Overview

The B780G and the B7780G high resolution component video links are designed to support RGB signals for projector and plasma display screens and UXGA (1600 x 1200) computer systems with resolution up to 2k x 2k pixels. The low profile 1RU chassis can be installed in a standard 19-inch equipment rack or placed on a table top, under-the-desk or ceiling mounted with the removable mounting brackets. The B780G model features multimode operation, while the B7780G model operates over single mode fiber.

Equipment Versatility

The RGB component signals are intensity modulated with a bandwidth of 125 MHz per component. The unit operates with either Sync-On-Green, H and V drives or composite sync. To satisfy the requirements of the video and computer world, the B780G and the B7780G feature both BNC and the HD-15 computer interface connectors. Loop-thru BNC connectors with selectable 75-ohm termination are provided on the transmitter.

Superior Diagnostics

The SMARTS™ diagnostic technology provides built-in diagnostic tools including LEDs that monitor the operating status of the video and optical signals.

Standard Features

- One-way transmission of three real-time, full frame video channels over three single mode or multimode fibers
- Supports multiple video standards
- 2K x 2K pixel resolution
- Video SNR >60 dB
- Optical AGC
- 10 dB (single mode) or 10 dB (multimode) optical budget
- Operating distance up to 15 miles (25 km)
- BNC and HD-15 interface
- Exclusive Pix-Lock Sync™ System
- 19" rack configurations

RGB High Resolution Component Video
B780G and B7780G

Specifications

Video	B780G (Multimode)	B7780G (Single Mode)
Channels	3	
Format and Video Signal	NTSC and PAL, 1.0 V p-p	
Standards Supported	RGB HV, RGsB, VGA, SVGA, UXGA, with TTL H and V Sync, Sun and Apple Macintosh with TTL composite sync, Silicon Graphics with sync-on-green	
Input/Output Impedance	75 ohms	
Bandwidth	125 MHz per component	
Signal-to-Noise Ratio	>60 dB	
Video Resolution	2k x 2k pixels	
Horizontal Scan Rate	15.75 kHz to 130 kHz	
Vertical Scan Rate	50 Hz to 150 Hz	
Optical		
Mode	Multimode	Single Mode
Optical Budget*	10 dB	10 dB
Emitter	LED	Laser
Wavelength	850 nm	1310 nm
Operating Distance**	1.8 mi (3.0 km)	15 mi (25 km)
Modulation Type	Intensity Modulation	
Gain Control	Optical Automatic Gain Control (OAGC)	
Electrical		
Input Power	100-240 VAC . 47-63 Hz	
Power Consumption	100 W maximum	
Protection	Removable 1 A Fuse	
Environmental		
Operating Temperature	-40 to 122°F (-40 to +50°C)	
Maximum Humidity	95% relative, noncondensing	
Mechanical		
Dimensions (HWD)	1.75" x 19.0" x 11.5" (45 x 483 x 292 mm)	
Weight	4.8 lbs (2.2 kg)	
Construction	Aluminum	

Related Diagram

AGENCY COMPLIANCE

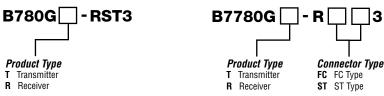**FCC** PART 15 COMPLIANT CE ℅cⓊℒus

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

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

B780G☐ - RST3

Product Type
T   Transmitter
R   Receiver

B7780G☐ - R☐☐3

Product Type
T   Transmitter
R   Receiver

Connector Type
FC   FC Type
ST   ST Type

* 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 GESecurity online at www.GESecurity.com or contact your GE Security sales representative.
B780G-2008-01-3

GE imagination at work