### ST/SR-1W1B1C/1B1C-x

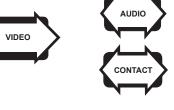
# DigiSlim™

Aiphone AX Compatible Digitally Encoded Fiber Transmission System with One Channel Video and Bi-directional Audio and Contact Closures



### FEATURES:

- Aiphone AX system compatible
- 10 Bit Video Digital Encoding
- Real Time Video, Audio & Data Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Bi-Directional Audio, Contact Closures
- 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<sup>™</sup> PC Based Network Management
- SpectraView<sup>™</sup> 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 Stable Optical Output Over Full Temperature Range.
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- Screw Terminals for Audio & Contacts



### **DESCRIPTION:**

This card is designed specifically to work seamlessly with the Aiphone AX intercom system on one multimode or singlemode optical fiber. The card features 1 channel of 10-bit, high resolution video, 1 Bi-directional channel of intercom-compatible fiber optic audio and 1 Bi-directional channel of Contact Closure. The versatility of this card 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 while loss of video sync will generate a loss of sync alarm on the monitor.

SpectraView is easy to use, always active and eliminates the need for additional test equipment. SpectraView also includes a selectable on-board audio test signal generator with built-in local and remote loop-back functions. In addition a video grey scale function is included to assist in monitor and system setup. If greater diagnostic capability is required, the DigiSlim series 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 product family is available as rack mount cards and modules that can be installed in any of Meridian's desk chassis or in 19" racking frames. This system 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 subrack frames.

### **MARKETS:**

- Security and surveillance
- Access Control

# SPECIFICATIONS: -

## Video

| Format             | NTSC, PAL, SECAM              |
|--------------------|-------------------------------|
| Voltage/Impedance  | 1 Vp-p, 75 Ohm, 1.5 Vp-p max. |
| Bandwidth          | 5 Hz to 6.8 MHz @ -3 dB       |
| Differential Gain  | <0.6%                         |
| Differential Phase | <0.3°                         |
| SNR                | >67 dB (weighted)*            |
| Return Loss        | >30 dB                        |
| Field Tilt         | < 0.5%                        |
|                    |                               |

## **Contact Closure**

# Rate10 Hz.(Per Channel)Contact Rating0.3A, 30V AC / DCContact Bounce Time5 ms

# Audio

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

# **Optical**

| Fiber | Data | Data |       | 250 | Mb/s  |
|-------|------|------|-------|-----|-------|
| FIDEI | Data | Nate | ••••• | 250 | 110/5 |

## **Connectors**

| Video                  | 75 Ohm BNC (Gold Center Pin)    |
|------------------------|---------------------------------|
| Optical                | ST, FC                          |
| Power (module)         | See SR-500 Brochure for Details |
| Audio/Contact Closures | 14pin Screw Terminals           |

\* measured @ max. optical budget

\*\* Due to variations of drivers and diagnostic options, power shown @ max value

### Power \*\*

Card .....

## **Indicators (LEDs)**

| - Green    | Power On                       |
|------------|--------------------------------|
| - Bi-color | TX Carrier/ Laser Over Current |
| - Bi-color | RX Carrier - Present / Error   |
| - Bi-color | Video Present / Overload       |
| - Green    | Sync. Present                  |
| - Bi-Color | Audio Present / Overmodulation |
| - Green    | Contact Closure Present        |

6 Watts

## Physical

2

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

See SR-500 Brochure

## Enviromental

Operating Temperature .... Storage Temperature ..... Relative Humidity .....

MTBF .....

Quality

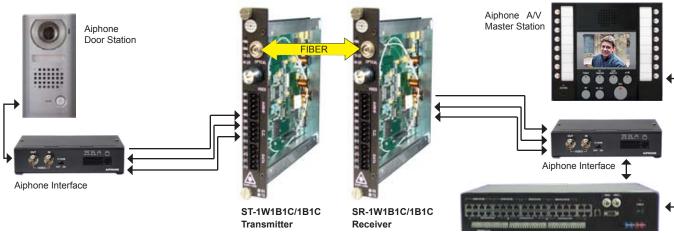
Part Numbers:

S

-34°C to +74°C -55°C to +85°C 0 to 95% Non-condensing

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

SpectraSmart ™ DIAGNOSTIC - D



Aiphone Matrix Switch

CONNECTOR

# **OPTICAL:**

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

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