



One Channel of Bi-directional
HDSDI/Multi-rate Video
over One Fiber



FEATURES:

- 1 Bi-directional Channels of Multi-Rate SDI & HD-SDI Video over One Multimode or Single-mode 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
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Optional Small, single channel Tx Easily Mounts on the Back of Broadcast Camera
- Requires No User Adjustments

DESCRIPTION:

The SXA/SXB-1HD/1HD-x system is a part of Meridian's DigiView product family and will transmit one bi-directional channel of real-time SDI/HDSDI video over one multimode or single-mode fiber.

A side:

SXA-1HD/1HD-x

One channel SDI/HDSDI Video = Tx @ 1310nm & Rx @ 1550nm

B side:

SXB-1HD/1HD-x

One channel SDI/HDSDI Video = Tx @ 1550nm & Rx @ 1310nm

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 single-mode fiber.

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.

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 5 W

Indicators (LEDs)

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

Physical

Dimensions (Card) 20 (W) x 127 (H) x 160 (D) mm
 (0.8 x 5.0 x 6.3 inch)
 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

Connectors

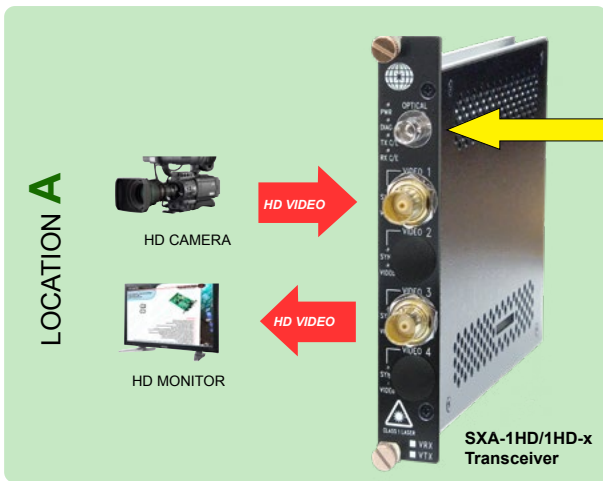
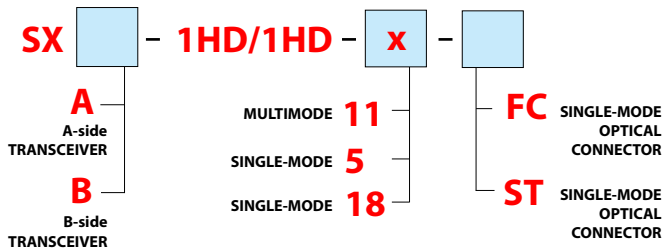
Video 75 Ohm BNC (Gold Center Pin)
 Optical Single-mode - FC (default), ST
 Multimode - ST (default)

Optical

Wavelengths 1310nm, 1550nm
 Output power -3dBm per channel

Part Numbers:

SXA-1HD/1HD-11	Transceiver, card, multimode Tx @ 1310nm, Rx @ 1550nm
SXB-1HD/1HD-11	Transceiver, card, multimode Tx @ 1550nm, Rx @ 1310nm
SXA-1HD/1HD-5	Transceiver, card, single-mode Tx @ 1310nm, Rx @ 1550nm
SXB-1HD/1HD-5	Transceiver, card, single-mode Tx @ 1550nm, Rx @ 1310nm
SXA-1HD/1HD-18	Transceiver, card, single-mode Tx @ 1310nm, Rx @ 1550nm, DFB Laser
SXB-1HD/1HD-18	Transceiver, card, single-mode Tx @ 1550nm, Rx @ 1310nm, DFB Laser



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)
11	Multimode (FP Laser) 62.5 / 125	-8	-22	14	1310 / 1550	ST	22	1.3
5	Single-mode (FP Laser) 9 / 125	-3	-21	18	1310 / 1550	ST, FC	21	30
18	Single-mode (DFB Laser) 9 / 125	+1	-21	22	1310 / 1550	ST, FC	21	55/65