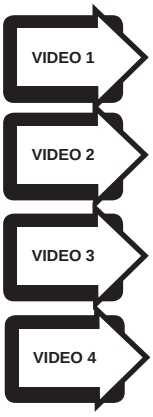
MERIDIAN™ TECNOLOGIES

ST/SR-4UT

DigiSlim™

Four Channels of Digitally-Encoded 8-Bit 12MHz Video



FEATURES:

- One slot digital module design
- 8-Bit Video Digital Encoding
- Real Time Video Transmission
- 12 MHz Video Bandwidth
- 20 Mbit / sec TTL Data Transmission
- Meets RS-250C Short Haul Transmission Specifications
- 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 EIA RS-170, RS-343A Formats

DESCRIPTION:

The ST/SR-4UT series products incorporate digital encoding technology. This fiber optic module transmits Four real-time, high performance 8-bit digitally-encoded Video signal over one fiber. Each video channel has a 12MHz bandwidth. This module also capable to transmit 20 Mbit per second TTL data. Both multimode and singlemode fiber versions are available. NTSC, PAL and SECAM video formats are all seamlessly supported. The functionality of the ST/SR-4UT series products are enhanced by their compatibility with Meridian's PC based *SpectraSmart* Network Management & Diagnostic Software system. *SpectraSmart* supervises the operating parameters of the transmission system such as the status on Video levels, Sync, Digital carrier detect, Voltages, Temperatures, Optical levels etc. See *SpectraSmart* brochure for further details.

CONFIGURATIONS:

The ST/SR-4UT 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	4 Vp-p max., 50 Ohm
Bandwidth	5 Hz to 12 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	1 Gbs

Connectors

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

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
4 - Bi-color	Video Present / Overload
4 - 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

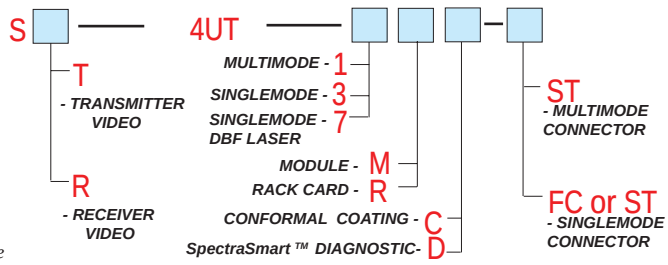
Enviromental

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

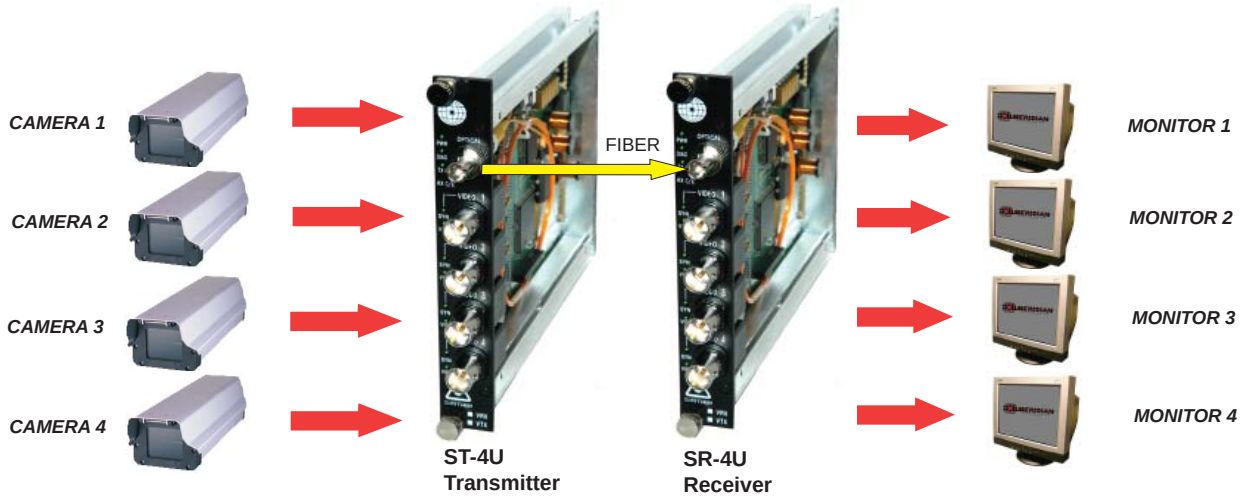
Quality

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

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	-3	-23	20	1300	ST	24
Singlemode (FP Laser) 9 / 125	-3	-23	20	1310	ST, FC	24
Singlemode (DFB Laser) 9 / 125	+3	-23	26	1550	ST , FC	24

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