

Analog Audio over Fiber

1, 2, 4, 8-Channel Simplex/Duplex



Features

- Support Point-to-Point (Daisy-Chain connection available on request)
- 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
- Stand alone or rack-mount
- OEM models available on customer's request

System Design

Fiber Optic Audio Transmitter & Receiver

Provides for the 24-Bit digitally transmission of 1, 2, 4, 8-Channel Simplex/Duplex Analog Audio. Ideal for Broadcast /Studio, CCTV audio and Professional AV applications.

Stand-alone

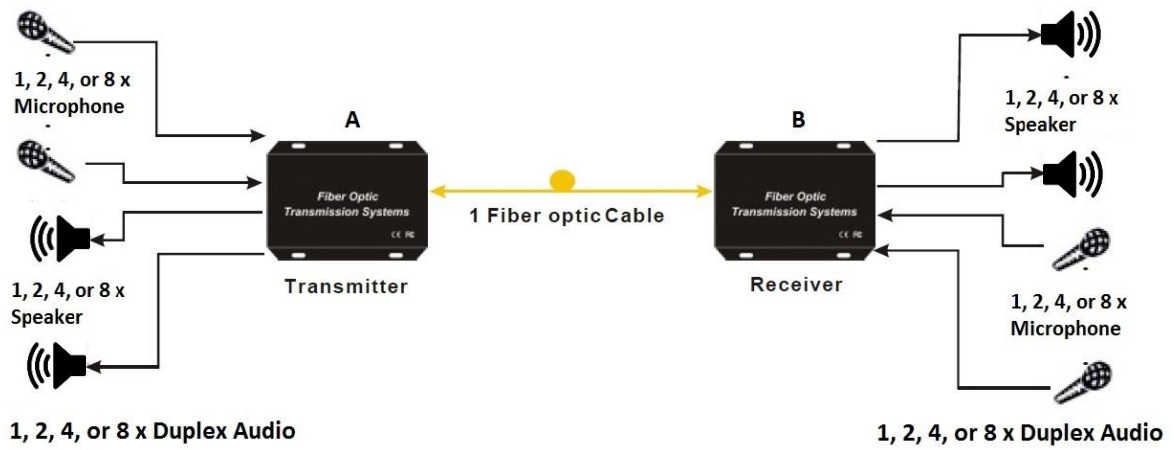
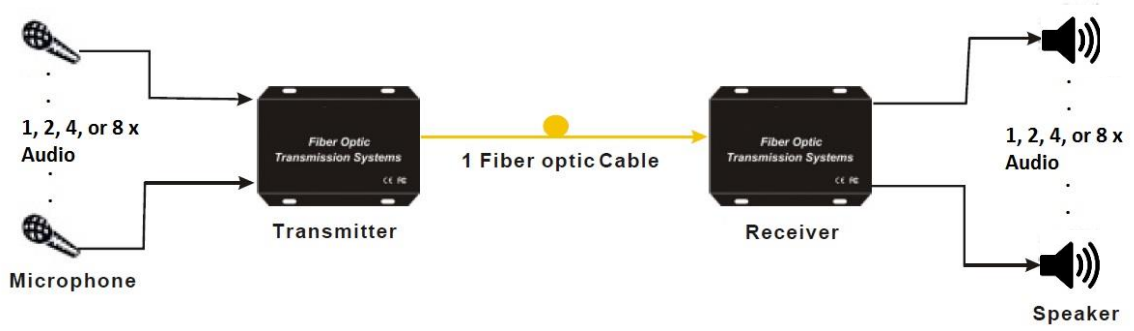
Rack-mount models available on request.

Single-Mode or Multi-Mode

Support FC /PC or ST/PC Optical connector. The Transmission distance range according to the Optical Budget. Single-mode up to 60 km or Multi-mode 2 km.



Typical Configuration



Specification

Audio		Electrical and Mechanical	
Number of Channels	1,2,4,8-Channel Simplex/Duplex Audio	Input Power Requirements	DC 5 V @ 2 A
Audio input/output Level	6 dBm	Power Adapter	AC 100 V ~ 240 V
Audio input/output impedance	600 Ω Unbalanced	Power Consumption	< 3 W/5 W (4, 8-ch duplex and 8-ch simplex)
Bandwidth	20 Hz ~ 20 KHz	Card for 4U Rack Dimensions (mm)	145 x 170 x 20 145 x 170 x 45,4 (4, 8-ch duplex and 8-ch simplex)
Bit Resolution	24-Bit	Shipping Weight (kg)	1,8/2,5 (4, 8-ch duplex and 8-ch simplex)
Signal-to-Noise Ratio (SNR)	> 80 dB	Environmental	
Connectors		Operating Temperature	-45 °C ~ +75 °C
Audio	Terminal Block (RJ-45 only duplex 8-channel)	Storage Temperature	-45 °C ~ +85 °C
Optical	FC/PC or ST/PC Optional	Relative Humidity	0 % ~ 95 % (non-condensing)
Stand-alone power	Screw terminal block	MTBF	> 100,000 hours
Rack Power	AC line cord		

Ordering information¹

PN		Fiber mode	Wave-lengths (nm)	Optical Power Budget	Maximum Transmission Distance	Dimension (mm) (Stand-alone)
Transmitter	Receiver					
XKA1T-Mx	XKA1R-Mx	Multi-mode	1310	16 db	2 km	95 x 70 x 25
XKA1T-2x	XKA1R-2x	Single-mode	1310	12 db	20 km	95 x 70 x 25
XKA1T-4x	XKA1R-4x	Single-mode	1310	18 db	40 km	95 x 70 x 25
XKA1T-6x	XKA1R-6x	Single-mode	1550	25 db	60 km	95 x 70 x 25
XKA2T-Mx	XKA2R-Mx	Multi-mode	1310	16 db	2 km	142 x 107 x 25
XKA2T-2x	XKA2R-2x	Single-mode	1310	12 db	20 km	142 x 107 x 25
XKA2T-4x	XKA2R-4x	Single-mode	1310	18 db	40 km	142 x 107 x 25
XKA2T-6x	XKA2R-6x	Single-mode	1550	25 db	60 km	142 x 107 x 25
XKA4T-Mx	XKA4R-Mx	Multi-mode	1310	16 db	2 km	142 x 107 x 25
XKA4T-2x	XKA4R-2x	Single-mode	1310	12 db	20 km	142 x 107 x 25
XKA4T-4x	XKA4R-4x	Single-mode	1310	18 db	40 km	142 x 107 x 25
XKA4T-6x	XKA4R-6x	Single-mode	1550	25 db	60 km	142 x 107 x 25
XKA8T-Mx	XKA8R-Mx	Multi-mode	1310	16 db	2 km	176,5 x 158 x 59
XKA8T-2x	XKA8R-2x	Single-mode	1310	12 db	20 km	176,5 x 158 x 59
XKA8T-4x	XKA8R-4x	Single-mode	1310	18 db	40 km	176,5 x 158 x 59
XKA8T-6x	XKA8R-6x	Single-mode	1550	25 db	60 km	176,5 x 158 x 59

Model A	Model B	Fiber mode	Wave-lengths (nm)	Optical Power Budget	Maximum Transmission Distance	Dimension (mm) (Stand-alone)
XKA1A-Mx	XKA1B-Mx	Multi-mode	1310/ 1550	16 db	2 km	142 x 107 x 25
XKA1A-2x	XKA1B-2x	Single-mode	1310/ 1550	12 db	20 km	142 x 107 x 25
XKA1A-4x	XKA1B-4x	Single-mode	1310/ 1550	18 db	40 km	142 x 107 x 25

XKA1A-6x	XKA1B-6x	Single-mode	1310/ 1550	25 db	60 km	142 x 107 x 25
XKA2A-Mx	XKA2B-Mx	Multi-mode	1310/ 1550	16 db	2 km	142 x 107 x 25
XKA2A-2x	XKA2B-2x	Single-mode	1310/ 1550	12 db	20 km	142 x 107 x 25
XKA2A-4x	XKA2B-4x	Single-mode	1310/ 1550	18 db	40 km	142 x 107 x 25
XKA2A-6x	XKA2B-6x	Single-mode	1310/ 1550	25 db	60 km	142 x 107 x 25
XKA4A-Mx	XKA4B-Mx	Multi-mode	1310/ 1550	16 db	2 km	176,5 x 158 x 59
XKA4A-2x	XKA4B-2x	Single-mode	1310/ 1550	12 db	20 km	176,5 x 158 x 59
XKA4A-4x	XKA4B-4x	Single-mode	1310/ 1550	18 db	40 km	176,5 x 158 x 59
XKA4A-6x	XKA4B-6x	Single-mode	1310/ 1550	25 db	60 km	176,5 x 158 x 59
XKA8A-Mx	XKA8B-Mx	Multi-mode	1310/ 1550	16 db	2 km	176,5 x 158 x 59
XKA8A-2x	XKA8B-2x	Single-mode	1310/ 1550	12 db	20 km	176,5 x 158 x 59
XKA8A-4x	XKA8B-4x	Single-mode	1310/ 1550	18 db	40 km	176,5 x 158 x 59
XKA8A-6x	XKA8B-6x	Single-mode	1310/ 1550	25 db	60 km	176,5 x 158 x 59

Notes:

- x in PNs stand for F or T (F = FC, T = ST)
- The Optical Power Budget data fit Multi-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.
- Transmission distances over 60 km are available on request.
- ¹ For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information. Please specify any compatibility requirements at time of ordering.

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