

## Overview

The S751DA and S7751DA fiber links provide two-way transmission of audio, multiprotocol data, and contact closure over one or two single mode or multimode fibers.

## Digital Processing

Digital processing of the audio signal along with an audio signal-to-noise ratio >90dB allows the audio output to drive balanced or unbalanced loads and maintain constant audio levels.

## Data Translation

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. Data formats are selected during installation and can be easily changed in the field via rotary switch.

## Superior Diagnostics

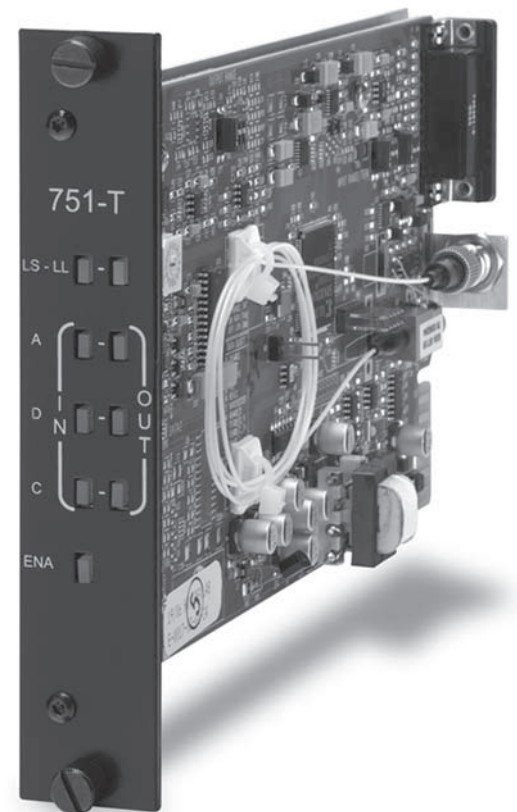
The SMARTS™ diagnostic technology provides an extensive set of diagnostic tools including an audio test generator to verify audio channel operation. LEDs provide a visual indication of the operating status of the audio, data, and contact channels as well as the optical signal strength.

# Two-Way Audio, Multiprotocol Data and Contact Closure

S751DA and S7751DA

## Standard Features

- Two-way audio, data and contact closure transmission over one or two single mode or multimode fibers
- 24-bit audio processing
- Unique data translation function
- Local or remote user-selectable data format
- Supports multiprotocol data formats
- Relay/contact closure - 1 duplex channel
- Built-in audio test generator
- Diagnostic LEDs



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## Specifications

Audio	S751DA (Multimode)	S7751DA (Single Mode)
Channels	1 duplex	
Input Signal	17.4 V pk - pk, +18 dBu max.	
Input Impedance	600 ohms or 100k ohms	
Bandwidth	20 Hz to 20 kHz	
Audio Sampling Rate	52 kHz	
Signal-to-Noise Ratio	>90 dB	
Total Harmonic Distortion	<0.006%	

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	
Relay/Contact Closure	1 duplex channel	
Relay Contact Rating	1 A at 30 VDC	

Optical	Multimode	Single Mode
Mode	Multimode	Single Mode
Optical Budget*	13 dB	18 dB
Emitter	Laser	
Operating Distance**	11 mi (18 km) (depending on model)	37 mi (60 km) (depending on model)
Wavelength	850 nm and/or 1300 nm (depending on model)	1310 nm and/or 1550 nm (depending on model)
Gain Control	Optical Automatic Gain Control (OAGC)	

Electrical	
Input Power	13.5 VDC regulated
Current Requirement	500 mA
Power Consumption	6.75 W
Power Factor	4
Protection	Solid-state short circuit protection

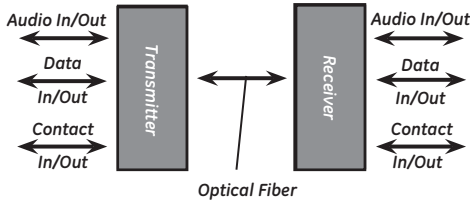
Environmental	
Operating Temperature	-40 to 167 °F (-40 to 75 °C)
Maximum Humidity	95% relative, noncondensing

Mechanical	
Dimensions, Rack Units	1 slot (1.0")
Weight	Standalone 0.7 lbs (0.32 kg)
Construction	Aluminum

AGENCY COMPLIANCE **MADE IN THE USA**  
**FCC** PART 15 COMPLIANT **CE** **UL** US

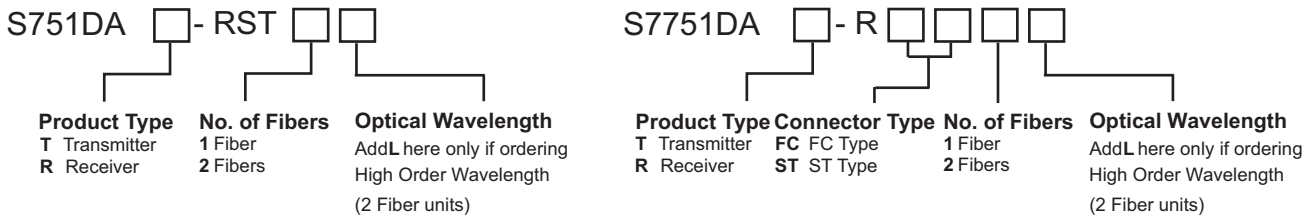
Complies with FDA Performance Standard for Laser Products,  
Title 21, Code of Federal Regulations, Subchapter J

## Related Diagram



## Ordering Information

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



\* Optical Budget based on 62.5 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.gesecurity.com

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.  
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imagination at work