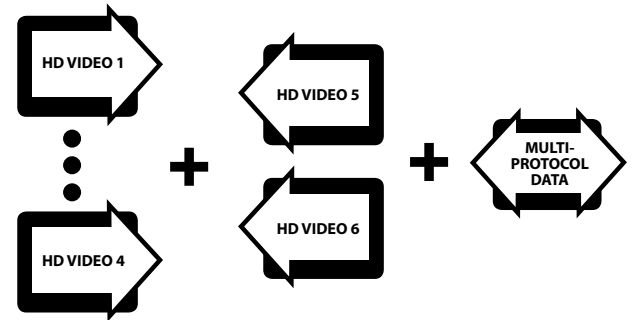


Four Simplex Multi-rate SDI / HDSDI Video and
 Two Return Multi-rate SDI / HDSDI Video plus
 One Bidirectional Multiprotocol Data
 over One Single-mode Fiber



FEATURES:

- Transmission of Multi-Rate SDI / HD-SDI (19 Mbps to 1.5Gbps) over one fiber
- Real-Time, uncompressed Video Transmission over One Single-mode Optical Fiber utilizing CWDM wavelength technology
- 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
- Supports Embedded Audio and Metadata
- Full Duplex Multiprotocol Data Channel Supports RS-232, RS-422 & RS-485 (2 & 4-wire)
- Laser Based Single-mode System
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments

DESCRIPTION:

The MT/MR-4HD1G/2HD1G-x system is a part of Meridian's DigiView product family and will transmit four simplex Multi-rate SDI / HDSDI Video, two Return Multi-rate SDI / HDSDI Video and one Bidirectional Multiprotocol Data over one single-mode 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 module 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, including 3G video over one single-mode fiber.

CONFIGURATIONS:

The MT/MR-4HD1G/2HD1G-x system is included in 3-slot stand-alone chassis (SR-1350) with AC power supply (87 VAC - 164 VAC) and can be mounted on any flat surface.

MARKETS:

- √ Remote broadcast camera links
- √ Sporting events, concerts, etc.
- √ Media feeds
- √ Video production
- √ Studio to studio & head end feeds
- √ Military information displays

SPECIFICATIONS:

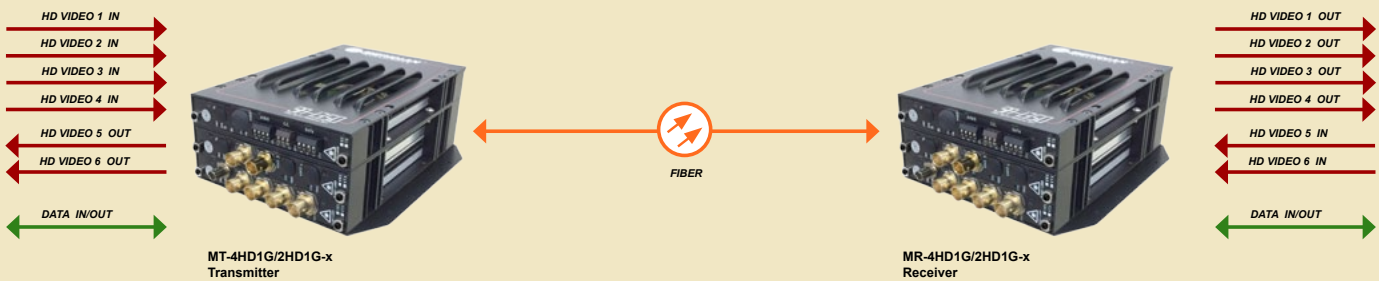
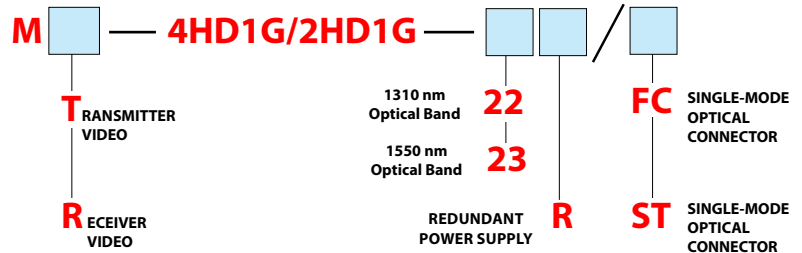
| HD-SDI Video | |
|------------------------------------|---|
| Formats | 19.4 Mbps (SMPTE 310M) 143 To 540 Mbps SMPTE 259M/344M 1.485 Gbps SMPTE 292M HDTV DVB/ASI at 270 Mbps SMPTE 305M SDTI Rates |
| Nominal Level | 0.8 Vp-p, 1.0 Vp-p max. |
| Data Rate | 19Mb/s - 1.5Gb/s |
| Impedance | 75 Ohm |
| Gain | Unity |
| Input Coupling | AC |
| Return Loss | >15 dB |
| Jitter (Pathological Data Pattern) | < 0.2 UI |
| Cable Equalisation | Automatic 0-200m @ 1.5Gb/s |
| Bit-Error Rate (0 to -20dBm) | 10 ⁻¹² |

| Data | |
|----------------------------|--|
| Formats | RS-232 w/ full speed handshake, RS-485, RS-422, Manchester or Bi-Phase |
| Data Rate (RS-232) | DC to 125 Kb/s |
| Data Rate (RS-422, RS-485) | DC to 250 Kb/s |
| Bit Error Rate | 10 ^{-9*} |
| Optical | |
| Wavelengths 1310 Band | 1270nm - 1390nm |
| Wavelengths 1550 Band | 1470nm - 1590nm |
| Output power | +1 dBm per channel |
| Connectors | |
| HD-SDI Video | 75 Ohm BNC (Gold Center Pin) |
| Data | Screw Terminals |
| Optical | FC, ST (Single-mode) |
| Power (module) | 2-pin Screw Terminal |

| Power | |
|-----------------------|---|
| Input Power | 9-36VDC |
| Power Consumption | 16 W |
| Physical | |
| Dimensions | 182 (L) x 75 (H) x 132 (W) mm (7.16 x 2.96 x 5.15 inch) |
| Weight | 3700 gms (8.10 lb.) |
| Environmental | |
| Operating Temperature | -40°C to +74°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 |

Part Numbers:

| Unit | Description | Wavelength |
|-------------------|---|--|
| MT-4HD1G/2HD1G-22 | Video, Data Transceiver, Single-mode, 1310nm Optical Band | Tx @ 1270nm - 1350nm Rx @ 1370nm - 1390nm |
| MR-4HD1G/2HD1G-22 | Video, Data Transceiver, Single-mode, 1310nm Optical Band | Tx @ 1370nm - 1390nm Rx @ 1270nm - 1350nm |
| MT-4HD1G/2HD1G-23 | Video, Data Transceiver, Single-mode, 1550nm Optical Band | Tx @ 1470nm - 1550nm Rx @ 1570nm - 1590nm |
| MR-4HD1G/2HD1G-23 | Video, Data Transceiver, Single-mode, 1550nm Optical Band | Tx @ 1570nm - 1590nm Rx @ 1470nm - 1550nm |



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) | -20 | 21 | 1310 nm Band | FC, ST | 21 | 60 |
| 23 | Singlemode (DFB Laser) 9 / 125 | +1 (per channel) | -20 | 21 | 1550 nm Band | FC, ST | 21 | 80 |

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