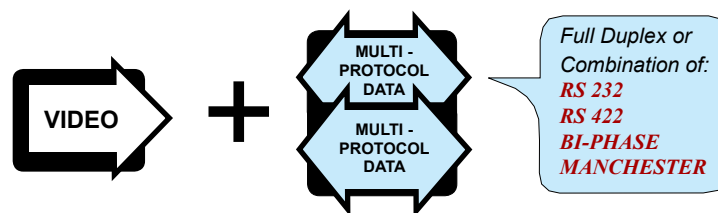


## Digitally Encoded 1 Channel Video with 2 Channels of Bi-directional Data



### FEATURES:

- One slot digital module design
- 10 Bit Video Digital Encoding
- Real Time Video and Data Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- 2 Full-duplex, Multiprotocol Data Channels
- 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™* Network Management Compatible
- 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 Terminal Type Connectors for Data

### DESCRIPTION:

This card is in the DigiSlim product family, incorporates an all-digital encoding technology and transmits one real-time, simplex 10-bit video channel and two Bidirectional user selectable, full duplex, RS-232, RS-422, Manchester, Bi-Phase data channels. NTSC, PAL and SECAM video formats are all seamlessly supported. These single fiber, laser based systems is available in both, Multimode and Singlemode units. The DigiSlim series is also compatible with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *SpectraSmart* brochure for additional details.

### CONFIGURATIONS:

The DigiSlim product family is available as rack mount cards and can be installed in either 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 made a standalone system by using the SR-500, SR-1000, 1 or 2 slot desk / wall mount chassis (87 VAC- 264VAC)

### MARKETS:

- ✓ Intelligent transportation systems (ITS)
- ✓ 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%                        |

### Data

|                      |                                        |
|----------------------|----------------------------------------|
| Formats .....        | RS-232, RS-422, Manchester or Bi-Phase |
| Data Rate .....      | DC to 125 Kb/s                         |
| Bit Error Rate ..... | 10 <sup>-9</sup>                       |

### Optical

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

### Connectors

|                      |                                                       |
|----------------------|-------------------------------------------------------|
| Video .....          | 75 Ohm BNC (Gold Center Pin)                          |
| Optical .....        | ST - Multimode(default),<br>FC - Single-mode(default) |
| Power (module) ..... | See SR-500 Brochure for details                       |
| Data .....           | Screw Terminals                                       |

### 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 ..... | Video Present / Overload       |
| 1 - Green .....    | Video Sync. Present            |
| 4 - Green .....    | Data Present                   |

### Physical

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

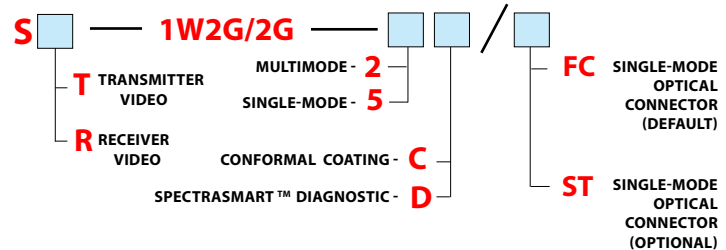
### Environmental

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

### Quality

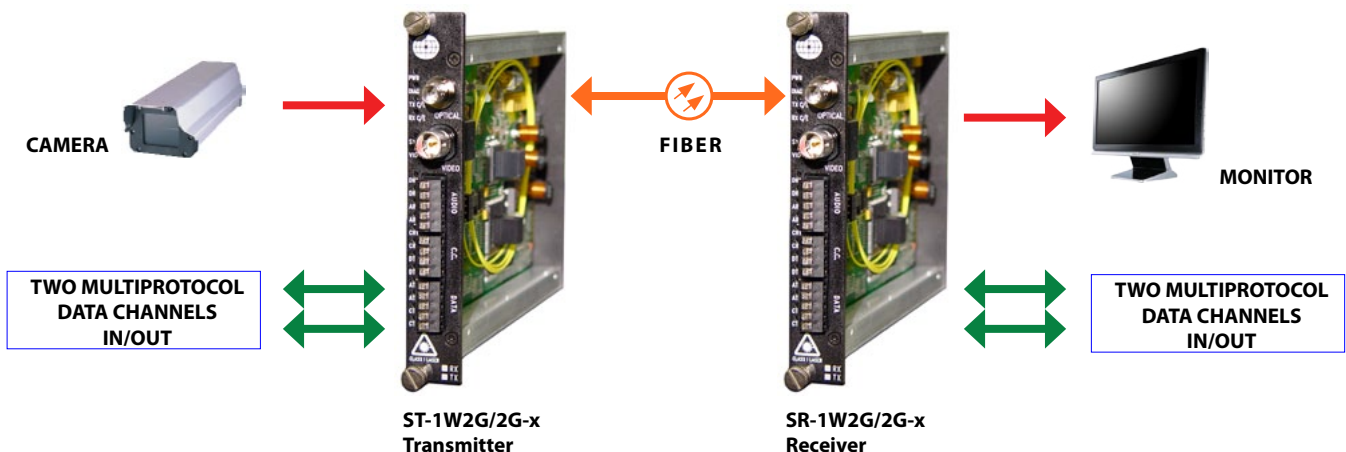
|            |                                                 |
|------------|-------------------------------------------------|
| MTBF ..... | >170,000 hours @ Ground Fix<br>35°C per MIL217F |
|------------|-------------------------------------------------|

### 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) |
|-----------------------|------------------------------------|----------------------|----------------------------|---------------------|-----------------|-------------------|----------------------------|-------------------|
| 2                     | Multimode (FP Laser)<br>62.5 / 125 | -5                   | -26                        | 21                  | 1300 / 850      | ST                | 24                         | 4                 |
| 5                     | Singlemode (FP Laser)<br>9 / 125   | -5                   | -26                        | 21                  | 1310 / 1550     | ST, FC            | 24                         | 60                |