# Fiber Optic Data Transmitters and Receivers

### Overview

The Enhanced Two-Way Multiprotocol data transceivers provide two-way transmission of multiprotocol data over one or two fibers. S711D models feature multimode operation, while S7711D models operate over single mode fiber.

### **Data Translation**

This equipment also features the unique data translation function that allows input of one data format and output of a different format. Data formats are selected during installation and can be easily changed in the field via rotary switch.

## **Superior Diagnostics**

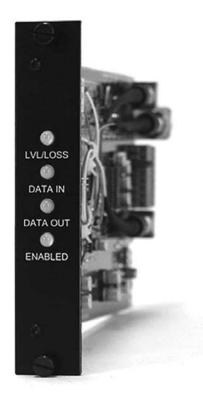
The SMARTS™ diagnostic technology provides an extensive array of system status LEDs. The integrity of the data paths can be tested with a built-in data transmission test generator. It is not necessary to connect to an external data device.

## Standard Features

- Two-way data transmission over one or two fibers
- Single and multimode models available
- Supports multiprotocol data formats including RS-232, TTL, RS-422, RS-485, Manchester, Biphase, and SensorNet
- Unique data translation function
- User-configurable data format
- 18 dB optical budget
- Optical AGC
- SMARTS™ diagnostics
- Standalone and rack configurations

## Enhanced Two-Way Multiprotocol Data S711D and S7711D







## GE Security

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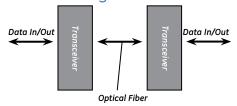
Europe T 44-113-238-1668 F 44-113-253-8121

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

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## Related Diagram



## **Specifications**

Data	S711D (Multimode)	S7711D (Single Mode)
Channels	1 duplex	
Formats	RS-232 (3-wire/5-wire), TTL, RS-422, RS-485 (2-wire/4-wire), Manchester, Biphase, SensorNet	
Baud Rate	250 kbps to 51 2 kbps (depending on data format)	
Bit Error Rate	<1.0E-9	
Optical		
Mode	Multimode	Single Mode
Optical Budget*	18 dB	
Emitter	LED or Laser	Laser
Wavelength	850 nm and/or 1300 nm (depending on model)	1310 nm and/or 1550 nm (depending on model)
Operating Distance**	Up to 15 mi (25 km) (depending on model)	Up to 37 mi (60 km) (depending on model)
Transmitter Launch Power	-10 dBm	
Receiver Sensitivity	-28 dBm	
Gain Control	Optical Automatic Gain Control (OAGC)	
Electrical		
Input Power	13.5 VDC regulated	
Current Requirement	350 mA	
Power Consumption	5 W	
Power Factor	3	
Protection	Solid-state short circuit protection	
Optional Power Supply	Model 613P	
Environmental		
Operating Temperature	-40 to 167 °F (-40 to 75 °C)	
Maximum Humidity	95% relative, noncondensing	
Mechanical		
Dimensions (LWD, Standalone Units)	5.0" × 2.8" × 1.5" (127 × 71 × 38 mm)	
Dimensions, Rack Units	1 slot (1.0")	
Weight	Standalone 0.22 lbs (0.1 kg); Rack 0.55 lbs (0.25 kg)	
Construction	Polycarbonate (standalone); Aluminum (rack)	

## AGENCY COMPLIANCE

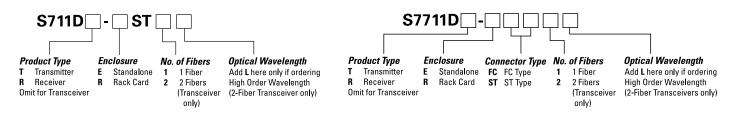


#### MADE IN THE USA

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

## **Ordering Information**

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



<sup>\*</sup> Optical Budget based on 62.5 µm fiber, for 50/125 µm fiber subtract 3 dB.

As a company of innovation, GE Security reserves the right to change product specifications without notice. For the latest product specifications, visit GESecurity online at www.GESecurity.com or contact your GE Security sales representative. S711D-2006-09-2



<sup>\*\*</sup> 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