



# 310/320

**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
- Multiple Video/Audio/Data Transmission Over ONE Fiber
- Compact, Standalone Packaging

**1 Fiber Solution also Available (WDM)**

**CWDM Optics Available**

**Multi-channel S-Video Options**

The 310/320 systems provide simultaneous transmission of multiple channels of digitized stereo audio, video and/or data over one or one pair of fiber. The standard 310 system transmits these video/audio/data channels in one direction. The 320 system transmits and receives these video/audio/data channels in both directions. The standard 310/320 system comes with 2-, 4-, and 8-channel versions with each channel containing one (1) NTSC/PAL 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. Many versions of optical transmitter and receiver combinations are available to address different distance coverages.

The 310/320 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 310/320 system, enabling quick setup and trouble-free operation.

The 310/320 comes in a rugged, standalone, and compact unit. Panel connectors are provided for video (BNC), audio (terminal block), and data (DB9), 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 310/320 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**



# 310/320

## Multimedia Transmission Systems Security/Surveillance Transmission Systems

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

### Video

Channel Capacity	2, 4, 8, or 16*
Bandwidth	7 MHz
Video Level	1.0Vp-p @ 75 Ohms
Differential Gain	3 %
Differential Phase	< 2°
SNR (Weighted)	> 62dB
Connector	BNC

### Audio

Channel Capacity	4, 8, 16, or 32*
Operating Mode	Balanced or Unbalanced
Input/Output Impedance	100k Ohms/100 Ohms (Balanced)
Max. Input/Output Level	5 Vp-p (Balanced)
Magnitude Freq. Response	20Hz to 20kHz @ -3dB
SNR (Weighted)	> 70dB @ 1kHz, 4Vpp Input Level (Balanced)
Connector	Terminal Block

### Serial Data

Channel Capacity	2, 4, or 8
Signal Format	RS-232 or RS-422
Operating Mode	Full Duplex with Handshake
Data Rate	Up to 19.2 kbps (RS-232) Up to 57.6 kbps (RS-422)
Connector	DB-9

### Physical

Dimension: (H x W x D)	
Standalone 2- or 4-ch Versions:	1.72" x 17.03" x 12.0"
Standalone 8- or 16-ch Versions:	3.46" x 17.03" x 12.0"
Power (4-channel TX/RX)	110-240 VAC @ 20W
Power (8-channel TX/RX)	110-240 VAC @ 40W
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

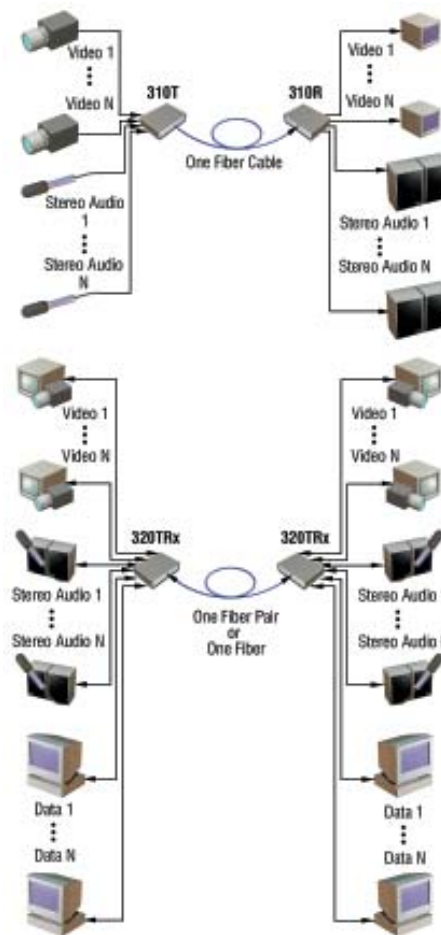
Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	8	1	0.6
Singlemode Fiber	12	25	16
Multimode Long Distance	12	3	1.8
Singlemode Long Distance	20	60	37

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



### Doing More With One Fiber

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

