



# GE Interlogix Fiber Options

Core Product



# S711D



# S7711D

## Multi-protocol Data System



## Product Specification

### Features

- ✓ Multi-protocol data: RS-232, RS-422, RS-485  
Manchester, Biphasic, TTL, SensorNet
- ✓ User-configurable data format
- ✓ Unique data translation function
- ✓ SMARTS™ Diagnostics
- ✓ Optical budget 18 dB
- ✓ Hot swappable
- ✓ Solid-state circuit protection
- ✓ Forever Warranty™

### Description

The S711D multimode link and S7711D single-mode link handle all major data formats in both directions, including SensorNet™. It is not necessary to order or stock different models to support different data formats. If an installation changes data formats, simply reconfigure the S711D or S7711D.

The use of state-of-the-art digital technology throughout the S711D and S7711D includes Fiber Options' unique SMARTS™ Technology, providing more diagnostic functions than previously possible. In addition, the integrity of the data paths can be tested with a built-in data transmission test pattern generator. It is not necessary to hook up a data source to test the link.

The S711D and S7711D also feature the very valuable data translation function that allows input of one data format and output of a different format.

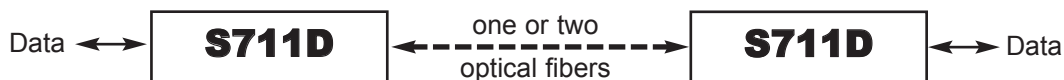
### Basic Multimode Models

<b>S711D-1</b>	1-Fiber link. 850/1300 nm
<b>S711D-2</b>	2-Fiber link, 850 nm
<b>S711D-2L</b>	2-Fiber link. 1300 nm

### Basic Single-Mode Models

<b>S7711D-1</b>	1-Fiber link, 1310/1550 nm
<b>S7711D-2</b>	2-Fiber link, 1310 nm
<b>S7711D-2L</b>	2-Fiber link, 1550 nm

### SYSTEM DIAGRAM



### DATA

Number of Channels:	1		RS-485 (2- wire and 4-wire) with 0.2, 1 & 2 V offsets
Data Formats:	RS-232 3-wire, no handshake	Baud Rate:	RS-232 = 250 kbps
	RS-232 5-wire, w/handshake		Manchester = 250 kbps
	TTL, RS-422, Manchester,		Biphase = 250 kbps
	Biphase, SensorNet™,		RS-422 = 512 kbps

## SERIES S711D AND S7711D

### DATA, Continued

Baud Rate:  
RS-485: 512 kbps  
TTL: 512 kbps  
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: 13.5 VDC, regulated  
12 - 16 VAC  
Rack Modules: 13.5 VDC, regulated  
Current Requirement: 350 mA  
Power Consumption: 5 W  
Rack Module  
Power Factor: 3  
Protection: Solid-state short circuit protection (no fuse required)  
Card Replacement: Cards are hot swappable  
Power Supply: 610P (AC)  
613P (DC)

### OPTICAL

Optical Mode:  
S711D-1: Multimode  
S711D-2: Multimode  
S711D-2L: Multimode  
S7711D-1: Single Mode  
S7711D-2: Single Mode  
S7711D-2L: Single Mode  
Wavelength:  
S711D-1: 850/1300 nm  
S711D-2: 850 nm  
S711D2-L: 1300 nm  
S7711D-1: 1310/1550 nm  
S7711D-2: 1310 nm  
S7711D-2L: 1550 nm  
Optical Budget:  
Multimode: 18 dB\*  
Single Mode: 18 dB  
Emitter Type:  
Multimode: LED or Laser  
Single Mode: Laser

### Operating Distance\*\*:

S711D-1: 4.5 mi (7.2 km)  
S711D-2: 4.5 mi (7.2 km)  
S711D-2L: 15 mi (25 km)  
S7711D-1: 28 mi (45 km)  
S7711D-2: 28 mi (45 km)  
S7711D-2L: 37 mi (60 km)

### Fiber Type:

Multimode: 62.5  $\mu$ m  
Single Mode: 8.3  $\mu$ m  
Gain Control: Optical automatic (OAGC)  
Tx Launch Power: - 14 dBm minimum  
Rx Sensitivity: - 32 dBm minimum

### 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: 0.22 lb (0.1 kg)  
Construction: Plastic  
Mounting Method: 2 No. 6 (3 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™, Data Input, Data Output, Enable Configuration

### 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  $\mu$ m fiber, for 50/125  $\mu$ m 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).