



GE Interlogix Fiber Options

Core Product



S731DV S7731DV



Video and Multi-protocol Reverse Data



Product Specification

Features

- ✓ 8-bit digital video transmission
- ✓ 520 TV lines resolution
- ✓ Multi-protocol Data: RS-232, RS-422, RS-485, Manchester, Biphase, TTL, SensorNet, and DTMF/FSK control signals
- ✓ SMARTS™ Diagnostics
- ✓ 24 VAC/12-16 VDC transmitter power
- ✓ Unique data translation function
- ✓ User-configurable data format
- ✓ Relay/contact closure - 1 forward channel
- ✓ Forever Warranty™

Description

The S731DV/S7731DV Video and Data Link provides digital transmission of video and return multi-protocol data. The link converts analog baseband composite video to 8-bit digital format for transmission over fiber. The S731DV and S7731DV support all major video formats. Return data permits remote control of a PTZ at the camera station.

The unique multi-protocol data design accepts all major data formats. This allows the S731DV/S7731DV to be retained if there is a change of video control systems. The unit also features the very valuable data translation function that allows input of one data format and output of a different format. Relay/contact closure is supported from the camera station to the control station.

SMARTS™ diagnostic technology provides extensive built-in system diagnostic tools including diagnostic LEDs and on-screen monitor displays.

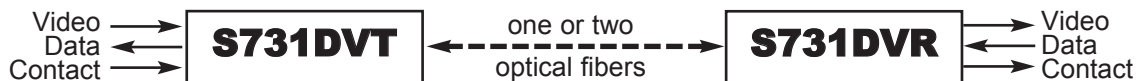
Basic Multimode Models

- S731DV-1** 1-Fiber link, 850/1300 nm
- S731DV-2** 2-Fiber link, 850 nm
- S731DV-2L** 2-Fiber link, 1300 nm

Basic Single-Mode Models

- S7731DV-1** 1-Fiber link, 1310/1550 nm
- S7731DV-2** 2-Fiber link, 1310 nm
- S7731DV-2L** 2-Fiber link, 1550 nm

SYSTEM DIAGRAM



VIDEO

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: >55 dB

Video Bandwidth: 6.5 MHz
 Video Resolution: 520 TV lines
 Differential Phase: 0.7°
 Differential Gain: 2%

SERIES S731DV AND S7731DV

DATA

Number of Channels:	1
I/O Data Formats:	RS-232 (3-wire and 5-wire), TTL, RS-422, Manchester, Biphase, RS-485 (2-wire) with 200 mV, 1 and 2 V offsets, DTMF/FSK (24-bit digital) odBu
Baud Rate:	
RS-232:	250 kbps
Manchester:	250 kbps
Biphase:	250 kbps
RS-422:	512 kbps
RS-485:	512 kbps
TTL:	512 kbps
DTMF/FSK:	15 kHz
Relay/Contact Closure:	1 forward channel (TX to RX)
Relay/Contact Rating:	0.5 A @ 30 VDC
Bit Error Rate:	<10 ⁻⁹
Maximum Distance:	The maximum distance from the CCTV control system components to the fiber units is governed by the control system.

ELECTRICAL

Input Voltage:	
Standalone Modules:	24 VAC ± 10% 13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	450 mA
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

OPTICAL

Optical Mode:	
S731DV-1, -2:	Multimode
S731DV-2L:	Multimode
S7731DV-1, -2:	Single Mode
S7731DV-2L:	Single Mode
Optical Budget:	
S731DV-1, -2, -2L:	13 dB standard*
S7731DV-1, -2, -2L:	18 dB standard
Gain Control:	Optical automatic (OAGC)
Emitter Type:	Multimode: LED Single Mode: Laser

Wavelength:	
S731DV-1:	850/1300 nm
S731DV-2:	850 nm
S731DV-2L:	1300 nm
S7731DV-1:	1310/1550 nm
S7731DV-2:	1310 nm
S7731DV-2L:	1550 nm
Operating Distance**:	
S731DV-1, -2:	3.2 mi (5.2 km)
S731DV-2L:	11 mi (18 km)
S7731DV-1, -2:	28 mi (45 km)
S7731DV-2L:	37 mi (60 km)
Fiber Type:	Multimode: 62.5 µm Single Mode: 8.3 µm
Transmitter Launch Power:	-15 dBm
Receiver Sensitivity:	-28 dBm

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: 5.05 in (128 mm) Width: 4.84 in (123 mm) Height: 1.63 in (41 mm)
Weight:	1.21 lb (0.55 kg)
Construction:	Steel
Finish:	Gray textured paint
Mounting Method:	6 No. 6 (3 or 3.5 mm) screws
Rack Modules	
Module Width:	1 slot, 1.0 in. (25.4 mm)
Weight:	0.55 lb (0.25 kg)
Construction:	Aluminum
Finish:	Black semigloss paint

SMARTS™ INDICATORS

Level/Loss™, Video, Data Input, Data Output, Enable Configuration

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 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.fiberoptions.com.

FCC PART 15
COMPLIANT



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