

Digitally Encoded One Channel
10-Bit 10MHz Video**FEATURES:**

- One Slot Digital Module Design
- 10-Bit Video Digital Encoding
- Real-Time Video Transmission
- 10 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Wide Optical Dynamic Range – Eliminates Need For Optical Attenuators
- Laser Based System for Either Multimode or Singlemode Operation
- Spectrasmart Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Siagnostics for Performance Parameters
- ST or FC Optical Connectors
- Hot Swappable Cards
- Laser Back-Biased Photo Detector Circuitry for Stable Optical Output over Full Temperature Range
- Meets Eia Rs-170 Formats
- Meets Nema TS1/TS2 And Caltrans Specifications
- 75 Ohm BNC Video Connector (Gold Center Pin)

DESCRIPTION:

This fiber-optic system is part of our expanding DigiSlim product family and incorporates an all-digital encoding technology. The ST/SR-1U-x (rack card) and MT/MR-1U-x (small standalone module) transmit/receive one channel of high performance 10-bit digitally-encoded video over one multimode or singlemode fiber. This products also features a high, 10MHz video channel bandwidth for superb video quality. NTSC, PAL and SECAM video formats are seamlessly supported. The ST/SR-1U-x system have on-board SpectraView diagnostics built in and is also compatible with Meridian's SpectraSmart network management and diagnostic PC based system. See the SpectraSmart brochure for additional details.

CONFIGURATIONS:

This system is available in both small standalone modules (MT/MR-1U-x) and rack mount cards (ST/SR-1U-x) 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 cards 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

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 10 MHz @ -3 dB
Differential Gain	<0.6%
Differential Phase	<0.3°
SNR	>60 dB (weighted)*
Return Loss	>30 dB
Field Tilt	<0.5%

Optical

Fiber Data Rate 270 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
Small module	12-24VAC or 12VDC

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

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") W 20mm (0.80") D
Weight (Card)	450 gms (16 Oz)
No. of Slots	1

Dimensions (Module)	86 mm (3.35") L, 46 mm (1.8") W 19mm (0.735") D
Weight (Module).....	100 gms (3.52 Oz)

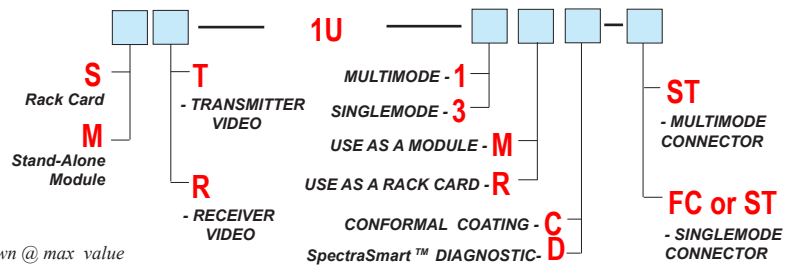
Environmental

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

Quality

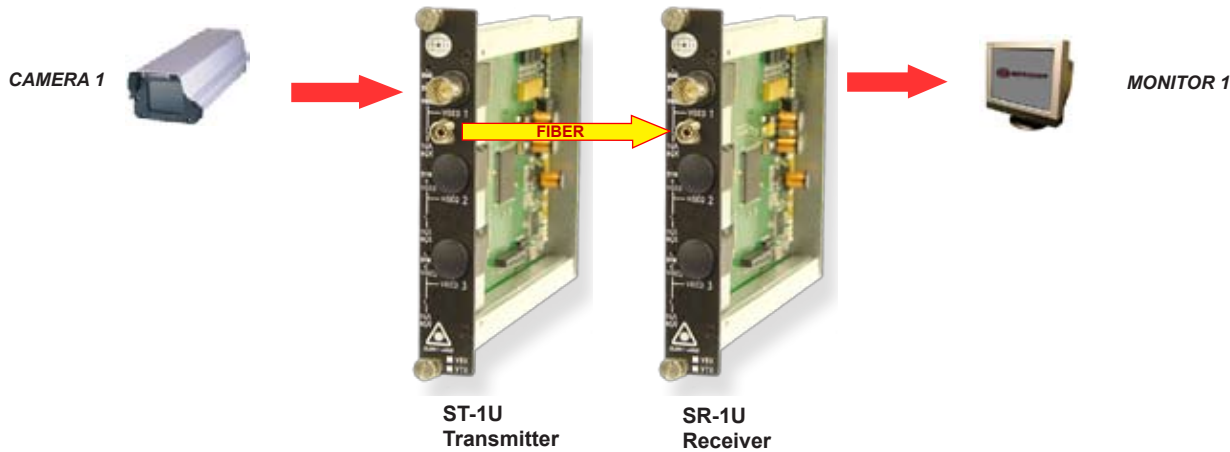
MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:



* 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 One Fiber	-3	-22	19	1300 / 850	ST	24
Singlemode (FP Laser) 9 / 125 One Fiber	-3	-22	19	1310 / 1550	ST / FC	24
Singlemode (DFB Laser) 9 / 125 One Fiber	+3	-22	25	1310 / 1550	ST / FC	24

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