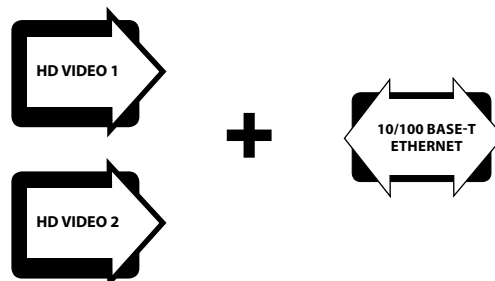


Two Unidirectional Channels of Multi-rate SDI / HDSDI Video with One Bi-directional Channel of 10/100Base-T Fast Ethernet



FEATURES:

- Uni-directional transmission of Multi-Rate SDI / HD-SDI (19 Mbps to 1.5Gbps) over one fiber
- Real-Time, uncompressed Video/Ethernet Data Transmission over One Single-mode Optical Fiber utilizing CWDM wavelength technology
- 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
- Rack Mounted Card Units
- Supports Embedded Audio and Metadata
- 10/100 Base-T Ethernet Auto-negotiation
- IEEE 802.3 Compliant
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments

DESCRIPTION:

The ST/SR-2HD1R/1R-x system is a part of Meridian's DigiView product family and will transmit two unidirectional channels of real-time SDI/HDSDI video and one bi-directional 10/100Base-T Fast Ethernet channel over one single-mode fiber.

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.

Standard shielded RJ-45 Ethernet connector is provided for Cat. 5 compliance.

Other signal options are available such as bi-directional transmission of SDI/HDSDI as well as 3G video over one single-mode fiber.

CONFIGURATIONS:

The ST/SR-2HD1R/1R-x system can be mounted in either a small, 2-slot stand-alone chassis for shelf or wall mounting or in one of Meridian's 3RU desk chassis or rack mounting in our 19" racking frames. The small stand-alone chassis (SR-1002) with its AC power supply (87 VAC - 164 VAC) is used for shelf or wall mounting.

MARKETS:

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

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	19 Mb/s - 1.5 Gb/s
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern)	< 0.2 UI
Cable Equalization	Automatic 0-70 m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm)	10 ⁻¹²

Ethernet

Formats	IEEE 802.3 CSMA/CD IEEE 802.3i 10Base-T IEEE 802.3u 100Base-T
Data Rate	10/100 Mb/s

Optical

Wavelengths 1310 Band	1290nm - 1350nm
Wavelengths 1550 Band	1510nm - 1570nm
Output power	+1 dBm per channel

Power

Power Consumption	6W
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Indicators (LEDs)

1 - Green (per card)	Power On
2 - Green (per channel)	Signal Power Level (RX)
1 - Green (per channel)	Signal Present (TX)
1 - Green (per channel)	Laser ON (TX)
1 - Green	T10 - 10Base-T IN
1 - Green	T100 - 100Base-T IN
1 - Green	R10 - 10Base-T OUT
1 - Green	R100 - 100Base-T OUT
1 - Green	TxD - DATA ACTIVITY IN
1 - Green	TxD - DATA ACTIVITY OUT

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	Single-mode - FC (default), Multimode - ST (default)

Physical

Dimensions (Card)	160 mm (6.3") L, 127 mm (5") H 20mm (0.80") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	1
Module	See SR-1002 Data sheet

Enviromental

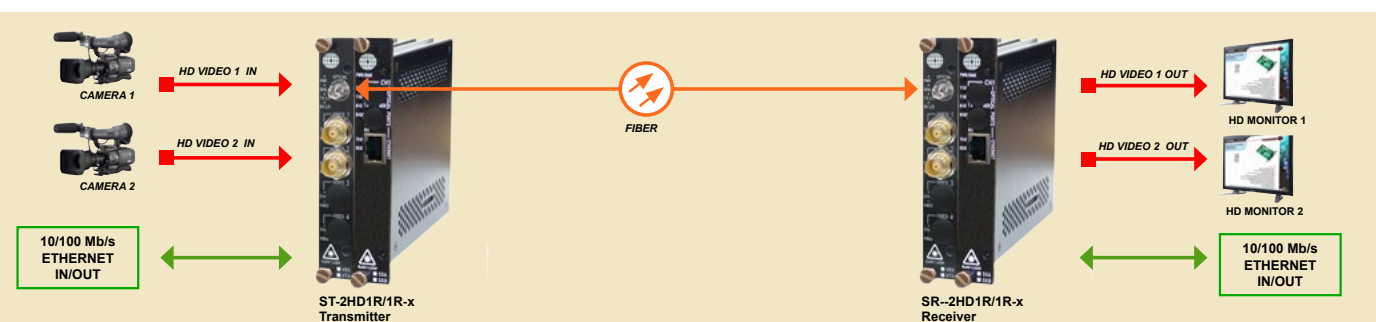
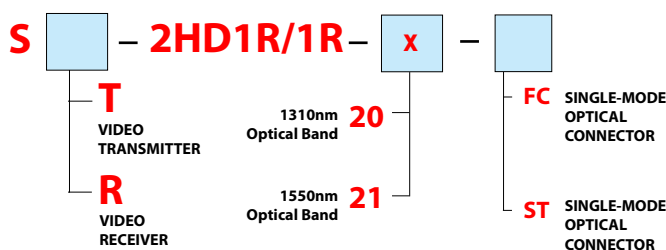
Operating Temperature	-25°C to +60°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>200,000 hours @ Ground Fix on Single channel 35°C per MIL217F
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Part Numbers:

Card	Description	Wavelength
ST-2HD1R/1R-20	Video Tx, 1310 Band, Single-mode	Video: Tx @ 1290nm & 1310nm, Ethernet: Tx @ 1330nm, Rx@1350nm
SR-2HD1R/1R-20	Video Rx, 1310 Band, Single-mode	Video: Rx @ 1290nm & 1310nm, Ethernet: Tx @ 1330nm, Rx@1350nm
ST-2HD1R/1R-21	Video Tx, 1550 Band, Single-mode	Video: Tx @ 1510nm & 1530nm, Ethernet: Tx @ 1550nm, Rx@1570nm
SR-2HD1R/1R-21	Video Rx, 1550 Band, Single-mode	Video: Rx @ 1510nm & 1530nm, Ethernet: Tx @ 1570nm, Rx@1550nm



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