

Digitally Encoded Multi-rate 12G-SDI Video using the Small Form Pluggable (SFP+) Optical Module





FEATURES:

- Transmission of Multi-Rate SDI (270 Mbps to 12Gbps (12G))
- Real-Time, Uncompressed Video
- Supports The Following Formats :
 - ST-2082-1(12G)
 - ST-2081-1(6G)
 - ST-424(3G)
 - ST-292(HD)
 - ST-259(SD)
- Integrated Reclocker Locks to SMPTE SDI Rates: 11.88Gbps, 5.94Gbps, 2.97Gbps, 1.485Gbps and 270Mbps
- Adaptive Input Cable Equalizer
- Supports SFF8431 (SFP+)
- Error Free Pathological Pattern Performance
- Supports Embedded Audio and Metadata
- Fiber Distance in Excess of 20 km
- 5 VDC Input with Locking Mini USB Power Connector

DESCRIPTION:

Meridian's 12G-SDI fiber products is part of our expanding DigiCool product family.

The NT/NR-1HK-SFP product supports one channel of SMPTE compliant industry standard, broadcast quality digital video over single-mode fiber.

These units transmit and receive real-time video and no video compression is utilized.

Integrated Reclocker ensures maximum performance over long fiber distance.

This product incorporates the industry standard Small Form Pluggable (SFP+) optical modules.

In addition to single-mode SFP+ modules, CWDM options are available.

CONFIGURATIONS:

This system is available as small standalone modules and can be desk or wall mounted.

MARKETS:

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

SPECIFICATIONS:

Video

Formats	ST-2082-1(12G)
	ST-2081-1(6G)
	ST-424(3G)
	ST-292(HD)
	ST-259(SD)
Nominal Level	0.8 Vp-p, 1.0 Vp-p max.
Data Rate	270Mbps - 12Gbps
Impedance	75 Ohm
Gain	Unity
Input Coupling	AC
Return Loss	>15 dB
Jitter (Pattological Data Pattern)	< 0.2 UI
Bit-Error Rate	10-12
Cable Equailization	
(Belden 1694A)	75m @ 11.88 Gbps (4Kp60 UHD)
	120m @ 5.94 Gbps (UHD)
	200m @ 2.97 Gbps (FHD)
	280m@ 1.485 Gbps (HD)
	60m@ 270 Mbps (SD)

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	LC
Power	Mini USB

Quality

MTBF >170,000 hours @ Ground Fix 35°C per MIL217F

Power

Power Consumption	2.0 W @ 5 VDC
Input Voltage	5VDC
Power Supply	WP-USB

Indicators (LEDs)

1 - Green	Power
1 - Green	SDI Signal Present
1 - Green	Optical Signal Present

Physical

Dimensions	86 mm (3.35") L, 46 mm (1.8") W
	20mm (0.785") D
Weight	100 gms (3.52 Oz)

Environmental

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

Part Numbers:



VIDEO IN



NT-1HK-SFP Transmitter





NR-1HK-SFP Receiver



SFP options:

The SFP series products are available for both single-mode and multimode fiber applications and ether one or two fiber versions. Recommended optical speed for this product is 12Gbps.

For more specifications on a SFP optical devices go to **SFP data sheet** or go to: WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES

Common SFP modules		
Part Number	Fiber Type	Fibers
SMT1300J10	Single-mode 6G Transmitter, 1310nm, 10Km	1
SMT1550J20	Single-mode 6G Transmitter, CWDM*, 20Km	1
SMR1300J10	Single-mode 6G Receiver, 1310nm, 10Km	1
SMT1300K10	Single-mode 12G Transmitter, 1310nm, 10Km	1
SMT1550K20	Single-mode 12G Transmitter, CWDM*, 20Km	1
SMR1300K10	Single-mode 12G Receiver, 1310nm, 10Km	1

*1550nm wavelength shown, 1270-1610 are available.

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MERIDIAN TECHNOLOGIES INC. • 700 ELMONT ROAD, ELMONT, NY 11003 • PHONE 516. 285. 1000 • FAX 516. 285. 6300 • E-MAIL SALES@MERIDIAN-TECH.COM • WWW.MERIDIAN-TECH.COM