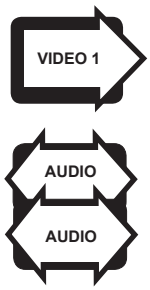
MERIDIAN TECHNOLOGIES

ST/SR-1W2A/2A-x

DigiSlim™

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



FEATURES:

- One slot digital module design
- 10 Bit Video Digital Encoding
- Real Time Video and Audio Transmission
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- 2 channels of Bi-directional Audio (Balanced or Un-balanced)
- 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 Connector for Audio

DESCRIPTION:

This ST/SR-1W2A/2A-x fiber optic product incorporates digital encoding technology and transmits/receives one real-time, simplex 10-bit video and two full-duplex, 24-bit audio channels 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-1W2A/2A-x is also compatible with Meridian's SpectraSmart Network management and diagnostic PC based system. See the SpectraSmart brochure for additional details.

CONFIGURATIONS:

The ST/SR-1W2A/2A-x product 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	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

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

Optical

Fiber Data Rate	250 Mb/s

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Audio	Screw Terminal Female

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 - Green	Video Sync. Present
1 - Bi-color	Video Present / Overload
4 - Bi-Color	Audio Present / Overmodulation

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

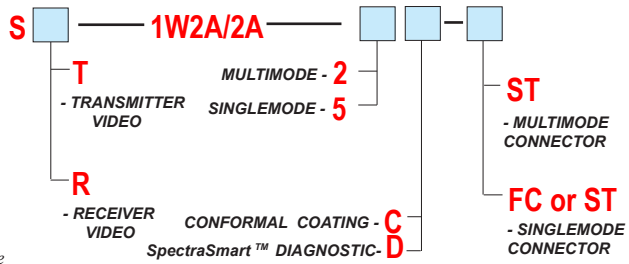
Enviromental

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

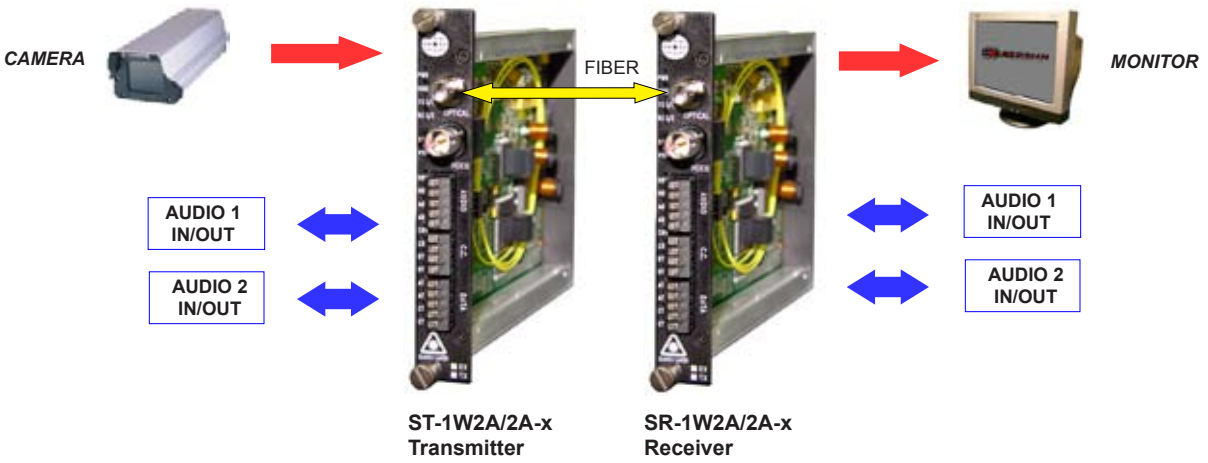
Quality

MTBF	>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:

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

Order From: MULTICOM

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