

8 Channels Multi-rate 3G-SDI Video over One Singlemode Fiber with optional Optical ADD/DROP Expansion Port

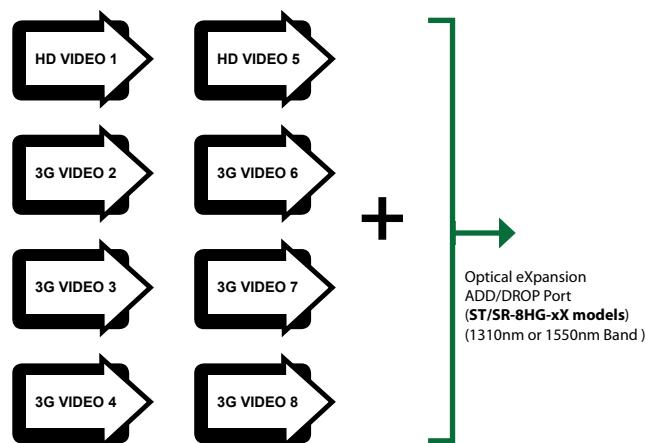


8-ch Multi-Rate
3G-SDI Video

8-ch Multi-Rate 3G-SDI Video w/
Optical eXpansion
ADD/DROP Port

FEATURES:

- Uni-directional transmission of Multi-Rate SDI / HD-SDI / 3G-SDI (19 Mbps to 2.97Gbps (3G)) over one fiber
- Real-Time, Uncompressed Video Transmission
- Supports Both Singlemode And Multimode Fiber
- 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
 - 2.97Gbps (3G) SMPTE 424M
 - SMPTE 305M SDTI Rates
- Error Free Pathological Pattern Performance
- Rack Mounted Card Units
- Supports Embedded Audio and Metadata
- Distances in Excess of 40 km
- Led Indicators for :
 - Power
 - Rx Optical Power
 - Tx Video Signal Present
 - Laser Over Current
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments



DESCRIPTION:

This addition to Meridian's DigiView™ product family will transmit 8 channels of real-time Multi-Rate SDI/HD-SDI / 3G-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. 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. The optional eXpansion port will provide the ability to add up to 8 more CWDM 1310nm Band or 1550nm Band wavelengths on one singlemode fiber.

Note: Up-to 16 Uni-directional or Up-to 8 Bi-directional Real-time Multi-Rate 3G-SDI Video are available in any combination for number of forward and return channels.

CONFIGURATIONS:

The ST/SR-8HG-x system is available in standard 2-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 2.97Gbps (3G) SMPTE 424M SMPTE 305M SDTI Rates
Nominal Level	0.8 Vp-p, 1.0 Vp-p max.
Data Rate	19Mb/s - 3Gb/s
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern) ..	< 0.2 UI
Cable Equalization	Automatic 0-70m @ 3 Gb/s
Bit-Error Rate (0 to -20dBm).....	10 ⁻¹²

Optical

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

Power

Card	8 W
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Connectors

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

Indicators (LEDs)

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 (Card)	160 mm (6.3") L, 127 mm (5") W 44mm (1.74") W
Weight (Card)	450 gms (16 Oz)
No. of Slots	2
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
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Part Numbers:

ST-8HG-22 Transmitter card, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm
SR-8HG-22 Receiver card, SM	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm, ch7=1390nm, ch8=1410nm
ST-8HG-23 Transmitter card, SM	ch1=1470nm, ch2=1490nm, ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm, ch7=1590nm, ch8=1610nm
SR-8HG-23 Receiver card, SM	ch1=1470nm, ch2=1490nm, ch3=1510nm, ch4=1530nm, ch5=1550nm, ch6=1570nm, ch7=1590nm, ch8=1610nm

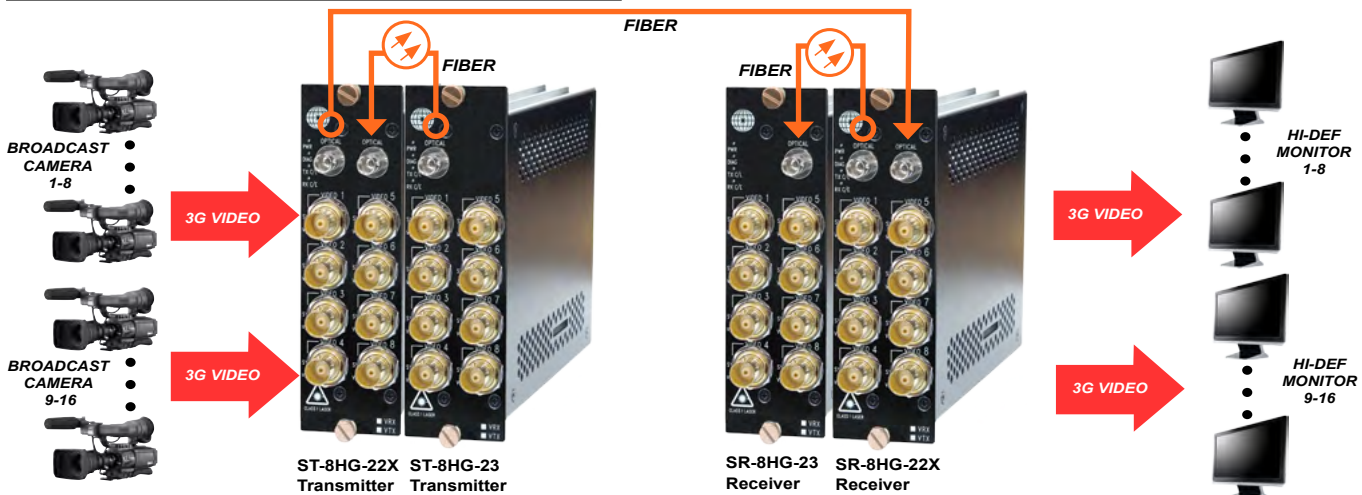
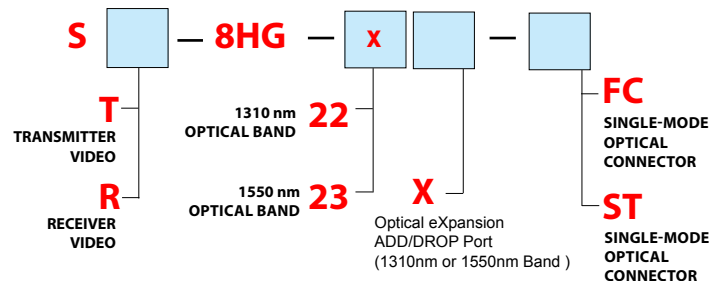


Diagram shows sample connection of unit with eXpansion port.

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)	-16	17	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410	FC, ST	16	45
23	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-16	17	1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610	FC, ST	16	60

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