



MERIDIAN
TECHNOLOGIES

ST/SR-1W2C-x

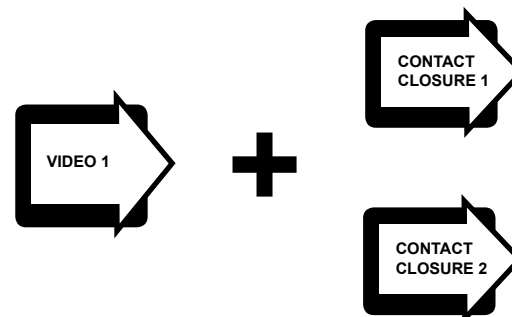
DigiSlim™

**Digitally Encoded One Channel
10 Bit Video with
Two Contact Closure**



FEATURES:

- One slot digital module design
- 10 Bit Video Digital Encoding
- Real Time Video and Data Transmission
- 7 MHz Video Bandwidth
- 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 NEMA TS1 / TS2 & CALTRANS Specifications
- Screw Terminal Connectors for Contacts



DESCRIPTION:

This system is in the DigiSlim™ product family and incorporates an all-digital encoding technology.

This fiber optic system transmits one real-time, simplex 10-bit video channel and two contact closure channels over one fiber and available in both, Multimode and Singlemode modules. NTSC, PAL and SECAM video formats are all seamlessly supported. Convenient terminal blocks are used for easy connection of the contact interfaces.

The ST/SR-1W2C-x 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 modules that 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/S, SR-1002/s, 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%

Contact Closure

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

Optical

Fiber Data Rate	250 Mb/s
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Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST - MM(default), FC - SM(default)
Contacts	Screw Terminals
Power (module)	See SR-500 Brochure for details

Power **

Power	6 Watts
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* measured @ max. optical budget

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

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	Contact Closure Present

Physical

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

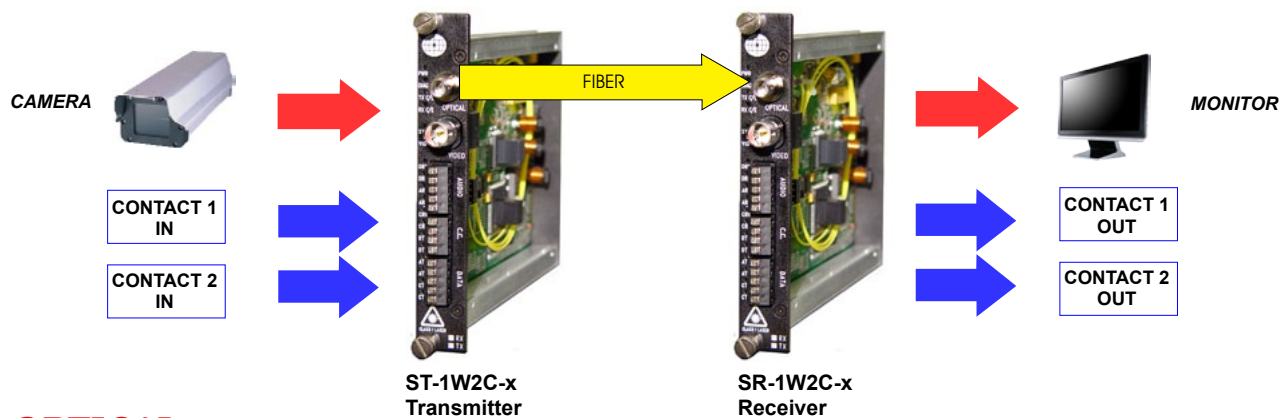
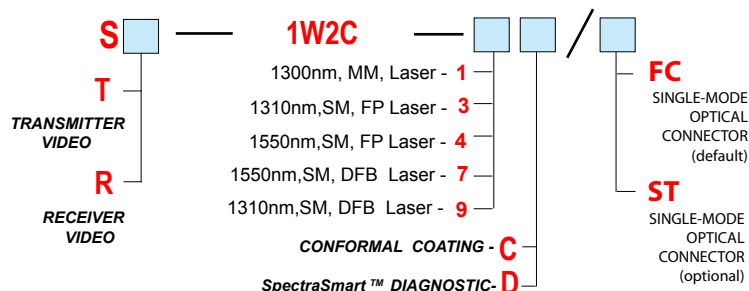
Environmental

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
	35°C per MIL217F

Part Numbers:



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)
1	Multimode (FP Laser) 62.5 / 125	-3	-24	21	1300	ST	24	7
3	Singlemode (FP Laser) 9 / 125	-3	-24	21	1310	ST, FC	24	60
4	Singlemode (FP Laser) 9 / 125	-3	-24	21	1550	ST, FC	24	75
7	Singlemode (DFB Laser) 9 / 125	+1	-24	25	1550	ST, FC	24	85
9	Singlemode (DFB Laser) 9 / 125	+1	-24	25	1310	ST, FC	24	70

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