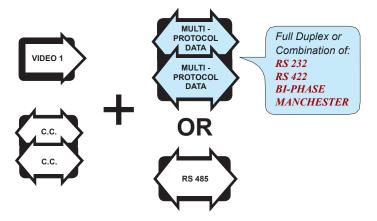
Digitally Encoded 1 Channel Video with 2 Channels of bi-directional Data, and Contact Closures



FEATURES:

- 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
- Two Channels of Multi-protocol Data and Contact Closure
- 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[™] PC Based Network Management
- 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
- DB 25 Type Connectors for Data and Contact Closure



DESCRIPTION:

This module in the **SC** product family incorporates an all-digital encoding technology that transmits one real-time, simplex 10-bit video channel and two user selectable, full duplex, RS-232, RS-422, Manchester, Bi-Phase data channels. One, user-selectable, single channel, full duplex, full-speed RS-485 (2 or 4 wire) data channel is also supported. In addition, two bi-directional contact closures are also supported on this product. These contacts can be individually user-configured for either normally-open or normally-closed contacts. 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 **SC** series is also compatible with Meridian's SpectraSmart Network management and diagnostic PC based system. See the SpectraSmart brochure for additional details.

CONFIGURATIONS:

The **SC** 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	>67 dB (weighted)*
Return Loss	>30 dB
Field Tilt	< 0.5%

Data

Formats	RS-232,RS-485, RS-422,
	Manchester or Bi-Phase
Data Rate	DC to 125 Kb/s
Bit Error Rate	10-9*

Contact Closure

Rate	10 Hz.(Per Channel
Contact Rating	0.3A, 30V AC / DC
Contact Bounce Time	5 ms

Optical

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST, FC
Power (module)	See SR-500 Brochure for details
Data/Audio/Contact closure	DB25 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 - Bi-color	Video Present / Overload
1 - Green	Video Sync. Present
2 - Green	Data Present
2 - Green	Contact Closure Present

Physical

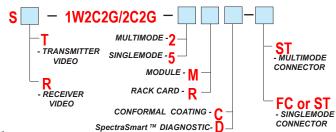
Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W
	20mm (0.80") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-500 Brochure

Enviromental

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

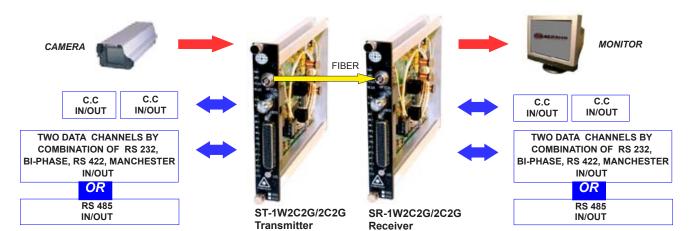
QualityMTBF >170,000 hours @ Ground Fix 35°C per MIL217F

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