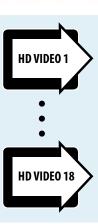


eighteen Unidirectional Channels of Multi-rate SDI / HDSDI Video over One Fiber





#### **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
- Wide Dynamic Range: Eliminates Need for Optical Attenuators
- Available with ST or FC Optical Connectors
- Requires No User Adjustments

#### **DESCRIPTION:**

The MT/MR-18HD-26 system is a part of Meridian's DigiView™ product family. This module will transmit Eighteen unidirectional channels of real-time SDI/HDSDI video over one single-mode fiber.

Using Coarse Wavelength Division Multiplexing (CWDM) technology, the content of each video channel is preserved and transmitted over single optical fiber in real-time.

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-18HD-26 system is inclosed in 5-slot stand-alone chassis (SR-1550) with AC power supply (87 VAC - 164 VAC) and can be mounted on any flat surface.

#### MARKETS:

- √ Remote broadcast camera links
- $\sqrt{}$  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
	SMPTE 305M SDTI Rates
Nominal Level	0.8 Vp-p, 1.0 Vp-p max.
Data Rate	19 Mb/s - 1.5 Gb/s
Impedance	_ 75 Ohm
Gain	_ Unity
Input Coupling	– AC
Return Loss	_>15 dB
Jitter (Pattological Data Pattern)	_ < 0.2 UI
Cable Equailization	— Automatic 0-70 m @ 1.5 Gb/s
Bit-Error Rate (0 to -20dBm)	10-12

## **Optical**

Wavelengts	1270nm - 1610nm			
Output power	+1 dBm per channel			

#### **Connectors**

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

#### **Power**

Power	Consumption	20V

#### **Indicators (LEDs)**

Power On
Signal Power Level ( RX
Signal Present (TX)
Laser ON (TX)

## **Physical**

Dimensions (Module)	135(W)x188(D)x112(H) mm		
	(5.31 x 7.31 x 4.40 inch)		
Weight (Module)	4064 gms (8.96 lb.)		

#### **Enviromental**

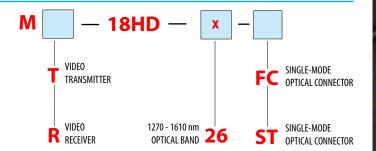
Operating Temperature	25°C to +60°C		
Storage Temperature	-55°C to +85°C		
Relative Humidity	0 to 95% Non-condensing		

## **Quality**

MTBF	>200,000 hours @ Ground Fix or	
	Single channel	
	35°C per MIL217F	

#### **Part Numbers:**

Unit	Description	Wavelength
MT-18HD-26	Video Transmitter, Single-mode	Video: Tx @ 1270nm - 1610nm
MR-18HD-26	Video Receiver, Single-mode	Video: Rx @ 1270nm - 1610nm





## **OPTICAL:**

Meridian	Fiber Type/Size	Optical Output	Receiver Sensitivity	Optical Budget	Wavelength	Optical	Optical Dynamic	Max Distance
Optical Code	(um)	(dBm)	(dBm)	(dB)	(nm)	Connector	Range (dB)	(Km)
26	Singlemode (DFB Laser) 9 / 125	+1 (per channel)	-17	18	1270 nm - 1610 nm	FC, ST	17	