



# GE Interlogix Fiber Options

Core Product 

# S703V

# S7703V



## 2-Channel FM Video Multiplexer

## Product Specification

### Features

- ✓ Two channels of real-time, full-frame video
- ✓ FM modulation
- ✓ 640 TV lines resolution
- ✓ 8 MHz bandwidth
- ✓ Optical Automatic Gain Control (OAGC)
- ✓ SMARTS™ Diagnostics
- ✓ Standard optical budget 13 dB
- ✓ MTBF > 100,000 hours
- ✓ Forever Warranty™

### Description

The S703V/S7703V Two-Channel FM Video System transmits two channels of full-frame, real-time video over a single fiber. It accepts monochrome and color signals in NTSC and PAL formats. The system consists of a two-channel transmitter and receiver. It is available in multi-mode and single-mode versions.

Full-frame, real-time video transmission delivers all the video captured by the camera. A bandwidth of 8 MHz enables the S703V and S7703V to transmit extremely clear, high-resolution images. FM modulation assures that the image quality remains high over the full operating distance. SMARTS™ diagnostic LEDs on the transmitter and receiver monitor the status of the video and optical signals.

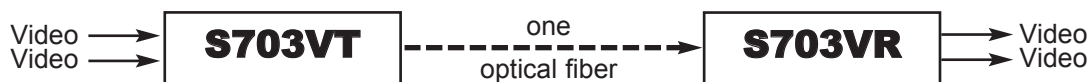
### Basic Multimode Models

- S703V** 1-Fiber link, 850 nm
- S703V-L** 1-Fiber link, 1300 nm

### Basic Single-Mode Models

- S7703V** 1-Fiber link, 1310 nm
- S7703V-L** 1-Fiber link, 1550 nm

### SYSTEM DIAGRAM



### VIDEO

Number of Channels:	2	Signal-to-Noise Ratio:	60 dB
Standards Supported:	NTSC, PAL, SECAM, EIA, CCIR	Video Bandwidth:	8 MHz
Video Input/Output Signal:	1.0 V p-p composite	Video Resolution:	>640 TV lines
Input/Output Impedance:	75 Ω	Differential Phase:	5°
		Differential Gain:	7%

## SERIES S703V AND S7703V

### ELECTRICAL

Input Voltage:	
Standalone Transmitter:	12 - 14 VAC or 13.5 VDC, regulated
Standalone Receiver:	13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	200 mA
Rack Module	
Power Factor:	2
Power Consumption:	3 W
Protection:	Solid-state short circuit protection (no fuse required)
Card Replacement:	Cards are hot swappable
Power Supply:	610P (AC) 613P (DC)

### OPTICAL

Wavelength:	
S703V:	850 nm
S703V-L:	1300 nm
S7703V:	1310 nm
S7703V-L:	1550 nm
Optical Mode:	
S703V:	Multimode
S703V-L:	Multimode
S7703V:	Single Mode
S7703V-L:	Single Mode
Optical Budget*:	13 dB standard
Operating Distance**:	
S703V:	3.2 mi (5.2 km)
S703V-L:	11 mi (18 km)
S7703V:	20 mi (32 km)
S7703V-L:	27 mi (43 km)
Emitter Type:	Laser
Fiber Type:	Multimode: 62.5 $\mu$ m Single Mode: 8.3 $\mu$ m
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

#### Standalone Transmitter

Dimensions:	Length: 5.0 in (127 mm) Width: 4.8 in (122 mm) Height: 1.5 in (38 mm)
Weight:	1.21 lb (0.55 kg)
Construction:	Steel
Finish:	Gray semigloss paint
Mounting Method:	6 No. 6 (3 mm) screws

#### Standalone Receiver

Dimensions:	Length: 9.31 in (236 mm) Width: 6.33 in (161 mm) Height: 1.15 in (29 mm)
Weight:	1.36 lb (0.61 kg)
Construction:	Aluminum
Finish:	Black semigloss paint
Mounting Method:	4 No. 6 (3 mm) screws

#### Rack Modules

Module Width:	1 slot, 1.0 in. (51 mm)
Weight:	0.75 lb (0.34 kg)
Construction:	Steel
Finish:	Gray textured paint
Mounting Method:	4 No. 6 (3 mm) screws

### SMART<sup>SM</sup> INDICATORS

Level/Loss<sup>SM</sup>, Video In/Out

### 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, EN 60825
MTBF:	>100,000 hours

\*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).

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).