



# GE Interlogix Fiber Options

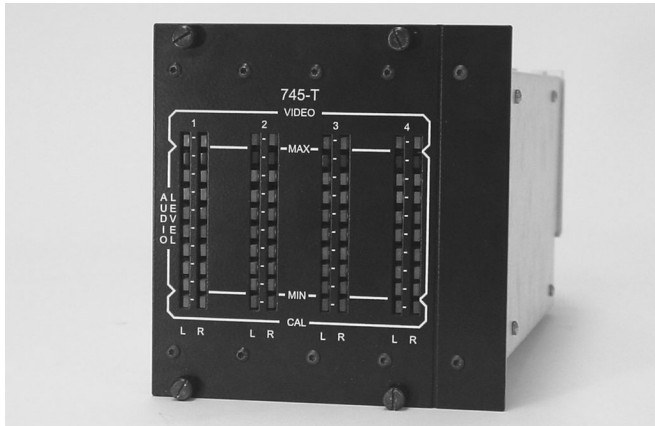
# B745AV



# B7745AV



## Four-Channel Video and Eight-Channel Audio *Digitally Processed*



## Product Specification

### Features

- ✓ One-way video and audio transmission over one fiber
- ✓ 10-bit A/D video processing
- ✓ 24-bit A/D audio processing
- ✓ Uses Coarse Wavelength Division Multiplexer (CWDM) technology
- ✓ Audio SNR >90 dB, THD <0.003%
- ✓ 20 Hz to 20 kHz frequency response
- ✓ Standard 13 dB MM, 18 dB SM optical budget
- ✓ Built-in 1.0 kHz test generator
- ✓ Built-in optical power meter
- ✓ SMARTS™ Diagnostics
- ✓ Forever Warranty™

### Description

The B745AV/B7745AV series high performance broadcast grade fiber transmission system supports four composite video channels and eight channels of line-level audio. The all-digital processing platform features 24-bit audio processing and 48 kHz audio sampling rate.

The unit uses Coarse Wavelength Division Multiplexer (CWDM) technology for maximum distance capability. For added flexibility dual range audio levels for the eight audio channels can be configured for -10 dB to +8 dB or 0 dB to +18 dB operation.

Eight multi-segment LED displays provide for complete monitoring of input video, output video, audio input and audio output levels and the received optical signal. When switched to the test mode on the receiver, the front panel LEDs have the capability to display the received optical level. This built-in test feature aids in the installation process as it easily measures the actual optical loss in the fiber run from the transmitter.

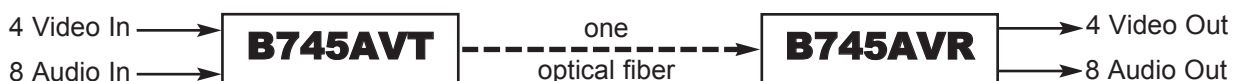
### Basic Multimode Models

**B745AV** 1-Fiber link, 1310/1330/1350/1370 nm

### Basic Single-Mode Models

**B7745AV** 1-Fiber link, 1310/1330/1350/1370 nm

### SYSTEM DIAGRAM



## SERIES B745AV AND B7745AV

### VIDEO

Number of Channels:	4
Standards Supported:	NTSC, PAL
Video Input Signal:	1.0 V p-p composite
Input/Output Impedance:	75 $\Omega$
Video Input Signal:	1.0 V p-p composite, unity gain
Signal-to-Noise Ratio:	>67 dB
Video Bandwidth:	7.5 MHz
Differential Phase:	0.7°
Differential Gain:	1%

### AUDIO

Number of Channels:	8, simplex
Input Signal Level:	10 dBm to +8 dBm or 0 dBm to +18 dBm
Input Impedance:	600 $\Omega$ (balanced or unbalanced) 30 k $\Omega$ (balanced or unbalanced)
Frequency Response:	20 Hz to 20 kHz
Sampling Rate:	48 kHz
Output Signal Level:	18 dBu max. 8 dBu max.
Output Impedance:	<30 $\Omega$ unbalanced <60 $\Omega$ balanced
Signal-to-Noise Ratio:	90 dB
THD:	<0.003%
Built-in Test Signal:	1 kHz @ 5 dBu

### ELECTRICAL

Input Voltage:	13.5 VDC, regulated
Current Requirement:	2.8 A
Rack Module	
Power Factor:	23
Power Consumption:	38 W @ 14 V
Protection:	Solid-state short-circuit protection (no fuse required)
Card Replacement:	Cards are hot swappable

### OPTICAL

Optical Mode:	
B745AV-L:	Multimode
B7745AV:	Single Mode

\*Optical Budget based on 62.5/125  $\mu$ m fiber,  
for 50/125  $\mu$ m fiber subtract 3 dB.

\*\*Operating distance is approximate and assumes best  
fiber. It will be affected by the type and number of  
splices in the fiber. Refer to update no. TB00-005,  
which can be found at [www.fiberoptions.com](http://www.fiberoptions.com).

Wavelength:	
B745AV-L:	1310/1330/1350/1370 nm
B7745AV:	1310/1330/1350/1370 nm
Optical Budget:	
B745AV-L:	13 dB*
B7745AV:	18 dB
Operating Distance**:	
B745AV-L:	3.7 mi (6 km)
B7745AV:	28 mi (45 km)
Emitter Type:	Laser
Fiber Type:	
Multimode:	50 $\mu$ m, 62.5 $\mu$ m
Single Mode:	8.3 $\mu$ m
Modulation Type:	Digital
Gain Control:	Optical automatic (OAGC)

### ENVIRONMENTAL

Temperature Range	
in Operation:	-40° to +167° F (-40° to +75° C)
in Storage:	-40° to +185° F (-40° to +85° C)
Humidity Range in Operation and Storage:	0 to 95% relative, noncondensing

### MECHANICAL

#### Rack Modules

Module Width:	4 slots, 4.0 in. (102 mm)
Weight:	3.8 lb (1.7 kg)
Construction:	Aluminum
Finish:	Black semigloss paint

### SMARTS™ INDICATORS

Level/Loss™, Audio Level, Video Status

### AGENCY COMPLIANCE AND MTBF

Emissions:	FCC Part 15, ICES-003, AS/NZS 3548, EN55022
Immunity:	ENV50204, EN61000-4-2,3,4,5,6,11
Safety:	UL1950, CAN/CSA 22.2, NO.950-95
MTBF:	>100,000 hours

FCC PART 15  
COMPLIANT



For additional information about this product, refer to the Fiber Options Web site at [www.fiberoptions.com](http://www.fiberoptions.com).