



310E/320E

**Multi-Channel Digital Fiber
Optic Video/Audio/Data
Transport Systems**



**“Multiple Channel
Video/Audio/Data
Over ONE Fiber”**



**“High performance and affordable solutions for your
multi-channel video/audio/data transmission.”**

Applications

- Remote Multimedia Studio
- Distance Learning
- Audio/Video/Data Conferencing
- Security Surveillance and CCTV Systems

Features

- Digital Encoded Fiber Optic Links
- Options with Composite Video or S-Video
- Multiple Video/Audio/Data Transmission Over ONE Fiber
- Add-Drop Capability
- Compact, Standalone Packaging

1 Fiber Solution also Available (WDM)

CWDM Optics Available

The 310E/320E systems provide simultaneous transmission of multiple channels of digitized stereo audio, video and/or data over one or one pair of fiber. The standard 310E system transmits these video/audio/data channels in one direction. The 320E system transmits and receives these video/audio/data channels in both directions. The standard 310E/320E system comes with 4- and 8-channel versions with each channel containing one (1) NTSC/PAL/SECAM video, two (2) audios, and one (1) serial data (RS-232/RS-422). Versions up to 16-channel video/audio/data are also available for unidirectional links. In addition, the 310E/320E has an option for S-video, and up to 8-channels of S-video can be accommodated. The 310E/320E system is also capable of adding/dropping video/audio/data channels in a ring or bus network configuration. Please consult us for your custom design.

The 310E/320E features a digital fiber optic transmission technology, capable of providing sharper video and crisp audio, little or no maintenance, high functionality reliability, and low operating cost. The quality of video, audio and data transmission in BCI's digital designs is much superior to the analog transmission (based on amplitude or frequency modulation) designs used by other manufacturers. No user adjustments are required in the 310E/320E system, enabling quick setup and trouble-free operation.

The 310E/320E comes in a rugged, standalone, and compact unit. Panel connectors are provided for video (BNC), audio (terminal block), and data (terminal block), and fiber connection (FC-type for singlemode fiber or ST-type for multimode fiber). They are also easily monitored by separate LED indicators for power, optical link, and channel activity.

Due to its digital transmission design, the 310E/320E 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*



310E/320E

Multimedia or Broadcast Transmission Systems

Multi-Channel Digital Fiber Optic Video/Audio/Data Transport Systems

Video

Video Format	NTSC, PAL, S-Video
Channel Capacity	4, 8, or 16* (NTSC or PAL) 2, 4, or 8* (S-Video)
Bandwidth	8 MHz
Modulation Resolution	10 Bits (12 Bits optional)
Video Level	1.2Vp-p @ 75 Ohms
Differential Gain	<1%
Differential Phase	<0.7°
SNR (Weighted)	>70dB
Connector	BNC

Audio

Channel Capacity	8, 16, or 32*
Operating Mode	Balanced or Unbalanced
Input/Output Impedance	600 Ohms/600 Ohms (Balanced)
Max. Input/Output Level	+10 dBm (Balanced)
Magnitude Freq. Response	20Hz to 24kHz
THD+N	>85dB @ 1kHz (Balanced)
Connector	Terminal Block

Serial Data

Channel Capacity	4, or 8
Signal Format	RS-232 or RS-422
Data Rate	Up to 128 kbps (RS-232) Up to 256 kbps (RS-422)
Connector	Terminal Block

Physical

Dimension: (H x W x D)	
Standalone Unidirectional Versions:	1.72" x 8.58" x 12.0"
Standalone Bi-directional Versions:	1.72" x 17.03" x 12.0" (2/4 ch) 3.46" x 17.03" x 12.0" (8 ch)
Power (Unidirectional 2/4/8 TX/RX)	12VDC @ 25/25/50W
Power (Bi-directional 2/4/8 TX/RX)	110-240 VAC @ 60/60/120W
Operating Temperature	0 to +50°C
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link, Video Activity

Optical

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

Optical

Typical Power Budget and Transmission Distance

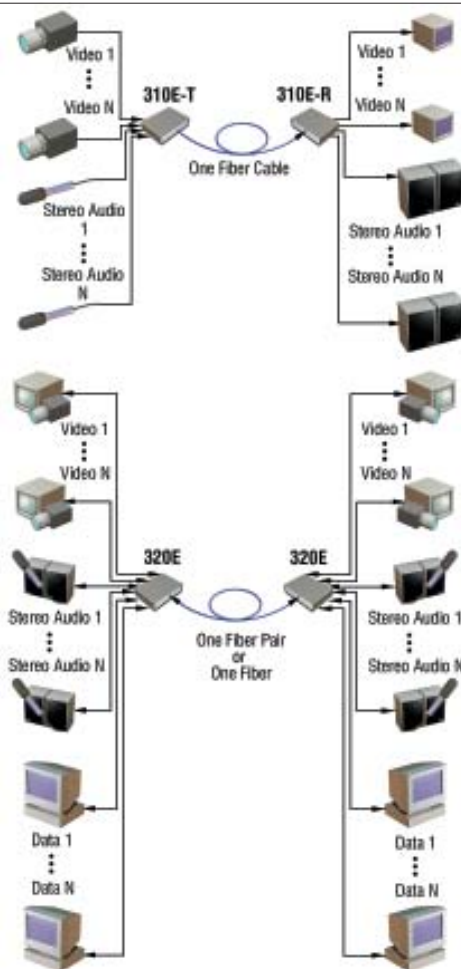
Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	8	0.5	0.3
Singlemode Fiber	14	25	16
Multimode Long Distance	14	2	1.25
Singlemode Long Distance	20	60	37

(1) These are typical values for the 310E/320E 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.

*The 16-ch video/32-ch audio option comes with unidirectional links only (i.e., bi-directional links are not available)

Applications



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

