ST/SR-2A2D/2D-x

DigiSlim™

Digitally Encoded 2 Unidirectional Audio and 2 Bi-directional RS-232 Data Channels



FEATURES:

- Two Unidirectional Channels of 24 Bit Digitally Encoded Audio over one Fiber
- Laser Based Systems for Multimode and Singlemode Fiber
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics and Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Rack Cards
- Back Biased Photo Detector Circuitry for Stable Optical Laser Output Over Full Temperature Range
- Meets NEMA TS1 / TS2 & CALTRANS Specifications.
- Meets EIA RS-170, RS-343A Formats
- Utilizes Internal Switching Power Supplies
- Automatically Resettable Solid-State Current Limiters
 on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Needed
- Screw Terminals for Audio & Data

DESCRIPTION:

The ST/SR-2A2D/2D-x card features 2 channel of 24-bit, digitally encoded audio and 2 channels of bi-directional RS-232 Data transmitted over one singlemode or multimode fiber. 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 builtin local and remote loop-back functions. 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 and 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: -

Data

Formats	RS-232
Data Rate	DC to 125 Kb/s
Bit Error Rate	10-9*

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	$-8 \text{ to } +8 \text{ dBm} (4V_{p,p} \text{ max.})$
	(+18 dBm available on request)
Total Harmonic Distortion	<0.01% @ 1KHz
Resolution	24 Bit

Optical

Fiber Data Rate 250 Mb/s

Connectors

Power **

Card

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

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
2 - Green	Data Present

Physical

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) See SR-500 Brochure

Enviromental

Operating Temperature ... Storage Temperature Relative Humidity

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

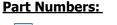
Quality

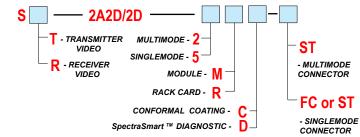
MTBF>170,000 hours @ Ground Fix 35°C per MIL217F

* measured @ max. optical budget

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

1





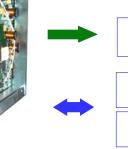
AUDIO IN RS-232 DATA 1 IN/OUT

RS-232 DATA 2

IN/OUT



ST-2A2D/2D-x Transmitter



SR-2A2D/2D-x Receiver



OPTICAL: -

Fiber Type/Si (um)	ize Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode (FP L 62.5 / 125	aser) -5	-26	21	1300 / 850	ST	24
Singlemode (FP 1 9 / 125	Laser) -5	-26	21	1310 / 1550	ST, FC	24

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ver 06/09