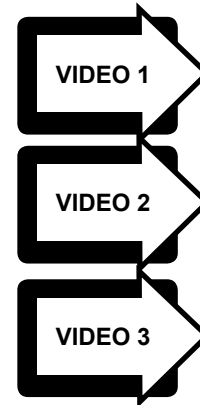


Three Independent Channels of  
Digitally Encoded 10-Bit  
10MHz Video



#### **FEATURES:**

- One Slot Digital Module Design
- 3 Independent Channels
- 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 Diagnostics 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 card is part of our expanding DigiSlim product family and incorporates an all-digital encoding technology. The ST/SR-3U-x series product transmits/receives 3 independent channels of high performance 10-bit digitally-encoded video over 3 multimode or singlemode fibers. This product also features a high, 10MHz video channel bandwidth for superb video quality. NTSC, PAL and SECAM video formats are seamlessly supported. This product series has 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:**

The STSR-3U-x system 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

## 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 .....	800 Mb/s
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### Connectors

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

### Power \*\*

Card .....	6 Watts
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### Indicators (LEDs)

1 - Green .....	Power On
1 - Bi-color .....	TX Carrier/ Laser Over Current
1 - Bi-color .....	RX Carrier - Present / Error
3 - Bi-color .....	Video Present / Overload
3 - Green .....	Video Sync. 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

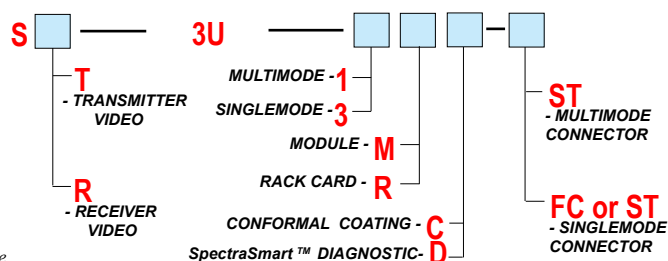
### Enviromental

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

### Quality

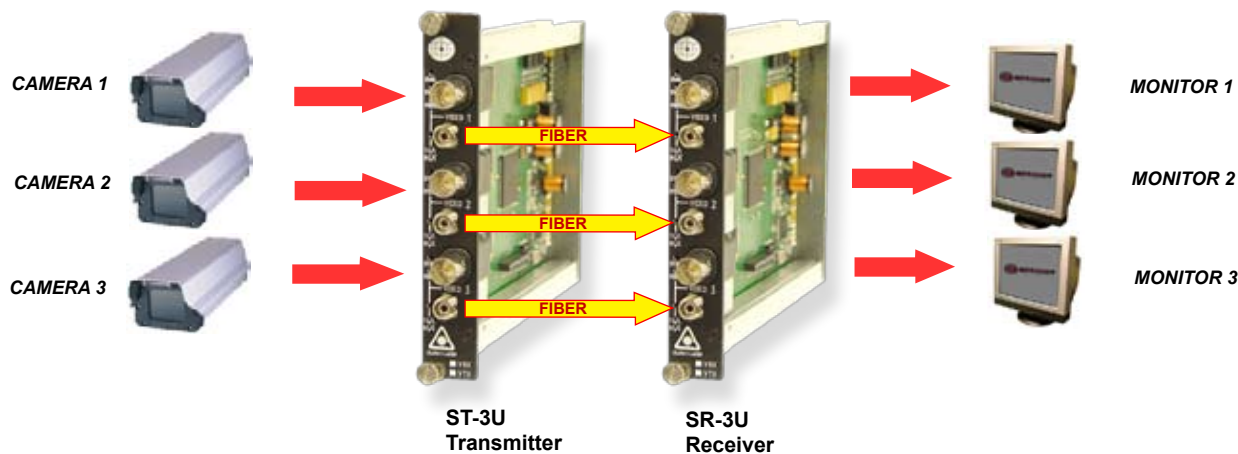
MTBF .....	>170,000 hours @ Ground Fix 35°C per MIL217F
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### Part Numbers:



\* 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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