



285E

Digital Fiber Optic Audio and Data Transmission System



“Two Way Audio/Data”



“For the same cost as analog links, why not use digital.”

Applications

Security Surveillance and CCTV Systems

Traffic Management and Process Control

Audio/Data Communication

The 285E Series is a high-performance Digital Fiber Optic Audio and Data Transmission System, providing simultaneous transmission of digitized audio and serial data. The standard 285E system is designed to transmit two (2) audio channels and two (2) serial data (RS-232/ RS-422) channels over one or one pair of multimode or singlemode fiber. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

Features

Digital Encoded Fiber Optic Links

Low Cost and High Performance

Standalone and Card-cage Packaging

1 Fiber Solution also Available (WDM)

CWDM Optics Available

The 285E features a digital fiber optic transmission technology, capable of providing crisp audio, little or no maintenance, high functional reliability, and low operating costs. The quality of audio and data transmission in BCI's digital designs is superior to the analog transmission (based on amplitude or frequency modulation) designs by other manufacturers. No user adjustments are required in the 285E system, enabling quick setup and trouble-free operation.

The 285E comes with two packaging options: a rugged, standalone, and compact unit, or a plug-in card for a card cage system. Panel connectors are provided for audio and data (terminal block connector) and fiber connection (SC-type for singlemode and multimode fiber). The 285E can be easily monitored by LED indicators for power, optical link, and audio/data activity. The standalone units are powered by +12 VDC.

Due to its digital transmission design, the 285E is capable of addressing a variety of non-standard configurations. Contact us to discuss your custom, OEM/private brand and high volume requirements.



DOING MORE WITH ONE FIBER *plus* IP



285E

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Multimedia Transmission Systems



Audio

Channel Capacity	2
Input/Output Impedance	600/600 Ohms (Balanced)
Max. Input/Output Level	+10dBm @ 600 Ohms (Balanced)
Magnitude Freq. Response	20Hz to 20k Hz @ -3dB
SNR (Weighted)	> 80dB @ 1 kHz (Balanced)
Connector	Terminal Block

Serial Data

Channel Capacity	2
Signal Format	RS-232 or RS-422 (factory configurable)
Data Rate	Up to 128 kbps (RS-232) Up to 512 kbps (RS-422)
Connector	Terminal Block

Physical

Dimension: (H x W x D)	
Standalone module	1.72" x 4.36" x 8.75"
Card-cage plug-in card	5.24" x 0.94" x 11.6"
Power Level	+12 VDC @ 0.8 A
Power Connector	2.5mm Jack
Operating Temperature	0 to +50°C (extended range is also available)
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link, Audio/Data Activity

Optical

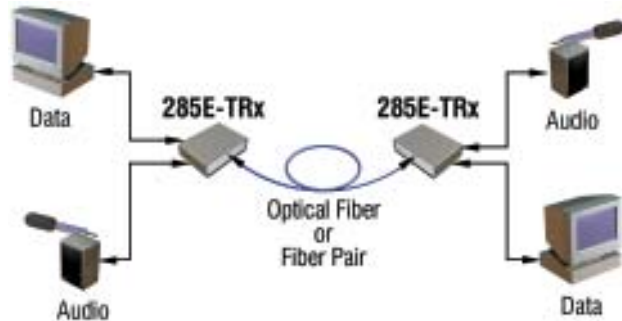
Fiber Type	Multimode and Singlemode
Number of Fibers	2 or 1
Wavelength	850, 1310 and/or 1550 nm
Fiber Optic Connector	SC (Multimode) SC (Singlemode)

Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	6	2	1.2
Singlemode Fiber	16	40	25

- (1) These are typical values for the 285E Series. The actual values may vary.
 (2) These are typical distance coverage figures. The maximum distance coverage may be greater than these typical numbers, depending on fiber type, fiber bandwidth, connector splicing losses, chromatic dispersion, environmental factors, etc.

Applications



Ordering Information

285E-TRX-M-SC	Transceiver, Multimode, 2-Fiber	← 2A → ← 2 RS-232 →
285E-TRX-S-SC	Transceiver, Singlemode, 2-Fiber	



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Subject to continued product enhancement, we reserve the right to change the above specifications and description without notice.