

Digitally Encoded One 24-Bit Audio and One Contact Closure



FEATURES:

- Real Time Audio & Contact Closure Transmission
- One Channel of 24-Bit Audio and Contact Closure
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Laser Based Systems for Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- *SpectraSmart*™ PC Based Network Management
- *SpectraView*™ Fault / Setup Firmware
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for table Optical Output Over Full Temperature Range
- Meets EIA RS-170, RS-343A Formats
- Screw Terminal Type Connectors for Audio and Contact Closure

DESCRIPTION:

This fiber-optic card is in the DigiSlim™ product family and incorporates an all-digital encoding technology. It transmits one 24-Bit Audio and one Contact Closure over single fiber.

These single fiber, laser based systems are available in both, Multimode and Singlemode modules.

The Contact Closure channel can be configured as either Normally Open (N.O.) or Normally Closed (N.C.).

The versatility of the ST/SR-1A1C-x system is enhanced by *SpectraView*, an On-Screen Video Diagnostic / Setup firmware system and *SpectraSmart*, an optional PC Based Network Diagnostic System. *SpectraView* monitors the integrity of the video signal and the fiber link. A break in the fiber path will cause a loss of fiber alarm to be displayed on an associated monitor. *SpectraView* is easy to use, always active and eliminates the need for additional test equipment. *SpectraView* also includes a selectable on-board audio & data test signal generator with built-in local and remote loop-back functions. If greater diagnostic capability is required, the ST/SR-1A1C-x system is also available with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* or *SpectraView* brochures for additional details.

CONFIGURATIONS:

The DigiSlim family products are available as rack mount cards and modules which can be installed in any of Meridian's desk chassis or in 19" racking frames. These systems can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be transformed in to a standalone module by utilizing an SR-500 (standard configuration) or an SR-1000 chassis.

MARKETS:

- ✓ Security and surveillance
- ✓ Access Control

SPECIFICATIONS:

Audio

| | |
|--------------------------------|---|
| I/O Impedance | 600 Ohm (Bal.), 47 KOhm (Un Bal.) |
| Frequency Response | 10 Hz to 20 KHz |
| SNR | >90dB (Weighted)@ 1 KHz |
| In/Out Level | -8 to +8 dBm (4V _{p-p} max.) (+18 dBm available on request) |
| Total Harmonic Distortion | <0.01% @ 1KHz |
| Resolution | 24 Bit |

Contact Closure

| | |
|---------------------------|--|
| Formats | Normally Open (N.O.) or Normally Closed (N.C.) - jumper selectable |
| Rate | 10 Hz.(Per Channel) |
| Contact Rating | 0.3A, 30V AC / DC |
| Contact Bounce Time | 5 ms |

Optical

| | |
|-----------------------|----------|
| Fiber Data Rate | 250 Mb/s |
|-----------------------|----------|

Connectors

| | |
|--------------------------------|---------------------------------|
| Optical | ST, FC |
| Power (module) | See SR-500 Brochure for details |
| Data/Audio/Contact closure ... | Screw Terminal |

Power **

| | |
|------------|---------|
| Card | 6 Watts |
|------------|---------|

Indicators (LEDs)

| | |
|--------------------|--------------------------------|
| 1 - Green | Power On |
| 1 - Bi-color | TX Carrier/ Laser Over Current |
| 1 - Bi-color | RX Carrier - Present / Error |
| 1 - Bi-Color | Audio Present / Overmodulation |
| 1 - 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 chassis Brochure |

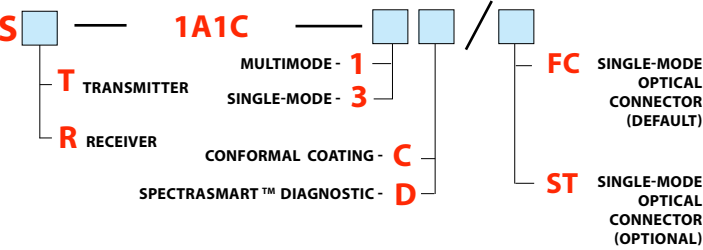
Enviromental

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

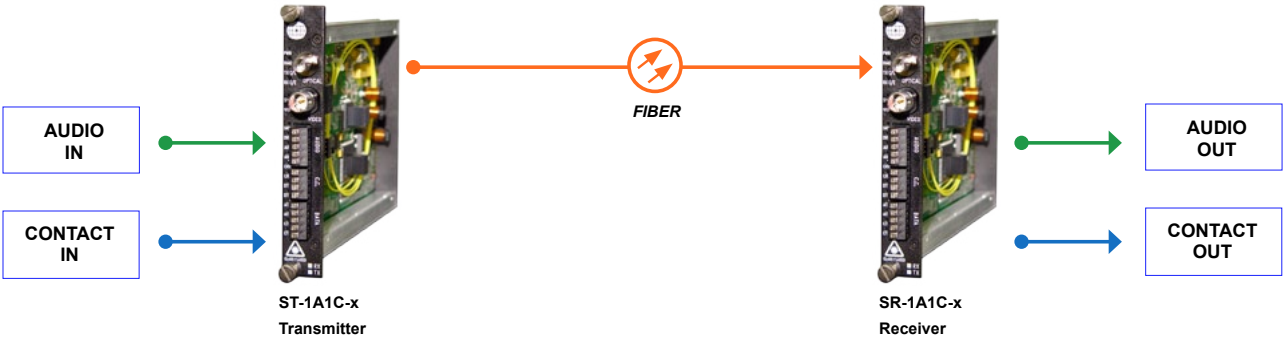
Quality

| | |
|------------|---|
| MTBF | >170,000 hours @ Ground Fix 35°C per MIL217F |
|------------|---|

Part Numbers:



* measured @ max. optical budget
** Due to variations of drivers and diagnostic options, power shown @ max value



OPTICAL:

| Meridian Optical Code | Fiber Type/Size (um) | Optical Output (dBm) | Receiver Sensitivity (dBm) | Optical Budget (dB) | Wavelength (nm) | Optical Connector | Optical Dynamic Range (dB) | Max Distance (Km) |
|-----------------------|------------------------------------|----------------------|----------------------------|---------------------|-----------------|-------------------|----------------------------|-------------------|
| 1 | Multimode (FP Laser) 62.5 / 125 | -5 | -26 | 21 | 1300 | ST | 24 | 7 |
| 3 | Single-mode (FP Laser) 9 / 125 | -5 | -26 | 21 | 1310 | ST, FC | 24 | 60 |