

## Overview

The B746AV and B7746AV series high performance fiber transmission system supports one-way composite video and two-way High Quality Audio (HQA). The all-digital processing platform features 24-bit audio processing.

## Digital Video and Audio Processing

Digital processing of the video component along with a signal-to-noise ratio >55 dB that assures clean, noise-free video at the receiver. Digital processing of the audio signal along with an audio signal-to-noise ratio >70 dB allows the audio output to drive balanced or unbalanced loads and maintain constant audio levels.

## Built-in Diagnostics

Built-in system performance analysis includes LED displays that provide for complete monitoring of transmitter and receiver operation.

## Standard Features

- One-way video and two-way audio transmission over one or two single mode or multimode fibers
- 8-bit video processing
- 24-bit audio processing
- 20 Hz to 15 kHz frequency response
- Balanced or unbalanced audio
- 13 dB optical budget
- Video SNR >55 dB
- Audio SNR >70 dB
- 32 kHz audio sampling rate
- THD <0.01%

# Video and Two-Way Audio

B746AV and B7746AV



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## Specifications

Video	B746AV (Multimode)	B7746AV (Single Mode)
Channels	1 simplex	
Format	NTSC and PAL	
Input/Output Signal	1.0 V pk-pk	
Bandwidth	6.5 MHz	
Video Resolution	520 TV Lines	
Signal-to-Noise Ratio	>55 dB	
Input/Output Impedance	75 ohms	
Differential Phase	<0.8°	
Differential Gain	3%	

Audio		
Channels	1 duplex	
Input Signal Level	6 dBu balanced (max.), 0 dBu unbalanced	
Input Impedance	30 k ohms (balanced or unbalanced)	
Frequency Response	20 Hz to 15 kHz	
Sampling Rate	33 kHz	
Output Signal Level	6 dBu balanced (max.), 0 dBu unbalanced	
Output Impedance	<30 ohms unbalanced, <60 ohms balanced	
Signal-to-Noise Ratio	>70 dB	
Total Harmonic Distortion	<0.003%	

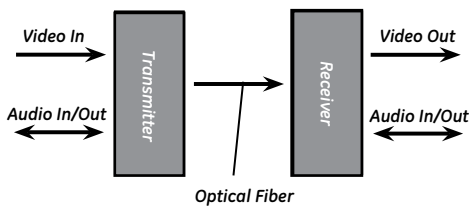
Optical	Multimode	Single Mode
Mode	Multimode	Single Mode
Optical Budget*	13 dB	18 dB
Emitter	Laser	
Wavelength	850 and/or 1300 nm (depending on model)	1310 and/or 1550 nm
Operating Distance**	3.2 mi (5.2 km) (depending on model)	Up to 37 mi (60 km)
Modulation Type	Digital	
Gain Control	Optical Automatic Gain Control (OAGC)	

Electrical		
Input Power	13.5 VDC regulated	
Current Requirement	450 mA	
Power Consumption	6 W	
Power Factor	4 (rack units only)	
Protection	Solid-state short circuit protection	

Environmental		
Operating Temperature	-40 to 167 °F (-40 to 75 °C)	
Maximum Humidity	95% relative, noncondensing	

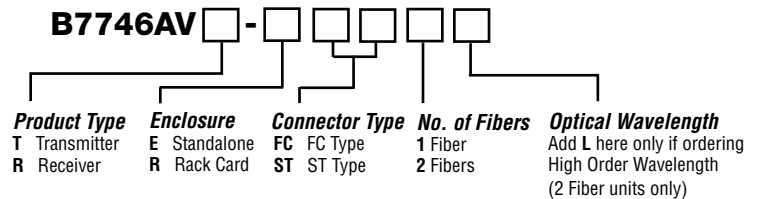
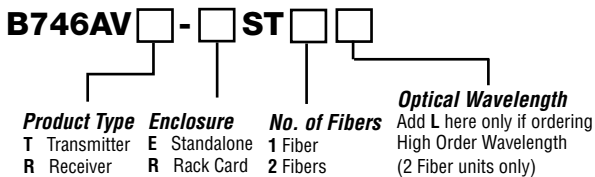
Mechanical		
Dimensions (LWD)	Standalone: 5.0" x 4.8" x 1.5" (127 x 122 x 38 mm); Rack: 1 slot (1.0")	
Weight	Standalone 0.75 lbs (0.34 kg); Rack 0.6 lbs. (0.27 kg)	
Construction	Steel (standalone); Aluminum (rack)	

## Related Diagram



## Ordering Information

Use the Configurator below to select the options available for this product.



\* Optical Budget based on 62.5 μm fiber, for 50/125 μm 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.gesecurity.com

As a company of innovation, GE Security reserves the right to change product specifications without notice. For the latest product specifications, visit GE Security online at www.GESecurity.com or contact your GE Security sales representative.  
B746AV-2006-09-2

AGENCY COMPLIANCE MADE IN THE USA



Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J