



GE Interlogix Fiber Options

Core Product



S705V



S7705V

Digital Video System



Product Specification

Features

- ✓ 10-bit digital video transmission
- ✓ >560 TV lines resolution
- ✓ Meets/exceeds EIA/TIA 250C Medium Haul Std
- ✓ SMARTS™ Diagnostics
- ✓ Optical budget: 13 dB MM; 18 dB SM
- ✓ Operates up to 2.5 mi (4.0 km) MM;
37 mi (60 km) SM
- ✓ Solid-state short-circuit protection
- ✓ 24 VAC/12-16 VDC transmitter power
- ✓ Forever Warranty™

Description

The S705V and S7705V fiber links accept analog baseband video, convert it to digital, and transmit it as a 10-bit digital signal over optical fiber. Digital transmission of video with a signal-to-noise ratio of >60 dB assures noise-free video at the receiver. The S705V and S7705V support all major video formats. Resolution of greater than 560 TV lines guarantees faithful reproduction of high-resolution closed-circuit video images.

The S705V and S7705 meet or exceed the requirements of the EIA/TIA 250C Medium Haul Standard. The S705V and S7705V also feature Fiber Option's unique **SMARTS™** Technology, which provides an extensive array of built-in diagnostic functions.

Basic Multimode Models

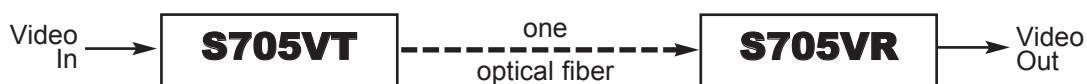
S705V-L 1-Fiber link, 1300 nm

Basic Single-Mode Models

S7705V 1-Fiber link, 1310 nm

S7705V-L 1-Fiber link, 1550 nm

SYSTEM DIAGRAM



VIDEO

Video performance meets or exceeds the requirements of EIA/TIA 250C medium-haul standard.

Number of Channels: 1
Standards Supported: NTSC, PAL
Video Input/Output Signal: 1.0 V p-p composite

Input/Output Impedance: 75 Ω
Signal-to-Noise Ratio: >60 dB
Video Bandwidth: 7 MHz
Video Resolution: >560 TV lines
Differential Phase: <0.7°
Differential Gain: <2%

SERIES S705V AND S7705V

ELECTRICAL

Input Voltage:	
Standalone Transmitter:	24 VAC \pm 10% or 13.5 VDC, regulated
Standalone Receiver:	13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	400 mA @ 14 V
Rack Module	
Power Factor:	4
Power Consumption:	6 W
Protection:	Solid-state short circuit protection (no fuse required)
Card Replacement:	Cards are hot swappable
Power Supply:	613P (DC)

OPTICAL

Wavelength:	
S705V-L:	1300 nm
S7705V:	1310 nm
S7705V-L	1550 nm
Optical Mode:	
S705V-L:	Multimode
S7705V:	Single Mode
S7705V-L	Single Mode
Optical Budget:	
S705V-L:	13 dB standard*
S7705V:	18 dB standard
S7705V-L	18 dB standard
Operating Distance**:	
S705V-L:	2.5 mi (4.0 km)
S7705V:	28 mi (45 km)
S7705V-L	37 mi (60 km)
Emitter Type:	Multimode: LED Single Mode: Laser
Fiber Type:	Multimode: 62.5 μ m Single Mode: 8.3 μ 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 Transmitters

Dimensions:	Length: 5.0 in (127 mm) Width: 4.8 in (122 mm) Height: 1.6 in (41 mm)
Weight:	1.21 lb (0.55 kg)
Construction:	Steel
Finish:	Gray textured paint
Mounting Method:	6 No. 6 (3 mm) screws

Standalone Receivers

Dimensions:	Length: 9.31 in (236 mm) Width: 6.33 in (161 mm) Height: 1.15 in (29 mm)
Weight:	1.4 lb (0.64 kg)
Construction:	Aluminum
Finish:	Black semigloss paint
Mounting Method:	4 No. 6 (3 mm) screws

Rack Modules

Module Width:	1 slot, 1.0 in. (25.4 mm)
Weight:	0.55 lb (0.25 kg)
Finish:	Black semigloss paint

SMARTSM INDICATORS

Level/LossSM, Video

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 μ m fiber,
for 50/125 μ 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.



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