

# S751DA

Fiber Optic Audio and Data with Contact Closure

## Overview

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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

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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

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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

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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.



## Standard Features

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- 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

# S751DA

## Fiber Optic Audio and Data with Contact Closure

### Specifications

Audio	
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	
Mode	Multimode or Single Mode
Optical budget	Multimode 13 dB; Single Mode 18 dB
Emitter	Laser
Wavelength	Multimode 850nm and/or 1300 nm; Single Mode 1310 nm and/or 1550 nm (depending on model)
Operating distance	Multimode up to 11 mi. (18 km); Single Mode 37 mi. (60 km) (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 (rack units only)
Protection	Solid-state short circuit protection
Environmental	
Operating temperature	-40 to 167°F (-40 to 75°C)
Maximum humidity	95% relative, noncondensing
Standards	
Emmissions	FCC Part 15, ICES-003, AS/NZS 3548, EN55022
Immunity	ENV50204, EN61000-4-2, -3, -4, -5, -6, -11
Safety	UL 1950, CAN/CSA 22.2, NO. 950-95
Laser safety	EN60825
Mechanical	
Dimensions	1 slot (1.0 in.)
Weight	0.7 lbs (0.32 kg)
Construction	Aluminum

### Ordering Information

Part No.	Description
S751DA	Fiber Optic Audio and Data with Contact Closure

