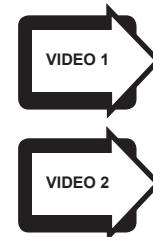


**Two Channels of Digitally  
Encoded 10 Bit Video****FEATURES:**

- One Slot Digital Module Design
- 10 Bit Video Digital Encoding
- Real Time Video Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul (10 Bit ) and Medium Haul ( 8 Bit ) Transmission Spec.
- NTSC, PAL, SECAM Compatible
- 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

**DESCRIPTION:**

This module in the **ST/SR-2W-x** product family incorporates an all-digital encoding technology that transmits two real-time, simplex 10 bit video channels in one direction over one optical fiber. NTSC, PAL and SECAM video formats are all seamlessly supported. These single fiber, laser based systems are available in both, Multimode and Singlemode modules. The **ST/SR-2W-x** units is also compatible with Meridian's *SpectraSmart* Network management and diagnostic PC based system. See the *Spec-traSmart* brochure for additional details

**CONFIGURATIONS:**

The **ST/SR-2W-x** 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/S (standard configuration) or an SR-1000/S.

**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 (8 Bit) .....        | >60 dB (weighted)*            |
| SNR (10 Bit) .....       | >67 dB (weighted)*            |
| Return Loss .....        | >30 dB                        |
| Field Tilt .....         | < 0.5%                        |

### Optical

|                       |          |
|-----------------------|----------|
| Fiber Data Rate ..... | 500 Mb/s |
|-----------------------|----------|

### Connectors

|                      |                                 |
|----------------------|---------------------------------|
| Video .....          | 75 Ohm BNC (Gold Center Pin)    |
| Optical .....        | ST, FC                          |
| Power (module) ..... | See SR-500 Brochure for details |

### Power \*\*

|            |         |
|------------|---------|
| Card ..... | 4 Watts |
|------------|---------|

### Indicators (LEDs)

|                    |                                |
|--------------------|--------------------------------|
| 1 - Green .....    | Power On                       |
| 1 - Bi-color ..... | TX Carrier/ Laser Over Current |
| 1 - Bi-color ..... | RX Carrier - Present / Error   |
| 2 - Bi-color ..... | Video Present / Overload       |
| 2 - Green .....    | Video Sync. 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                              |

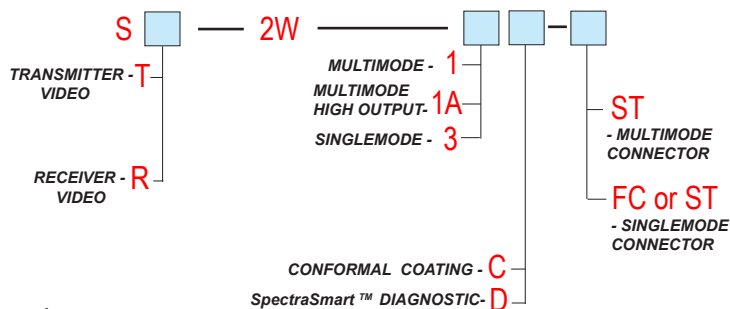
### Enviromental

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

### Quality

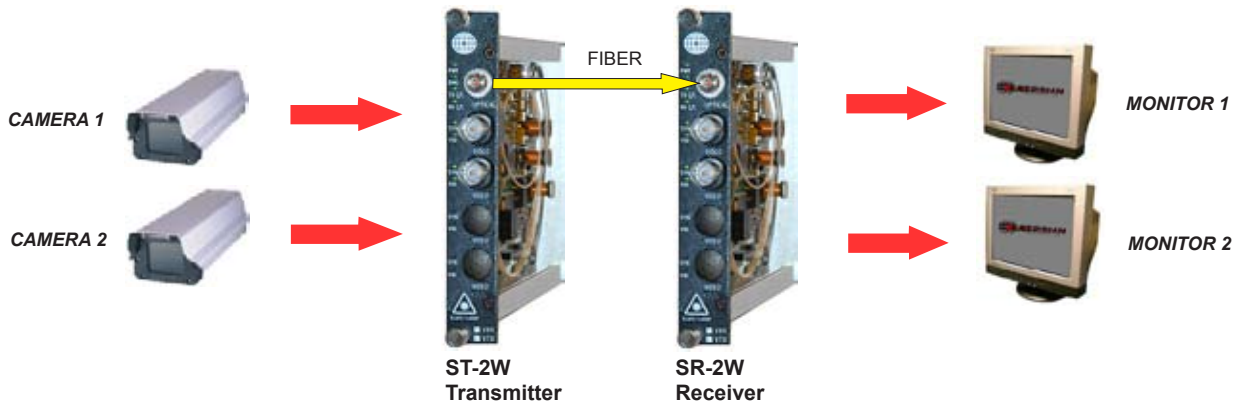
|            |                                                 |
|------------|-------------------------------------------------|
| MTBF ..... | >200,000 hours @ Ground Fix<br>35°C per MIL217F |
|------------|-------------------------------------------------|

### Part Numbers:



\* measured @ max. optical budget

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



## OPTICAL:

| Fiber Type/Size (um)               | Optical Output (dBm) | Receiver Sensitivity (dBm) | Optical Budget (dB) | Wavelength (nm) | Optical Connector | Optical Dynamic Range (dB) |
|------------------------------------|----------------------|----------------------------|---------------------|-----------------|-------------------|----------------------------|
| Multimode (FP Laser)<br>62.5 / 125 | -5                   | -26                        | 21                  | 1300            | ST                | 24                         |
| Multimode (FP Laser)<br>62.5 / 125 | -3                   | -26                        | 23                  | 1300            | ST                | 24                         |
| Singlemode (FP Laser)<br>9 / 125   | -5                   | -26                        | 21                  | 1310            | ST, FC            | 24                         |