GE
Security

Fiber Optic
Video/Data Transmitters and Receivers

Overview

S731DV and S7731DV video and reverse data links provide digital transmission of video and return multiprotocol data. The link converts analog baseband composite video to 8-bit digital format for transmission over one or two fibers. The links support all major video formats. Return data permits remote control of a PTZ at the camera station. S731DV models feature multimode operation, while S7731DV models operate over single mode fibers. S731DV-PKG kits include a standalone multimode transmitter, a standalone multimode receiver, and two power supplies.

Multiprotocol Data Formats

The unique multiprotocol data design accepts all major data formats. This allows the S731DV and S7731DV to be retained if there is a change of video control systems. Relay/contact closur e is supported from the camera station to the control station.

Data Translation

The data functions include the unique data translation feature, which allows one data format to be input and a different data format to be output. Data formats are selected during installation and can be easily changed in the field via rotary switch.

Superior Diagnostics

The SMARTS™ diagnostic technology provides an extensive set of built-in diagnostic tools including a video test pattern generator that allows failures to be diagnosed from the monitor. LEDs provide a visual indication of the operating status of the equipment.

Standard Features

- One-way video and reverse multiprotocol data transmission over one or two fibers
- Single and multimode models available
- 8-bit video processing
- 520 TV lines video resolution
- Unique data translation function
- Field-selectable data format
- 18 dB (single mode) or 13 dB (multimode) optical budget
- Forward relay/contact closure - 1 channel
- Supports all major data formats
- Standalone or rack configurations
- Standalone package includes a multimode transmitter, a multimode receiver, and two power supplies

Single-Channel Video and Reverse Multiprotocol Data

S731DV, S7731DV and S731DV-PKG

S731DV-PKG

GE
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U.S.
T (561) 998-6100
T 888-GE-SECURITY
888-(437-3287)
F 561 998 6224

Canada
T 519 376 2430
F 519 376 7258

Asia
T 852-2907-8108
F 852-2142-5063

Australia
T 61-3-9239-1200
F 61-3-9239-1299

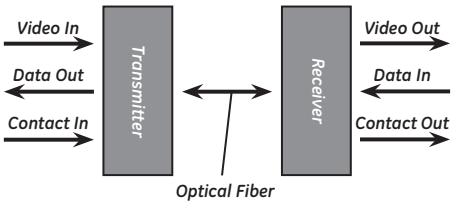
Europe
T 32-2-719-9847
F 32-2-719-9846

Latin America
T 305-593-4301
F 305-593-4300

www.gesecurity.com

613P Power Supply (2 included with S731DV-PKG)	
Input Power	100 - 240 VAC, 60/50 Hz
Output Voltage	13.5 VDC regulated
Output Current	1.3 A maximum
Power Consumption	18 W
AC Connection	Connects to standard wall outlet
Dimensions	1.27" x 2.3" x 4.35"
Weight	0.79 lbs (0.36 kg)

Related Diagram



Specifications

Video	S731DV (Multimode)	S7731DV (Single Mode)
Channels	1 simplex	
Format	NTSC and PAL	
Input/Output Signal	1.0 V pk - pk composite	
Bandwidth	6.5 MHz	
Signal-to-Noise Ratio	>55 dB	
Video Resolution	520 TV lines	
Input/Output Impedance	75 ohms	
Differential Phase	<3°	
Differential Gain	3%	
Data		
Channels	1 simplex (RX to TX)	
Formats	RS-232 (3-wire/5-wire), TTL, RS-422, RS-485 (2-wire), Manchester, Biphase, SensorNet	
Baud Rate	250 kbps to 512 kbps (depending on data format)	
Relay/Contact Closure	1 simplex channel (TX to RX)	
Relay/Contact Rating	0.5 A at 30 VDC	0.5 A at 30 VDC
Bit Error Rate	<1.0E-9	
Optical		
Mode	Multimode	Single Mode
Optical Budget*	13 dB	18 dB
Emitter	LED	Laser
Wavelength	850 nm and/or 1300 nm (depending on model)	1310 nm and/or 1550 nm (depending on model)
Operating Distance**	Up to 3.2 mi (5.2 km) (depending on model)	Up to 37 mi (60 km)
Launch Power	-15 dBm	-10 dBm
Receiver Sensitivity	-28 dBm	
Gain Control	Optical Automatic Gain Control (OAGC)	
Electrical		
Input Power, Standalone Units	24 VAC or 13.5 VDC regulated	
Input Power, Rack Units	13.5 VDC regulated	
Current Requirement	450 mA	
Power Consumption	6 W	
Power Factor	4 (rack units only)	
Protection	Solid-state short circuit protection	
Power Supply	Model 613P (optional)	
Environmental		
Operating Temperature	-40 to 167 °F (-40 to 75 °C)	
Maximum Humidity	95% relative, noncondensing	
Mechanical		
Dimensions (LWD), Standalone Units	5.0" x 4.8" x 1.5" (127 x 122 x 38 mm)	
Dimensions, Rack Units	1 slot (1.0")	
Weight	Standalone 1.20 lbs (0.55 kg); Rack 0.6 lbs (0.27 kg)	
Construction	Polycarbonate (standalone); Aluminum (rack)	

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

MADE IN THE USA

Ordering Information

Use the Configurators below to select the options available for these products.

S731DV□-□ST□□

Product Type	Enclosure	No. of Fibers	Optical Wavelength
T Transmitter	E Standalone	1 1 Fiber	Add **L** here only if ordering High Order Wavelength (2-Fiber units only)
R Receiver	R Rack Card	2 2 Fibers	

S7731DV□-□□□□□

Product Type	Enclosure	Connector Type	No. of Fibers	Optical Wavelength
T Transmitter	E Standalone	FC FC Type	1 1 Fiber	Add **L** here only if ordering High Order Wavelength (2-Fiber units only)
R Receiver	R Rack Card	ST ST Type	2 2 Fibers	

* Optical Budget based on 62.5 µm fiber, for 50/125 µm 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.gesecurity.com

S731DV-2006-09-2

S731DV-PKG

Includes a standalone multimode transmitter, a stand-alone multimode receiver, and two power supplies.