

Multi-rate HD-SDI Video Module Kit

FEATURES:

- Kit contains HDSDI Tx & Rx modules, universal power supplies and rugged travel case
- Transmission of Multi-Rate SDI & HD-SDI (19 Mbps to 1.5 Gbps)
- 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
 - 1.5 Gbps SMPTE 292M HDTV
 - DVB/ASI at 270 Mbps
 - SMPTE 305M SDTI Rates
- Error Free Pathological Pattern Performance
- Small Tx Easily Mounts on Back of Cameras
- Supports Embedded Audio and Metadata
- Distances in Excess of 30 km
- 5 VDC Universal Power Pack or USB Hub
- Led Indicators for :
 - Power
 - Rx Optical Power
 - Tx Video Signal Present
 - Laser Over Current
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Optional Rack Mount Card Unit Available
- Available with ST or FC Optical Connectors
- Requires No User Adjustments
- CWDM Lasers Available for 16 Channel MUX over One Fiber

DESCRIPTION:

Meridian's HD-SDI Transmitter/Receiver module kit includes both the miniature transmitter and receiver modules and a pair of universal (110/220VAC) 5VDC power supplies all housed in a handy, rugged carrying case. These units are robust, miniature serial digital video transmitters & receivers that provide broadcast quality transmission of the industry standard range of digital video data rates. All units transmit and receive real-time video. No video compression is utilized. The standard MT/R product supports one channel of SMPTE 292M, 310M, 259M, and 344M compliant digital video data rates over one multimode or singlemode fiber. Using high-performance digital transmission technologies, no user adjustments are needed thus ensuring fast deployment and setup with broadcast quality results.

Other available options include one and two channel rack mount (ST/SR-1HD-x) with 3R (Retiming, Reshaping, Regenerate) functions and dual buffered outputs. This feature ensures maximum performance over long distances.

CONFIGURATIONS:

Other product configurations include individual Transmitter/Receiver modules and one & two channel 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 1.5 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
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern) ..	< 0.2 UI
Cable Equailization	Automatic 0-200m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm).....	10 ⁻¹¹

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST - MM(default), FC - SM(default)
Power (module)	0.65 mm DC Power Jack

Power

Module	500 mW
Input Voltage	5 VDC

Part Numbers:

MT/MR-1HD-1K	Module Kit, multimode, 1300nm
MT/MR-1HD-3K	Module Kit, singlemode, FP laser, 1310nm

Indicators (LEDs)

1 - Green	Power On (TX & RX)
1 - Red	Laser Over Current (TX)
4 - Green	Signal Power Level (RX)
1 - Green	Signal Present (TX)

Physical

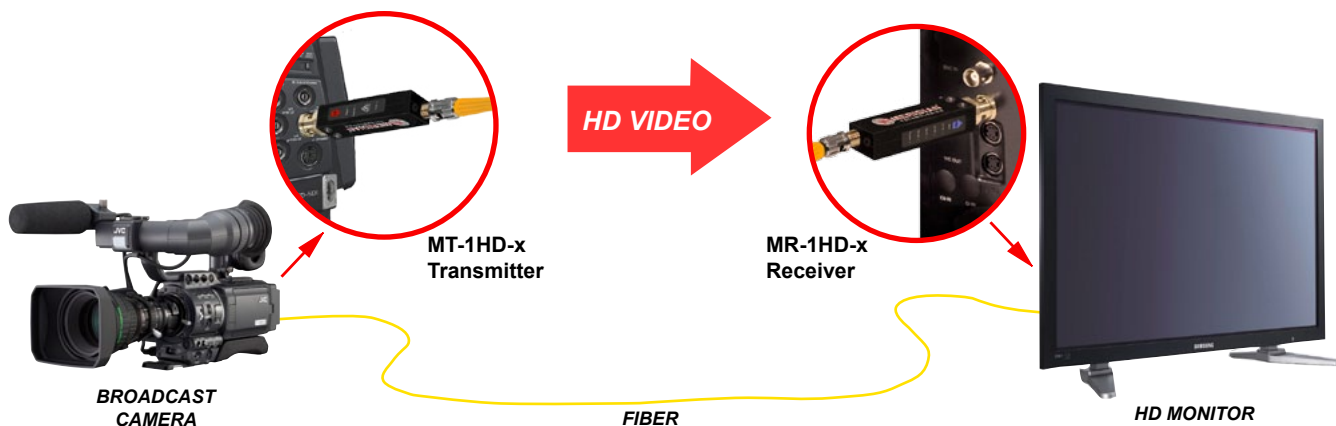
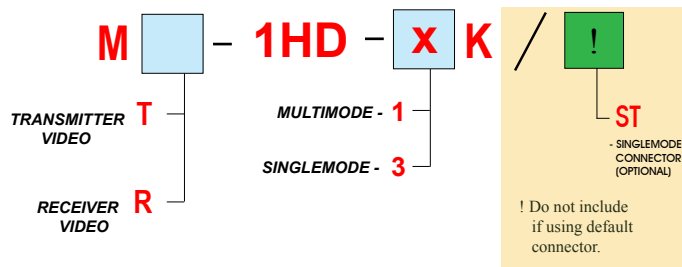
Dimensions (Module)	76 mm (3") L, 19 mm (0.75") W 15 mm (0.60") H
Weight (Module)	42 gms (1.5 Oz)

Enviromental

Operating Temperature ...	-25°C to +60°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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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)
1	Multimode (FP Laser) 62.5 / 125	-3	-22	19	1300	ST	22	1.3
3	Singlemode (FP Laser) 9 / 125	-3	-22	19	1310	FC, ST	22	30