV audio and Professional AV applications.

4

Audio

Stand-alone or rack-mount. All units of 20100080
come in an insert card version. The cards can be inserted into
our our 14-slot, 19inch 4U or 6U rack-mountable cardcage
(TBD). The card version of this model
require two slots widths.

Data

Single-Mode or Multi-Mode, 20100080 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

1 Fiber optic Cable

20100080
Transmitter

20100080
Receiver

4 x Duplex Audio

4 x Duplex Audio
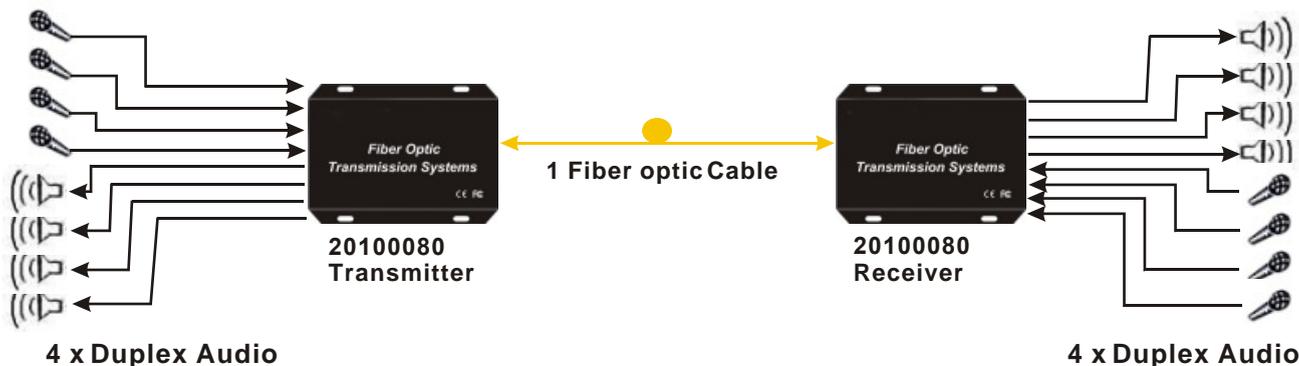
Ordering Information

Model Number		Fiber Mode	Wavelengths	Optical Power Budget	Maximum Transmission Distance
Transmitter	Receiver				
Same unit 201000, $ transmitter+receiver is used for both MultiMode and SingleMode		Multi-Mode	1310nm/1550nm	16dB	2km
		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:	4-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

• 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@3A
Power Adapter:	AC 100V~240V
Power Consumption:	< 5W
Stand-Alone Dimensions:	176.5mm × 158mm × 59mm
Card for 4U Rack Dimensions:	145mm × 170mm × 45.4mm
Shipping Weight:	2.5kg (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