

## Aiphone/Dukane Intercom System

**FEATURES:**

- Surface Mount Technology (SMT) for High Reliability and Repeatability
- Hot Swappable Cards
- Laser Based Back-Biased Photo Detection Circuitry for Stable Optical Output Over Full Temperature Range (Singlemode)
- ST™, FC Optical Connector
- 10 Hz to 15 KHz Audio Bandwidth
- Single Direction Contact Closure
- Digital Transmission technology
- SpectraSmart™ Compatible
- Meets NEMA TS1/TS2 and Caltrans Specifications
- Utilizes Switching, Internal Power Supplies
- LED Status Indicators Provide Rapid Indication of Critical Operating Parameters
- Automatically Resettable Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required
- Three Pin Terminal Blocks for audio & contact signals

**DESCRIPTION:**

The ST/SR-1B1C/1B series products incorporate an all-digital transmission technology that transmits/receives intercom-compatible fiber optic audio transmission over one multimode or singlemode fiber. This product family supports intercom products from both Aiphone and Dukane. A push-to-talk contact is also included from the door panel to the entry control panel. The product's capabilities are further enhanced by its compatibility with Meridian's optional PC based SpectraSmart™ Network Management and Diagnostic software system. SpectraSmart™ supervises the operating parameters of the transmission system such as status on the digital carrier signal, voltage, temperature, audio, optical levels, etc. See the SpectraSmart™ brochure for more details.

**Optional features include:**

- Video transmission
- Additional bi-directional audio channel
- Multi-protocol data transmission

**CONFIGURATIONS:**

The ST/SR-1B1C/1B product family is available as rack mount cards that can be installed in all of Meridian's card chassis, desk chassis and 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires no user adjustments & features superior quality and performance.

**MARKETS:**

- ✓ Security and Surveillance
- ✓ Intercom Systems
- ✓ Nurse Call Stations
- ✓ Residential Intercom

## SPECIFICATIONS:

### Audio

I/O Impedance.....	4-8 Ohm Unbalanced
I/O Level.....	-40 to +15 dBm
Frequency Responce.....	10 Hz to 15 KHz
THD.....	<0.1%, 1 KHz @ max modulation
SNR.....	>65 dB (weighted)*

### Contact Closure

Rate .....	10 Hz.(Per Channel)
Contact Rating .....	0.3A, 30V AC / DC
Contact Bounce Time .....	5 ms

### Optical

Fiber Data Rate .....	250 Mb/s
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### Connectors

Audio.....	3 Pin Terminal Block
Contact .....	3 Pin Terminal Block
Optical.....	STTM , FC
Power.....	2 Pin Terminal Block (SR-500 chassis)

### Power \*\*

Card.....	3.2 W
Module.....	130 mA @ 24 VAC
Adapter for SR-1000/S.....	Model PS-100

\* Measured @ 1Km (multimode), @ 10Km (singlemode)

\*\* Due to variations of drivers and diagnostic options power shown at maximum measurements

### Indicators (LEDs)

1 - Green .....	Power On
1 - Bi-color .....	TX Carrier/ Laser Over Current
1 - Bi-color .....	RX Carrier - Present / Error
2 - Bi-Color .....	Audio Present / Overmodulation
2 - Green .....	Contact Closure Present

### Physical

Dimensions (Card) .....	160 mm (6.3") L, 127 mm (5") W 20mm (0.80") W
Weight (Card) .....	450 gms (16 Oz)
No. of Slots .....	1
Module .....	See SR-500 Brochure

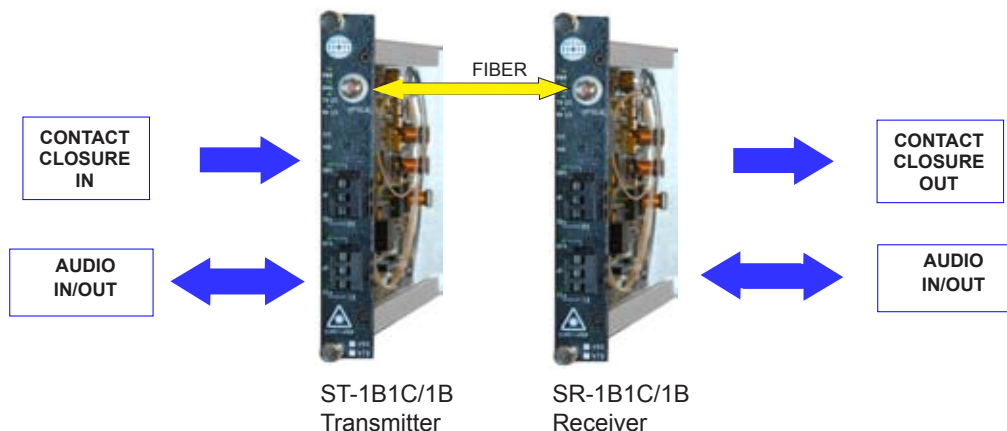
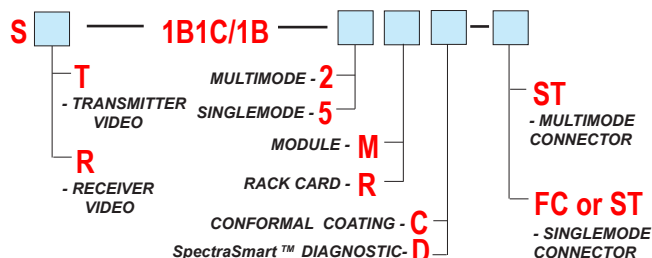
### Enviromental

Operating Temperature ...	-34°C to +74°C
Storage Temperature .....	-55°C to +85°C
Relative Humidity .....	0 to 95% Non-condensing

### Quality

MTBF .....	>210,000 hours @ Ground Fix 35°C per MIL217F
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### Part Numbers:



## OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP Laser) 62.5 / 125	-5	-26	21	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125	-5	-26	21	1310 / 1550	ST, FC	24