



S700V & S702V

Product Specification

Description: Video Transmission System

Features

- ✓ One- or two-channel versions
- ✓ OAGC circuitry
- ✓ Works with all cameras
- ✓ Transmits up to 3.2 mi (5.2 km)
- ✓ Standalone or rack modules
- ✓ Dual-channel rack modules
- ✓ Forever Warranty™

Description

Fiber Options' S700V Series Video system is designed to transmit one or two channels of baseband composite video up to 3.2 miles (5.2 km). It provides superior performance and reliability at an economical price. The S700V is available in three versions: (1) compact standalone modules providing one video channel on one fiber, (2) rack-mounted cards providing one video channel on one fiber, and (3) rack-mounted cards that support two video channels on two fibers. The S700V Series meets the challenge for a low cost, high performance fiber optic video transmission system. The S700V and S702V model series are compatible with models in the 110V and 110V2 model series.

Basic Model Descriptions

S700V Transmits one channel of video over one multimode fiber

S702V Transmits two channels of video over two multimode fibers

For a complete list of available models, please refer to Table 1.

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SERIES S700V & S702V TECHNICAL INFORMATION

ELECTRICAL

Input Voltage:		Power Consumption	
Standalone Modules	12-16 VAC	@ 14 V:	1.4 W
	12-16 VDC	Heat Equivalent**:	0.08 btu/min (0.02 cal/min)
Rack Units	13.5 - 16 VDC		
Current Requirement:	35 mA		
Rack Module Power Factor:	1*		
Input Power Frequency:	50/60 Hz or DC		

*For an explanation of the Power Factor, please see the product specification for the 515R or 517R racks or the Fiber Finder.

**This represents the conversion of all input power to heat. The actual heat generated will be less.

VIDEO SIGNAL

Number of Channels:		Signal-to-Noise Ratio:	
S700V:	1		> 50 dB @ maximum optical attenuation
S702V:	2	Video Bandwidth:	8 MHz ± 1 dB
Standards Supported:	EIA, CCIR, NTSC, PAL	Frequency Response:	15 MHz
Video Input Signal:	1.0 V p-p composite	Video Resolution:	> 640 TV lines
Input/Output Impedance:	75 Ω	Differential Phase:	< 1.7°
Video Output Signal:	1.0 V p-p composite	Tilt:	< 1.6%
Output Gain:	Unity		

VIDEO INTERCONNECTION

Recommended Maximum Distances		Recommended Cable	
Video Equip to Tx:	≤100 ft (30 m)	Type:	RG59/U coaxial cable (Belden No. 9259 or equivalent)
Rx to Video Equip:	≤100 ft (30 m)		

AGENCY COMPLIANCE

Emissions:	FCC Part 15, ICES-003, AS/NZS 3548, EN55022	Safety:	UL1950, CAN/CSA 22.2, NO.950-95
Immunity:	ENVS0204 EN61000-4-2, 3, 4, 5, 6, 11		

FCC PART 15
COMPLIANT



SERIES S700V & S702V

TECHNICAL INFORMATION

OPTICAL

Wavelength:	850 nm	Modulation Type:	Intensity modulation
Optical Mode:	Multimode	Gain Control:	Optical automatic (OAGC)
Signal Direction:	Tx → Rx	Transmitter Launch Power:	-15 dBm
Optical Budget:	13 dB	Receiver Sensitivity:	-28 dBm
Operating Distance*:	3.2 mi (5.2. km)		
Emitter Type:	LED		
Fiber Type:	62.5 μm		

*Operating distance is approximate and assumes best fiber. It will be affected by the type and number of splices in the fiber.

CONNECTORS

Signal Input/Output:	
Optical:	ST type
Video:	BNC
Power Input:	3-pin screw terminal

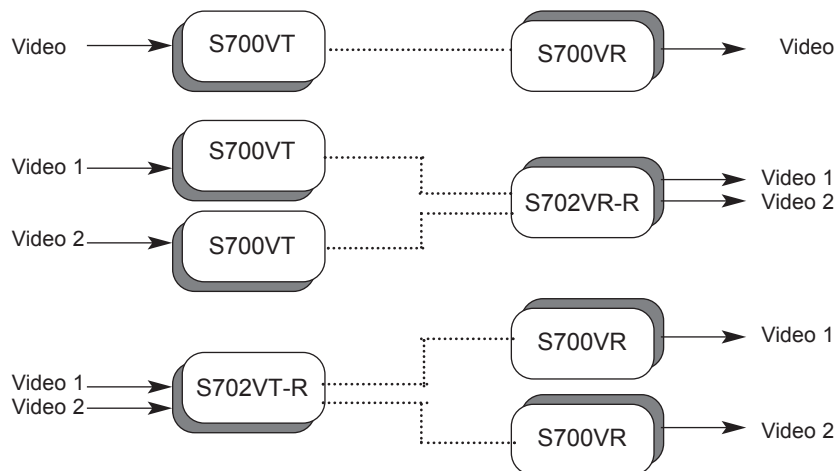
OPTIONS

Power Supply:	Model 610P (AC)
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INDICATORS

Receiver:		Transmitter:	None
Standalone	Level/Loss™		
Rack	Level/Loss™		

FIGURE 1: SYSTEM DIAGRAMS*



* Not shown above: A single S702VT-R transmitter may also be used to interface with a single S702VR-R receiver.

SERIES S700V & S702V TECHNICAL INFORMATION

ENVIRONMENTAL

Temperature Range in Operation:	-40° to +167° F (-40° to +75° C)	Humidity Range in Operation:	0 - 95% relative, noncondensing
Temperature Range in Storage:	-40° to +185° F (-40° to +85° C)	Humidity Range in Storage:	0 - 95% relative, noncondensing

MECHANICAL

Standalone Modules

Dimensions:	Length: 5.0 in (127 mm) Width: 2.62 in (67 mm) Height: 1.54 in (39 mm)
Weight:	10.7 oz (0.31 kg)
Construction:	Steel
Finish:	Grey textured paint
Mounting Method:	4 - No. 6 (3 mm) screws

Rack Modules

Module Width:	1 slot, 1.0 in (25.4 mm)
Weight:	S700VT-R: 0.49 lb (0.22 kg) S702VT-R: 0.61 lb (0.28 kg)
Construction:	Aluminum
Finish:	Black semigloss paint

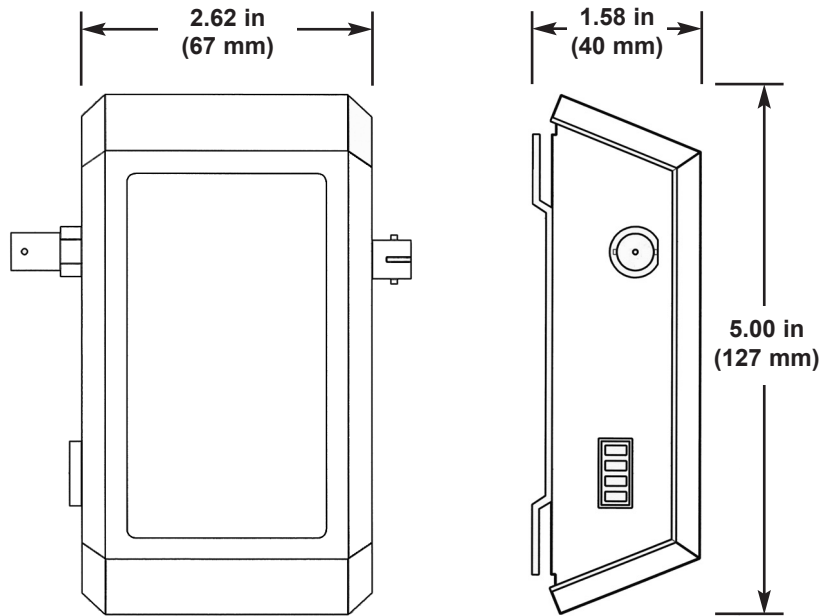
TABLE 1: MODEL VARIATIONS

Model Number	Function	Enclosure Type*	Fiber Size	No. of Fibers	Max. Atten.	Wave-length	Power Supply Model
Standalone Modules							
S700VT	Transmitter	4 X 2 X 1	62.5	1	13 dB	850	610P
S700VR	Receiver	4 X 2 X 1	62.5	1	13 dB	850	610P
S702VT	Transmitter	4 X 2 X 1	62.5	2	13 dB	850	610P
Rack-Mount Modules							
S700VT-R	Transmitter	515R1, 517R1	62.5	1	13 dB	850	powered by rack
S700VR-R	Receiver	515R1, 517R1	62.5	1	13 dB	850	powered by rack
S702VT-R	Transmitter	515R1, 517R1	62.5	2	13 dB	850	powered by rack
S702VR-R	Receiver	515R1, 517R1	62.5	2	13 dB	850	powered by rack

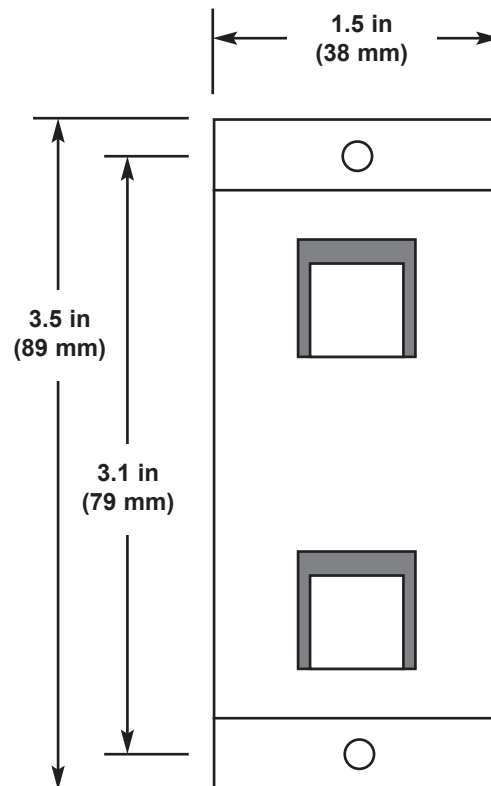
*For exact dimensions, see the MECHANICAL section.

SERIES S700V & S702V
TECHNICAL INFORMATION

FIGURE 2: S700V STANDALONE MODULES



**FIGURE 3: S700V STANDALONE MODULE
REMOVABLE MOUNTING PLATE**



S700V & S702V

Product Specification

THE FOREVER WARRANTY

Fiber Options warrants that, at the time of shipment, the products manufactured by Fiber Options will be free from defects in material and workmanship. Should any defects appear in the product, Fiber Options shall repair or replace the product or supply an equivalent, at its sole discretion. A Return Authorization (RA) number is required to send the unit back in case return is necessary. Return shipments to Fiber Options shall be at the buyer's expense. Fiber Options will return said equipment prepaid via best way.

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