GE
Security

Fiber Optic
Video Transmitters and Receivers

Overview

2-Channel Video Multiplexers transmit two channels of full-frame, real-time video over a single fiber. They accept monochrome and color signals in NTSC and PAL formats. The multiplexers consist of a two-channel transmitter and receiver, with both units available in standalone and rack configurations. S703V models feature multimode operation, while S7703V models operate over one single mode fiber.

Exceptional Performance

Full-frame, real-time video transmission delivers all the video captured by the camera. A bandwidth of 8 MHz enable the multiplexers to transmit extremely clear, high-resolution images. FM modulation assures that the image quality remains high over the full operating distance.

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 two real-time, full frame video channels over one fiber.
- Single and multimode models available
- Supports all major video formats
- 640 TV lines resolution
- 60 dB Video SNR
- 8 MHz video bandwidth
- Optical AGC
- 13 dB optical budget
- Operating distance up to 27 miles (43 km), depending on the model
- Standalone or rack configurations

2-Channel Video Multiplexer

S703V and S7703V

GE Security

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Europe
T 44-113-238-1668
F 44-113-253-8121

Latin America
T 305-593-4301
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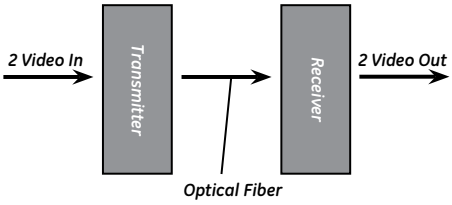
www.gesecurity.com

Related Diagram



Ordering Information

Use the Configurators below to select the options available for these products.

S703V ☐-☐ ST ☐

Product Type	Enclosure	Optical Wavelength
T Transmitter	E Standalone	Add **L** here only if ordering
R Receiver	R Rack Card	High Order Wavelength

S7703V ☐-☐☐☐☐

Product Type	Enclosure	Connector Type	Optical Wavelength
T Transmitter	E Standalone	FC FC Type	Add **L** here only if ordering
R Receiver	R Rack Card	ST ST Type	High Order Wavelength

Specifications

Video	S703V (Multimode)	S7703V (Single Mode)
Channels	2	
Format	NTSC, PAL, SECAM, EIA, CCIR	
Input/Output Signal	1.0 V p-p composite	
Bandwidth	8 MHz	
Signal-to-Noise Ratio	60 dB	
Video Resolution	640 TV lines	
Input/Output Impedance	75 ohms	
Differential Phase	3°	
Differential Gain	3%	
Optical		
Mode	Multimode	Single Mode
Optical Budget*	13 dB	
Emitter	Laser	
Wavelength	850 nm or 1300 nm (Depending on model)	1310 nm or 1550 nm
Operating Distance**	Up to 11 mi (18 km) (Depending on model)	Up to 27 mi (43 km)
Modulation Type	Frequency modulation	
Gain Control	Optical Automatic Gain Control (OAGC)	
Electrical		
Input Power, Standalone Units	Transmitter: 13.5 VDC regulated Receiver: 13.5 VDC regulated	
Input Power, Rack Units	13.5 VDC regulated	
Current Requirement	200 mA	
Power Consumption	3 W	
Power Factor	2 (rack units only)	
Protection	Solid-state short circuit protection	
Optional Power Supply	Model 613P	
Environmental		
Operating Temperature	-40 to 167 °F (-40 to 75 °C)	
Maximum Humidity	95% relative, noncondensing	
Mechanical		
Dimensions (HWD)	Standalone Transmitter: 5.0" x 4.8" x 1.5" (127 x 122 x 38 mm) Standalone Receiver: 9.3" x 6.33" x 1.15" (236 x 161 x 29 mm) Rack: 1 slot (1.0")	
Weight	Standalone Transmitter: 1.21 lbs (0.55 kg) Standalone Receiver: 1.36 lbs (0.61 kg) Rack: 0.75 lbs (0.34 kg)	
Construction	Polycarbonate (standalone Tx); Aluminum (rack & standalone Rx)	

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT CE c UL us

MADE IN THE USA

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

* 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

S703V-2006-09-2

imagination at work