

16 Channels HD-SDI Multi-rate Video over One Singlemode Fiber



ST-8HD-23X
 1550 Band Transmitter
 with Expansion Port

ST-8HD-22
 1310 Band Transmitter

FEATURES:

- Transmission of 16 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 40 km
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Optional Small, single channel Tx Easily Mounts on the Back of Broadcast Camera
- Available with FC or ST Optical Connectors
- Requires No User Adjustments

DESCRIPTION:

This addition to Meridian's DigiView™ product family will transmit 16 channels of real-time Multi-Rate SDI/HD-SDI video over one singlemode fiber.

Unit consists of two double slot cards: ST/SR-8HD-22 and ST/SR-8HD-23X connected through expansion optical port achieving full CWDM optical wavelength range. 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. Other signal options are available such as bi-directional transmission of SDI/HDSOI as well as 3G video over one singlemode fiber.

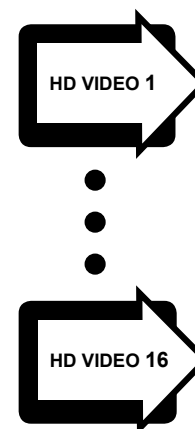
Note: Up-to 16 Uni-directional or Up-to 8 Bi-directional Real-time Multi-Rate SDI/HD-SDI Video are available in any combination for number of forward and return channels.

CONFIGURATIONS:

The ST/SR-16HD-x system is available in 2 (two) standard 2-slot or rack mount cards (4-slots occupied), 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 Equilization	Automatic 0-200m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm).....	10 ⁻¹²

Optical

Wavelengths	1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm, 1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm
Output power	+1 dBm per channel

Power

Card (per card)	8 W
-----------------------	-----

Connectors

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

Indicators (LEDs) on each card

1 - Green	Power On (TX & RX)
8 - Green	Signal Present (TX)
8 - Green	Laser (TX)
8 - Green	Level 0/-10 dBm (RX)
8 - Green	Level -10/-20 dBm (RX)

Physical

Dimensions (per Card)	160 mm (6.3") L, 127 mm (5") W 44mm (1.74") W
Weight (per Card)	450 gms (16 Oz)
No. of Cards.....	2
No. of Slots	4
Module	See SR-1002 Specs.

Environmental

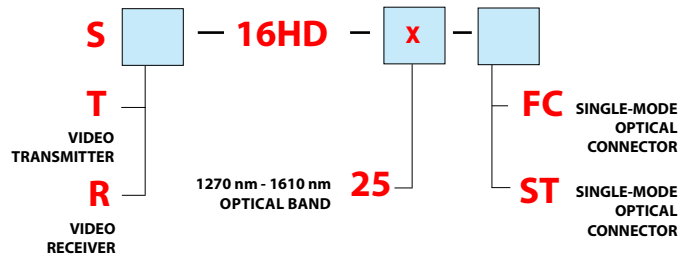
Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

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

Part Numbers:

ST-16HD-25 Transmitter, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm, ch9=1470nm, ch10=1490nm, ch11=1510nm, ch12=1530nm, ch13=1550nm, ch14=1570nm, ch15=1590nm, ch16=1610nm
SR-16HD-25 Receiver, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm, ch9=1470nm, ch10=1490nm, ch11=1510nm, ch12=1530nm, ch13=1550nm, ch14=1570nm, ch15=1590nm, ch16=1610nm



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)
25	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-15	16	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610	FC, ST	17	42