

4 Channels of 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 30 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/HDSDI 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-CWDM 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

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

Power **

Card 3 W

Indicators (LEDs)

1 - Green Power On (TX & 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 Brochure

Environmental

Operating Temperature 0°C to +70°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

Connectors

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

Optical

Wavelengths Ch1=1510nm, Ch2=1530nm,
 Ch3=1550nm, Ch4=1570nm
 Output power 3dBm per channel

Part Numbers:

ST-4HD-51-57 Transmitter, card, singlemode
 (ch1=1510nm, ch2=1530nm, ch3=1550nm, ch4=1570nm)

SR-4HD-3 Receiver, card, singlemode



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Singlemode (DFB Laser) 9 / 125	+1	-20	21	1510, 1530, 1550, 1570	ST, FC	20