

FEATURES

- SDI / HD-SDI Video Transmission (19 Mbps to 1.5Gbps)
- 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
- Bi-Directional RS-422 Data transmission
- Built in Re-clocker on TX/RX
- Wide Optical Dynamic Range: Eliminates Need For Optical Attenuators
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart™ PC Based Network Management
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Screw Terminals Connector for Data

DESCRIPTION

The FT/FR-1HD2F/2F-12 fiber optic transmission systems are taking advantage of Meridian's new digital encoding technology and will transmit following signals:

1. One real-time, SDI / HD-SDI Video channel (19 Mbps to 1.5 Gbps)
2. Two full duplex RS-422 Data channels

These units featuring built-in Re-clockers that support 3R (Retiming, Reshaping, Regenerate) functions and buffered output on SDI/HD-SDI Video channel.

The functionality of this system is enhanced by compatibility with Meridian's PC based SpectraSmart™, Network Management and Remote Diagnostic Software System. SpectraSmart™ supervises the operating parameters of the transmission system such as status on SDI signal presence, PLL lock, SDI data rates, voltage, temperature, optical levels. See the SpectraSmart brochure for more details.

CONFIGURATIONS

The DigiCool products are available as rack mount cards that can be installed in Meridian's card chassis, desk chassis and 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be made a standalone system by using the SR-500/s, 1 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS

- ✓ Security and Surveillance
- ✓ Intelligent Transportation System (ITS)
- ✓ Access Control Systems
- ✓ Campus Lecture Networks

SPECIFICATIONS:

SDI/HDSDI 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

Data

Formats	RS-422, Manchester, Bi-Phase
Data Rate	DC to 250 Kb/s
Bit Error Rate	10 ⁻⁹ *

Optical

Fiber Data Rate	1.5 Gb/s
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Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST - MM(default), FC - SM(default)
Power (module)	See SR-500 Brochure for details
Data	Screw Terminals Connector

Power **

Card	5 Watts
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Indicators (LEDs)

1 - Green	Power On
1 - Bi-color	TX Carrier/ Laser Over Current
1 - Bi-color	RX Carrier - Present / Error
1 - Bi-color	SDI/HD-SDI Signal Present (TX)
1 - Bi-color	SDI/HD-SDI Level 0/-20 dB (RX)
4 - Green	Data Present

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

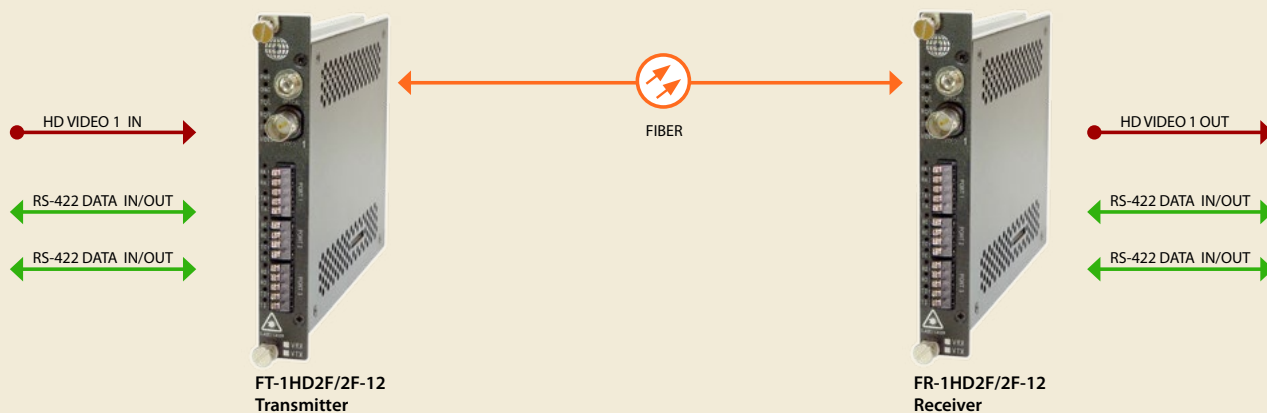
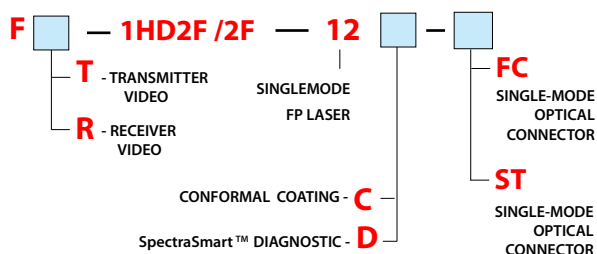
Environmental

Operating Temperature ...	-34°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
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Part Numbers:



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)
12	Singlemode (FP Laser) 9 / 125	-5	-25	20	1310 / 1490 / 1550	FC, ST	25	55