



4 Channels of HD-SDI Multi-rate Video over One Singlemode 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
- Rack Mounted Card Units
- Supports Embedded Audio and Metadata
- Distances in Excess of 50 km
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Optional Small, single channel Tx Easily Mounts on the Back of Broadcast Camera
- Available with ST or FC Optical Connectors
- Requires No User Adjustments

DESCRIPTION:

This addition to Meridian's DigiView product family will transmit 4 channels of real-time SDI/HD-SDI video over one singlemode 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. The entire electrical and optical subsystems are housed in a standard Meridian 1-slot card design for mounting in any venue, particularly those with space constraints. No user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results. Other signal options are available such as bi-directional transmission of SDI/HDSDI as well as 3G video over one singlemode fiber.

CONFIGURATIONS:

The ST/SR-4HD-x system is available in standard 1-slot or rack mount cards that can be installed in either Meridian desk/shelf mount chassis or in 19", 3RU racking frames.

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

rtuco	
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 Equailization	Automatic 0-200m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm)	

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	FC (default), ST (optional)

Optical

Wavelengts 1310 Band	Ch1=1290nm, Ch2=1310nm,
	Ch3=1330nm, Ch4=1350nm
Wavelengts 1550 Band	Ch1=1510nm, Ch2=1530nm,
	Ch3=1550nm, Ch4=1570nm
Output power	+1 dBm per channel

Power

Card 5 W

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)

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 Broch	ure

Enviromental

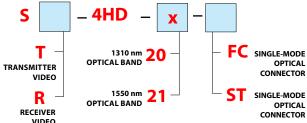
Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

35°C per MIL217F

Part Numbers:

ST-4HD-20	Transmitter, card, singlemode (ch1=1290nm, ch2=1310nm, ch3=1330nm, ch4=1350nm)	s	_ 4HD _ x	-	
SR-4HD-20	Receiver, card, singlemode			, _	
ST-4HD-21	(ch1=1290nm, ch2=1310nm, ch3=1330nm, ch4=1350nm)	T — TRANSMITTER VIDEO	1310 nm 20 — OPTICAL BAND		- F(
SR-4HD-21	Receiver, card, singlemode (ch1=1510nm, ch2=1530nm, ch3=1550nm, ch4=1570nm)	RECEIVER	1550 nm 21 OPTICAL BAND		∟ S⁻





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