



# GE Interlogix Fiber Options

Core Product 

# S730DV

# S7730DV

## Video and Two-Way Multi-protocol Data



## Product Specification

### Features

- ✓ 10-bit digital video transmission
- ✓ 560 TV lines resolution
- ✓ SMARTS™ Diagnostics
- ✓ Multi-protocol data: RS-232, RS-422, RS-485, Manchester, Biphasic, TTL, SensorNet
- ✓ Unique data translation function
- ✓ User-configurable data format
- ✓ Meets or exceeds EIA/TIA-250C medium haul standard
- ✓ Relay/contact closure - 1 forward channel
- ✓ Forever Warranty™

### Description

The revolutionary S730DV fiber link converts analog video to digital video and supports two-way transmission of all major data formats. Digital transmission of the video component along with a signal-to-noise ratio of >60 dB assures clean, noise-free video at the receiver. Moreover, the S730DV supports all major video formats.

With multi-protocol data, it is not necessary to order or stock different models to support different data formats. Also, the forward data path (from Tx to Rx) can be set to function as a relay. 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.

Fiber Options' unique SMARTS™ Technology provides an extensive array of built-in diagnostic functions.

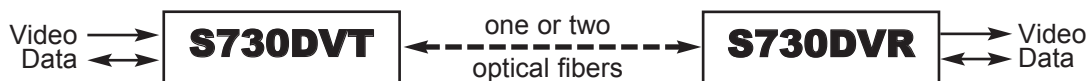
### Basic Multimode Models

- S730DV-1** 1-Fiber link, 850/1300 nm
- S730DV-2** 2-Fiber link, 850 nm
- S730DV-2L** 2-Fiber link, 1300 nm

### Basic Single-Mode Models

- S7730DV-1** 1-Fiber link, 1310/1550 nm
- S7730DV-2** 2-Fiber link, 1310 nm
- S7730DV-2L** 2-Fiber link, 1550 nm

### SYSTEM DIAGRAM



### VIDEO

Video performance 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 S730DV AND S7730DV

### DATA

Number of Channels:	1 bidirectional
I/O Data Formats:	RS-232 (3-wire and 5-wire), TTL; RS-422, Manchester, Biphase, Sensornet™, RS-485 (2-wire and 4-wire) with 200 mV, 1 and 2 V offsets & forward relay option
Baud Rate:	
RS-232:	250 kbps
Manchester/Biphase:	250 kbps
RS-422, RS-485, TTL:	512 kbps
Relay Contact Closure:	1 forward channel (TX to RX)
Relay/Contact Rating:	0.5 A @ 30 VDC
Bit Error Rate:	<10 <sup>-9</sup>
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 Transmitter:	24 VAC ± 10% 13.5 VDC, regulated
Standalone Receiver:	13.5 VDC, regulated
Rack Modules:	13.5 VDC, regulated
Current Requirement:	650 mA
Rack Module Power Factor:	6
Power Consumption:	8 W
Protection:	Solid-state short circuit protection (no fuse required)
Card Replacement:	Cards are hot swappable
Power Supply:	613P

### OPTICAL

Optical Mode:	
S730DV-1, -2, -2L:	Multimode
S7730DV-1, -2, -2L:	Single Mode
Wavelength:	
S730DV-1:	850/1300 nm
S730DV-2:	850 nm
S730DV-2L:	1300 nm
S7730DV-1:	1310/1550 nm
S7730DV-2:	1310 nm
S7730DV-2L:	1550 nm
Optical Budget:	Multimode: 13 dB* Single Mode: 18 dB
Emitter Type:	Multimode: LED Single Mode: Laser

Operating Distance*:	
S730DV1, 2:	3.2 mi (5.2 km)
S730DV-2L:	11 mi (18 km)
S7730DV-1, 2:	28 mi (45 km)
S7730DV-2L:	37 mi (60 km)
Gain Control:	Optical automatic (OAGC)
Fiber Type:	Multimode: 62.5 μm Single Mode: 8.3 μm
Launch Power:	
S730DV-1, -2, -2L:	-15 dBm
S7730DV-1, -2, -2L:	-10 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 Transmitter

Dimensions:	Length: 4.0 in (102 mm) Width: 4.55 in (116 mm) Height: 1.95 in (50 mm)
Weight:	0.75 lb (0.34 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

#### Standalone Receiver

Dimensions:	Length: 9.31 in (236 mm) Width: 6.33 in (161 mm) Height: 1.15 in (29 mm)
Weight:	1.36 lb (0.61 kg)
Construction:	Aluminum
Finish:	Black semigloss paint
Mounting Method:	4 No. 6 (3 mm) screws

### SMARTS™ INDICATORS

Level/Loss™, Video, Data Input/Output, Enable Configuration	
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### 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
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](http://www.fiberoptions.com).



For additional information about this product, refer to the Fiber Options Web site at [www.fiberoptions.com](http://www.fiberoptions.com).