GE Interlogix
Fiber Options

S701V

VIDEO

Video Transmission System

Product Specification

Features

✔ **One-way transmission of one or two video channels**

✔ **10 MHz bandwidth**

✔ **High-resolution video, >800 TV Lines**

✔ **Supports NTSC and PAL video formats**

✔ **Optical automatic gain control (OAGC)**

✔ **Operates up to 3.2 mi (5.2 km)**

✔ *SMARTS™* **Diagnostics**

✔ **Rack cards are hot-swappable**

✔ **Forever Warranty™**

Description

The S701V Series provides a high-performance video transmission system over a single multimode fiber. The S701V system provides up to 67 dB signal-to-noise ratio with a 10 MHz bandwidth and an optical budget of 13 dB. The high bandwidth is ideally suited for handling feeds with imbedded audio carriers.
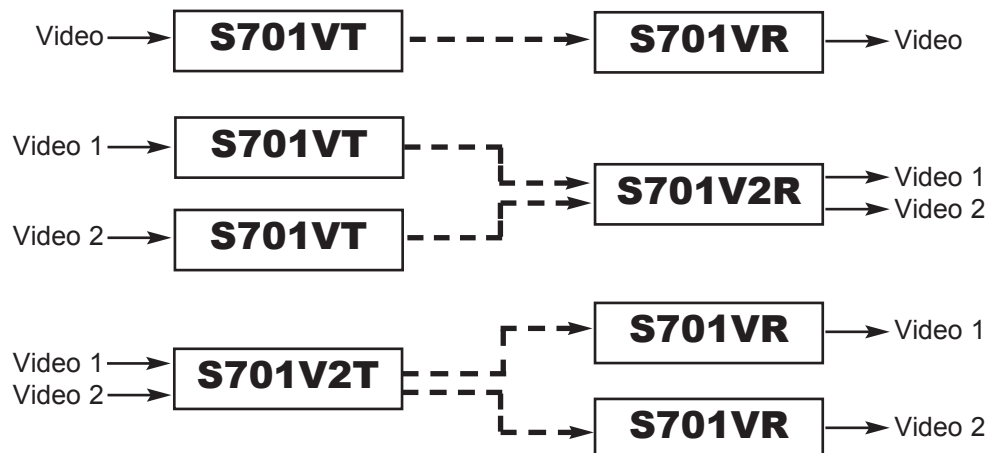
A complete system consists of a transmitter (S701VT) and a receiver (S701VR). The S701V is available in both standalone and rack modules. Rack modules are available in both one- and two-channel versions.

The S701V is compatible with the 170V series.

Basic Model Descriptions

S701V	1-Fiber link, 850 nm
S701V2	2-Fiber link, 850 nm

SYSTEM DIAGRAMS*

Video → S701VT ----→ S701VR → Video

Video 1 → S701VT
Video 2 → S701VT → S701V2R → Video 1 / Video 2

Video 1 / Video 2 → S701V2T → S701VR → Video 1 / S701VR → Video 2

* Note shown: A single S701V2T-R transmitter may also be used to interface with a single S701V2R-R receiver.

VIDEO

Number of Channels:	
S701V:	1
S701V2:	2
Standards Supported:	NTSC, PAL
Video Input Signal:	1.0 V p-p composite
Video Output Signal:	1.0 V p-p composite, unity gain
Input Impedance:	75 Ω
Output Impedance:	75 Ω
Signal-to-Noise Ratio:	>54 dB @ max optical attenuation
Video Bandwidth:	10 MHz
Video Resolution:	>800 TV lines
Differential Phase:	3º
Differential Gain:	3%

ELECTRICAL

Input Voltage:	
Standalone Modules:	13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	
S701VT:	50 mA
S701V2T:	100 mA
S701VR:	200 mA
S701V2R:	400 mA
Rack Module	
Power Factor:	
S701VT:	1
S701V2T:	1
S701VR:	2
S701V2R:	4
Power Consumption:	
S701VT:	0.75 W
S701V2T:	1.5 W
S701VR:	3.0 W
S701V2R:	6.0 W
Card Replacement:	Cards are hot swappable
Power Supply:	613P (DC)

OPTICAL

Wavelength:	850 nm
Optical Mode:	Multimode
Optical Budget*:	13 dB
Operating Distance**:	3.2 mi (5.2 km)
Emitter Type:	LED
Fiber Type:	62.5 µm
Gain Control:	Optical automatic (OAGC)
Modulation Type:	Intensity Modulation

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 Modules

Dimensions:	Length: 5.0 in (127 mm)
	Width: 2.8 in (71 mm)
	Height: 1.5 in (38 mm)
Weight:	0.28 lb (0.13 kg)
Construction:	Plastic
Mounting Method:	Two No. 6 (3 mm) screws

Rack Modules

Module Width:	1 slot, 1.0 in (25.4 mm)
Weight:	
S701V:	0.49 lb (0.22 kg)
S701V2:	0.61 lb (0.28 kg)
Construction:	Aluminum
Finish:	Black semigloss paint

SMARTS™ INDICATORS

Level/Loss™, 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
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 CE c UL us

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