MERIDIAN TECHNOLOGIES

SERIES 9000

Three Channel High Resolution RGB Video System

FEATURES:

- Surface Mount Technology (SMT) for High Reliability and Repeatability
- Hot Swappable Cards
- ST™ Optical Connector
- 160 MHz Video Bandwidth
- True DC Restoration
- SpectraSmart™ Compatible
- Sync on Green or All Channels
- 10 dB Budget on 62.5/125u Fiber
- 1600 x 1200 Resolution
- Automatically Resettable Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required
- BNC Video Connector

DESCRIPTION:

Series 9000 is a fiber optic high-resolution system that is designed to transmit RGB signals up to 1600 X 1200 resolution via optical fibers. This system uses three independent fibers for each color and it can be installed as a stand-alone module or a rack mount card. The units operate with Sync on green or with Sync on all three colors. These systems are capable of a maximum of 128 KHz of horizontal frequency and 120 KHz of refresh rate. The Link budget on the multimode system is 10 dB. This reliable, low cost implementation, long distance transmission series 9000 is a state of the art alternative to coaxial systems. The 9000's capabilities are enhanced by it's compatibility with Meridian's PC based SpectraSmart™ Network Management and Diagnostic software system. SpectraSmart™ supervises the operating parameters of the transmission system such as status on video levels, sync, voltage, temperature, optical levels, etc., and external equipment which are attached to the Meridian equipment. See the SpectraSmart™ brochure for more details..

CONFIGURATIONS:

Series 9000 RGB transmitters are installed in rack mountable 14 slot subracks with dual redundant power supplies or 18 slot subracks with a single power supply at the computer source. Three fibers connect transmitters to receivers which plug into the desk chassis at the remote monitor location. Series 9000 require no user adjustments as a result of superior AGC and dynamic range circuit design. Supports 50 and 62.5/125u fibers.

APPLICATIONS:

√ CAD/CAM/CAE
√ Trading Floors
√ Medical Imaging
√ HDTV/Plasma Screens

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	0.7 Vp-p, 75 Ohm, 1.0 Vp-p max.
Bandwidth	10 Hz to 160 MHz @ -3 dB
Gray Scale Lin. Distortion	<2% typical
Pixel Intensity Distortion	<2° typical
SNR	52 dB *
Max. Horizontal Freq.	128 kHz
Max. Refresh Rate	120 kHz

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST™, FC
Power (Module)	2 Pin Terminal Block

Power**

Transmitter Card	3.8 W
Reciever Card	4 W
Transmitter Module	170 mA@ 24 VAC
Reciever Module	160 mA@ 24 VAC
Adapter for SR-500/S	Model WP-24

Indicators (LEDs)

Red	Power On

Physical

Dimensions:	
Module (w/SR-500)	182 mm (7.16")L, 132 mm (5.21")W
	29 mm (1.15")H
Card	160 mm (6.3")L, (0.8")W
	10 mm (4")H
Weight:	
Module (w/SR-500)	900 g (32 oz.)
Card	450 g (16 oz.)
Number of Rack Slots	One

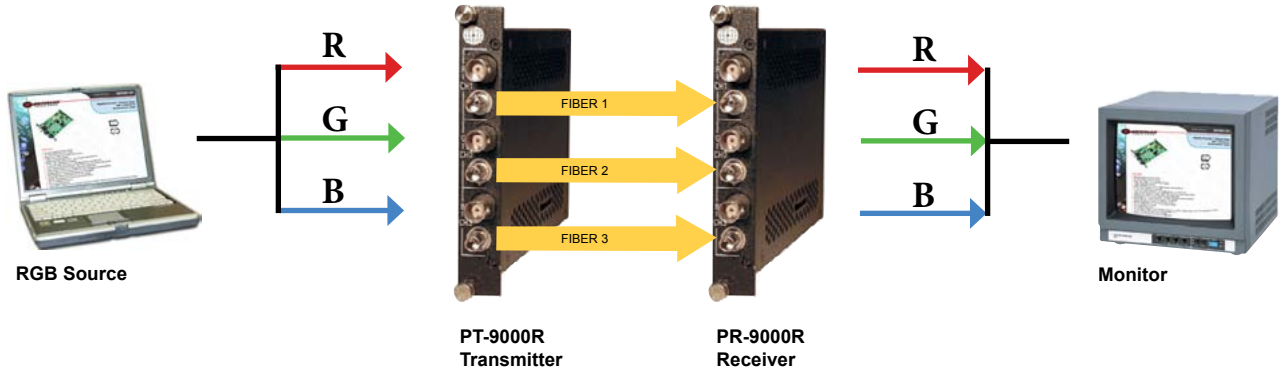
Environmental

Operating Temperature	-20°C to +50°C
Storage Temperature	-50°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>160,000 hours @ Ground Fix
	35°C per MIL217F

** Measured @ 500 m (multimode)*
*** Due to variations of drivers and diagnostic options power shown at maximum measurements*



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
Multimode* (SLED) 50/125	-13	-20	7	850	ST	10	2.3
Multimode* (SLED) 62.5/125	-10	-20	10	850	ST	10	3.3

** Distance is limited to fiber loss, splices and bandwidth*

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