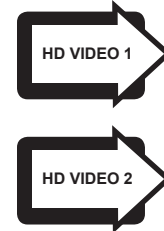


Digitally Encoded 1 and 2 Channel Multi-rate HD-SDI Video CWDM transmitter



FEATURES:

- Transmission of Multi-Rate SDI & HD-SDI (19 Mbps to 2.97Gbps (3G))
- Real-Time, Uncompressed Video Transmission
- Each channel has loop-thru input
- Supports up to 16 CWDM wavelengths on one singlemode 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 30 km
- Led Indicators for :
 - Power
 - Laser output power
 - Laser Over Current
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Optional Small CWDM Tx Easily Mounts on the Back of Broadcast Camera
- Available with ST or FC Optical Connectors
- Requires No User Adjustments
- Compatible with 1 & 2-ch receiver cards (SR-1HD-3 & SR-2HD-3)

DESCRIPTION:

Meridian's CWDM HD-SDI fiber products are part of our expanding DigiView product family. These serial digital video transmitters & receivers provide broadcast quality transmission of the industry standard range of digital video data rates using CWDM wavelengths. This wavelength architecture allows multiplexing of up to 16 independent SDI/HDSDI channels on one singlemode fiber. All units transmit real-time video and are either one or two channel rack mount cards with 3R (Retiming, Reshaping, Regenerate) functions and dual buffered outputs (on the standard receiver card). This feature ensures maximum performance over long distances. No video compression is utilized. A loop-thru input is provided on each channel for local monitoring or additional signal routing. The standard ST/SR-2HD-x product supports two channels of SMPTE 292M, 310M, 259M, 344M and 424M compliant digital video data rates over one multimode or singlemode fiber for each channel. Using high-performance digital transmission technologies, no user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results. Meridian's standard SR-1HD-3 (one channel) or SR-2HD-3 (two channels) receiver cards are used in conjunction with these transmitter cards.

CONFIGURATIONS:

The ST-1HD-A and ST-2HD-A/B products are available either as modules 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

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 - 1.5Gb/s
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

Connectors

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

Power **

Card	3 W
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Indicators (LEDs)

1 - Green	Power On
2 - Red	Laser Over Current (TX)
2 - Green	Signal Present (TX)
2 - Green	Signal Lock (TX)
2 - Green	SDI Present (TX)
2 - Green	HD-SDI Present (TX)

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	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
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Part Numbers:

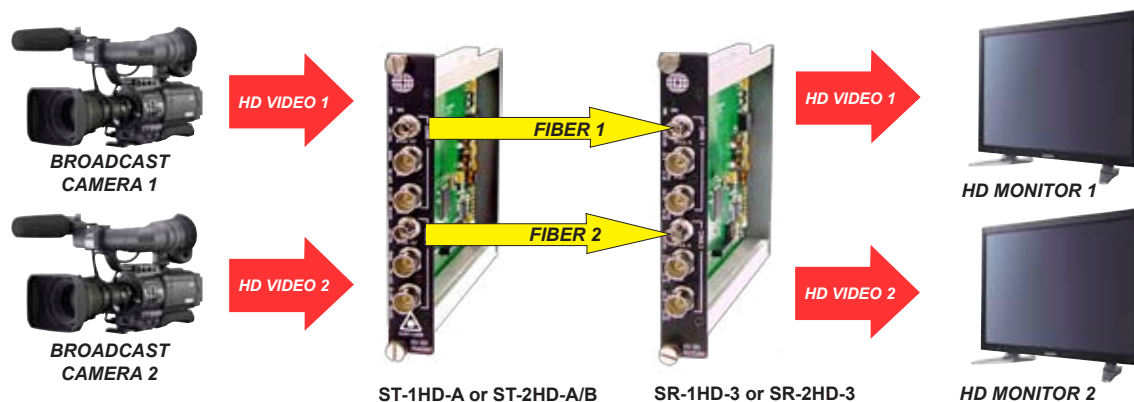
ST – **x** **HD** – **A/B** **FC or ST**

1 - ONE CHANNEL
2 - TWO CHANNELS

SEE TABLE FOR WAVELENGTH DESIGNATION
(SELECT 'A' CODE FOR SINGLE CHANNEL
AND 'A/B' CODE FOR TWO CHANNEL)

- SINGLEMODE
CONNECTOR

CWDM wavelength selection			
wavelength	Pt # code (A/B)	wavelength	Pt # code (A/B)
1270nm	27	1470nm	47
1290nm	29	1490nm	49
1310nm	31	1510nm	51
1330nm	33	1530nm	53
1350nm	35	1550nm	55
1370nm	37	1570nm	57
1390nm	39	1590nm	59
1410nm	41	1610nm	61



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Singlemode (Laser) 9 / 125	+3	-22	25	1550	ST, FC	20