# GE Security

# Fiber Optic Data Transmitters and Receivers

## Overview

The S710D data transceiver provides two-way transmission of multiprotocol data over two multimode fibers.

### **Data Translation**

The S710D 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 two multimode fibers Supports multiprotocol data formats including RS-232, TTL, RS-422, RS-485, Manchester, Biphase, and SensorNet
- · Unique data translation function
- User-configurable data format
- 13 dB optical budget
- Optical AGC
- SMARTS™ diagnostics
- Standalone and rack configurations

# Two-Way Multiprotocol Data S710D







# GE Security

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

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

www.gesecurity.com

© 2005 General Electric Company All Rights Reserved

## **Specifications**

Data	
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 512 kbps (depending on data format)
Bit Error Rate	<1.0E-9
Optical	
Mode	Multimode
Optical Budget*	13 dB
Emitter	LED
Wavelength	850 nm
Operating Distance**	3.2 mi (5.2 km)
Gain Control	Optical Automatic Gain Control (OAGC)
Transmitter Launch Power	-17 dBm
Receiver Sensitivity	-30 dBm
Electrical	
Input Power	13.5 VDC regulated
Current Requirement	220 mA
Power Consumption	3.5 W
Power Factor	2
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" x 2.8" x 1.5" (127 x 71 x 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)

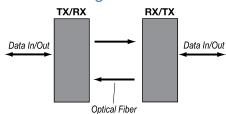
#### **AGENCY COMPLIANCE**



#### MADE IN THE USA

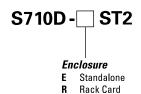
Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

## Related Diagram



## **Ordering Information**

Use the Configurator below to select the options available for this product.



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. S710D-2006-09-2



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

<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