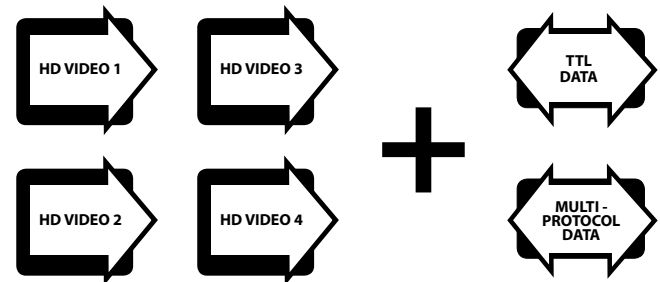


Four Channels of Multi-rate HD-SDI Video with
 One Full Duplex Multiprotocol Data and
 One Bi-directional TTL Data
 over One Single-mode Fiber



FEATURES:

- Transmission of 4-channels of Multi-Rate SDI & HD-SDI video over one singlemode fiber
- Real-Time, Uncompressed Video Transmission
- Supports The Following Formats :
 - 19.4 Mbps (SMPTE 310M)
 - 143 To 540 Mbps SMPTE 259M/344M
 - 1.485 Gbps SMPTE 292M HDTV
 - DVB-ASI at 270 Mbps
 - SMPTE 305M SDTI Rates
- Error Free Pathological Pattern Performance
- One Full Duplex Multiprotocol Data Channel
- One Bi-directional TTL Data Channel
- Rack Mounted Card Units
- Supports Embedded Audio and Metadata
- Distances in Excess of 50 km
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.
- DB-25F Type Connectors for Data



DESCRIPTION:

The STSR-4HD1G1L/1G1L-x fiber optic transmission system takes advantage of Meridian's new digital encoding technology and transmits following signals over one singlemode fiber:

1. Four channels of real-time HD-SDI Video
2. One Full Duplex Multiprotocol Data Channel
3. One Bi-directional TTL Data Channel

Using Coarse Wavelength Division Multiplexing (CWDM) technology, the content details of each video channel are preserved by real-time transmission of each video channel in a compact card format. These serial digital video transmitters & receivers provide broadcast quality transmission of the industry standard range of digital video data rates.

No user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results.

CONFIGURATIONS:

The DigiView™ products are available as rack mount cards that can be installed in Meridian's card chassis, desk chassis and 19" racking frames. These systems can be configured in either star (module to rack) or trunking (rack to rack) configurations or can be made a standalone systems, by using the SR-1002 series, 2 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS:

- ✓ Remote broadcast camera links
- ✓ Sporting events, concerts, etc.
- ✓ Media feeds
- ✓ Video production
- ✓ Studio to studio & head end feeds
- ✓ Military information displays
- ✓ Video Transport Systems

SPECIFICATIONS:

Video

Formats	19.4 Mbps (SMPTE 310M) 143 To 540 Mbps SMPTE 259M/344M 1.485 Gbps SMPTE 292M HDTV DVB-ASI at 270 Mbps SMPTE 305M SDTI Rates
Nominal Level	0.8 Vp-p, 1.0 Vp-p max.
Data Rate	19Mb/s - 1.5Gb/s per channel
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern)	< 0.2 UI
Cable Equalization	Automatic 0-200m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm)	10 ⁻¹²

Data

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

Optical

Wavelengths 1310 Band	1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm
Wavelengths 1550 Band	1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm
Output power	+1 dBm per channel

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	FC (default), ST (optional)
Data	DB-25F Female

Power

Card	10 W
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Indicators (LEDs)

1 - Green	Power On (TX & RX)
4 - Green	Signal Present (TX)
4 - Green	Laser (TX)
4 - Green	Level 0/-10 dBm (RX)
4 - Green	Level -10/-20 dBm (RX)
2 - Green	Tx Data Present
2 - Green	Rx Data Present

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") H 44mm (1.7") W
Weight (Card)	725 gms (1.6 lb.)
No of Slots	2
Module	See SR-1002 Chassis specs.

Environmental

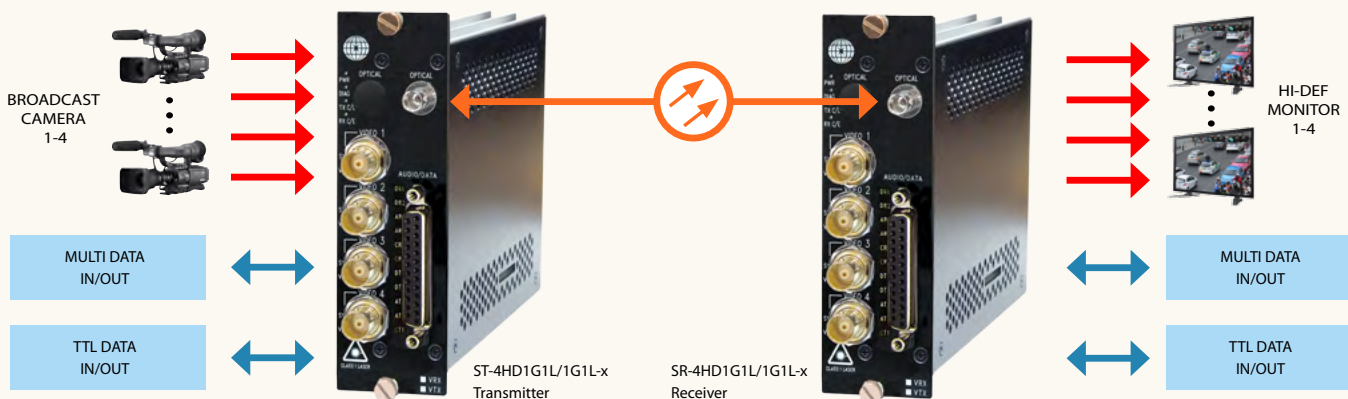
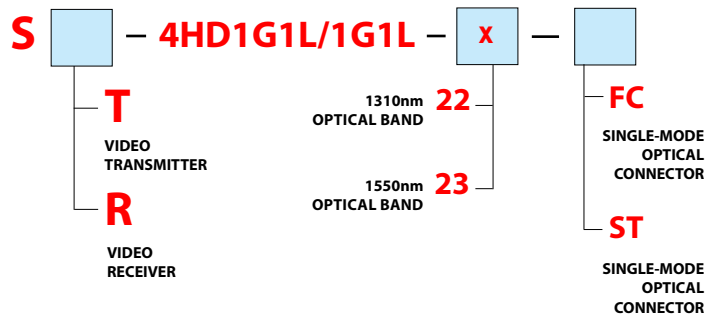
Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

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

Product	Signals	Wavelengths Distribution
ST-4HD1G1L/1G1L-22 Transmitter card, SM	Video	ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm
	Data	ch1=1270nm, ch2=1290nm
SR-4HD1G1L/1G1L-22 Receiver card, SM	Video	ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm
	Data	ch1=1270nm, ch2=1290nm
ST-4HD1G1L/1G1L-23 Transmitter card, SM	Video	ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm
	Data	ch1=1470nm, ch2=1490nm
SR-4HD1G1L/1G1L-23 Receiver card, SM	Video	ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm
	Data	ch1=1470nm, ch2=1490nm



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)
22	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-20	21	1270, 1290, 1310, 1330, 1350, 1370	FC, ST	20	50
23	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-20	21	1470, 1490, 1510, 1530, 1550, 1570	FC, ST	20	60

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