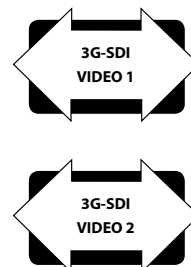




2 Channels of Bi-directional 3G-SDI/Multi-rate Video over One Singlemode Fiber



FEATURES:

- Bi-directional transmission of Multi-Rate SDI / HD-SDI / 3G-SDI (19 Mbps to 2.97Gbps (3G)) 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
 - 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 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

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

DESCRIPTION:

The SXA/SXB-2HG-x system is a part of Meridian's DigiView™ product family and will transmit 2 bi-directional channels of real-time 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. 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.

1310nm Optical Band

Tx side: SXA-2HG-20

a. 2-ch 3G-SDI Tx & Rx = Tx @ 1270nm & 1290nm,
Rx @ 1310nm & 1330nm

Rx side: SXB-2HG-20

a. 2-ch 3G-SDI Tx & Rx = Tx @ 1310nm & 1330nm,
Rx @ 1270nm & 1290nm

1550nm Optical Band

Tx side: SXA-2HG-21

a. 2-ch 3G-SDI Tx & Rx = Tx @ 1510nm & 1530nm,
Rx @ 1550nm & 1570nm

Rx side: SXB-2HG-21

a. 2-ch 3G-SDI Tx & Rx = Tx @ 1550nm & 1570nm,
Rx @ 1510nm & 1530nm

CONFIGURATIONS:

This 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.

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

Connectors

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

Optical

Wavelengths 1310 Band	1270nm, 1290nm, 1310nm, 1330nm
Wavelengths 1550 Band	1510nm, 1530nm, 1550nm, 1570nm
Output power	+1 dBm per channel

Power **

Card	5 W
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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 Brochure

Enviromental

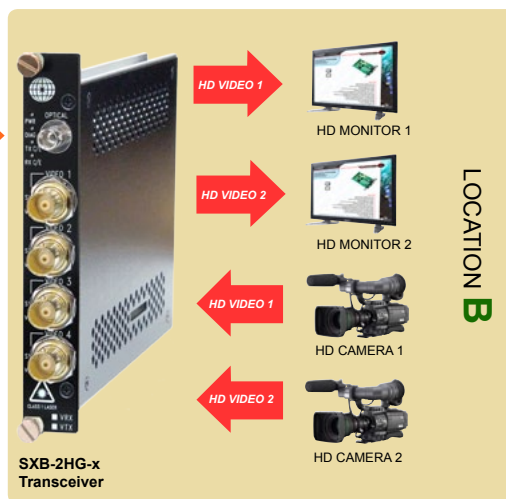
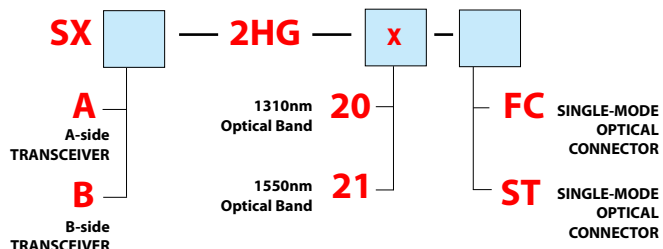
Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>170,000 hours @ Ground Fix 35°C per MIL217F
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Part Numbers:

SXA-2HG-20	Transceiver, card, singlemode Tx @ 1270nm & 1290nm, Rx @ 1310nm & 1330nm
SXB-2HG-20	Transceiver, card, singlemode Tx @ 1310nm & 1330nm, Rx @ 1270nm & 1290nm
SXA-2HG-21	Transceiver, card, singlemode Tx @ 1510nm & 1530nm, Rx @ 1550nm & 1570nm
SXB-2HG-21	Transceiver, card, singlemode Tx @ 1550nm & 1570nm, Rx @ 1510nm & 1530nm



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)	-17	18	1310 Band	FC, ST	17	50
21	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-17	18	1550 Band	FC, ST	17	60