Core Product

GE Interlogix
Fiber Options

S707V
S7707V

4-Channel Digital Video Multiplexer

Product Specification

Features

- Four channels of one-way video
- Digital multiplexing technology
- 10-bit digital encoding
- 500 TV lines resolution
- Supports all major video formats
- *SMARTS™* Diagnostics
- Optical Automatic Gain Control
- Solid-state short-circuit protection
- Forever Warranty™

Description

Fiber Options' S707V/S7707V Video Multiplexer System represents a technological breakthrough in the simultaneous transmission of multiple full-frame, real-time video signals (color or monochrome) over one fiber.

The four-channel system features a 6.2 MHz-per-channel bandwidth and optical automatic gain control (OAGC). It accepts analog baseband inputs and converts them to digital format for transmission, assuring high-quality video outputs at the receiver. The system is compatible with with all major video formats.

Fiber Options' unique ***SMARTS™*** Technology includes a built-in video test pattern generator on the transmitter for system setup and on-screen diagnostics to indicate insufficient optical power or an inactive video channel for each output.

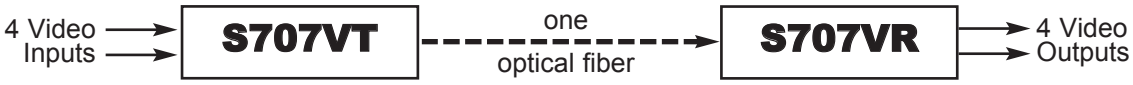
Basic Multimode Models

S707V-L 1-Fiber link, 1300 nm

Basic Single-Mode Models

S7707V 1-Fiber link, 1310 nm
S7707V-L 1-Fiber link, 1550 nm

SYSTEM DIAGRAM



VIDEO

Number of Channels:	4	Video Bandwidth:	6.2 MHz
Standards Supported:	All major formats	Video Resolution:	500 TV lines
Video Input/Output Signal:	1.0 V p-p composite	Differential Phase:	0.7°
Input/Output Impedance:	75 Ω	Differential Gain:	2%
Signal-to-Noise Ratio:	>55 dB		

ELECTRICAL

Input Voltage:	
Standalone Transmitter:	13.5 VDC, regulated or 24 VAC
Standalone Receiver:	13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	
Standalone Transmitter:	350 mA
Rack Modules:	600 mA
Rack Module	
Power Factor:	5
Power Consumption:	
Standalone Transmitter:	5 W
Rack Modules:	9 W
Protection:	Solid-state short circuit protection (no fuse required)
Card Replacement:	Cards are hot swappable
Power Supply:	613P

OPTICAL

Optical Mode:	
S707V-L:	Multimode
S7707V:	Single Mode
S7707V-L:	Single Mode
Wavelength:	
S707V-L:	1300 nm
S7707V:	1310 nm
S7707V-L:	1550 nm
Optical Budget:	
S707V-L:	13 dB*
S7707V:	13 dB
S7707V-L:	16 dB
Operating Distance**:	
S707V-L:	11 mi (18 km)
S7707V:	20 mi (32 km)
S7707V-L:	33 mi (53 km)
Emitter Type:	Laser
Fiber Type:	Multimode: 62.5 µm Single Mode: 8.3 µm
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:	Height: 5.0 in (127 mm) Width: 4.8 in (122 mm) Depth: 1.5 in (38 mm)
Weight:	1.3 lb (0.59 kg)
Construction:	Steel
Finish:	Gray textured 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:	1.5 lb (1.68 kg)
Construction:	Aluminum
Finish:	Black semigloss paint
Mounting Method:	4 No. 6 (3 mm) screws

Rack Modules

Width:	1 slot, 1.0 in. (25 mm)
Weight:	0.64 lb (0.29 kg)
Construction:	Aluminum
Finish:	Black semigloss paint

SMARTS™ INDICATORS

Level/Loss™, Video In/Out

AGENCY COMPLIANCE AND MTBF

Emissions:	FCC Part 15, ICES-003, AS/NZS 3548, EN55022
Immunity:	EN50130-4
Safety:	UL1950, CAN/CSA 22.2, NO.950-95,
Laser Safety:	21CFR1040, EN 60825-1, 2
MTBF:	>100,000 hours

*Optical Budget based on 62.5/125 um fiber, for 50/125 um 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.

FCC PART 15 COMPLIANT

For additional information about this product, refer to the Fiber Options Web site at www.fiberoptions.com.