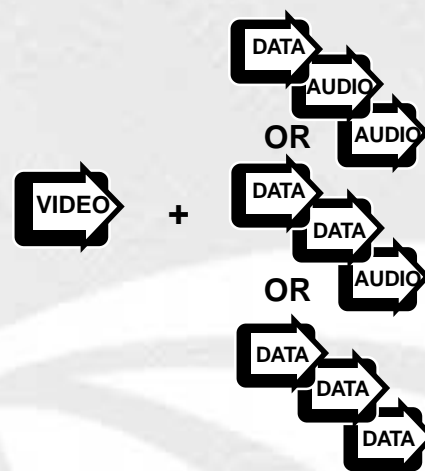




FM Video with Three Channels



FEATURES:

- Surface Mount Technology (SMT) for High Reliability and Repeatability
- Hot Swappable Cards
- Laser Based Back-Biased Photo Detection Circuitry for Stable Optical Output Over Full Temperature Range (Singlemode)
- ST™, FC Optical Connector
- 7 MHz Video Bandwidth
- 10Hz to 20KHz Audio Bandwidth
- DC to 300 Kb/s Data Rate
- Meets EIA RS-170, RS-343A
- Frequency Modulated (FM) Transmission
- SpectraSmart™ Compatible
- Meets NEMA TS1/TS2 and Caltrans Specifications
- Utilizes Internal Switching Power Supplies
- Meets RS-250C Transmission Requirements
- Compatible with All NTSC, PAL, or SECAM Systems
- LED Status Indicators Provide Rapid Indication of Critical Operating Parameters
- 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
- DB Style Data Connector for Audio and/or Data

DESCRIPTION:

The Series 180 is a Frequency Modulated (FM) state-of-the-art fiber optic system that transmits a real time video signal plus three data signals or two data with one audio signal or one data and two audio signals (in same direction) over one multimode or singlemode fiber. PAL, SECAM or NTSC formats, in B&W or color, are seamlessly transmitted distances of up to 6Km (multimode) and 100 Km (singlemode). Available formats are Balanced/Unbalanced Audio, GenLock, Manchester, Biphase, RS-232D, RS-422A, 4-20mA Current Loop, TTL, and Contact Closure (option for open collector). The capabilities of the Model 180 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, FM carrier detect, voltage, temperature, optical levels, etc., and external equipment which are attached to the Meridian equipment. See the SpectraSmart™ brochure for more details.

CONFIGURATIONS:

The Series 180 is available as rack mount cards that can be installed in all of Meridian's card chassis and 19" racking frames. The Series 180 can be converted to module by installing it in the SR-500 card chassis. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires no user adjustments and features superior quality and performance.

APPLICATIONS:

Security and Surveillance
Intelligent Transportation System (ITS)
Access Control
Distance Learning
Video Teleconferencing

SPECIFICATIONS:

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 7 MHz @ -3 dB
Differential Gain	<2% typical
Differential Phase	<1.5° typical
SNR	64 dB weighted*
Return Loss	>30 dB
Field Tilt	<0.5% max.
Carrier Frequency	70 MHz

Audio

I/O Impedance	600 Ohm, 10 kOhm, 47 kOhm
	Balanced/Unbalanced
I/O Level	-6 to +6 dBm
Frequency Response	10 Hz to 20 KHz
THD	<1%, 1 KHz @ max modulation
SNR	>60 dB (weighted)*

Data

Formats	RS-232D, RS-422A, GenLock,
	Manchester, Biphase, 4-20 mA
	Current Loop, TTL,
	Contact Closure
Rate	DC to 300 Kb/s
Bit Error Rate	10 ⁻⁹ *

Connectors

Video	75 Ohm BNC (Gold Center Pin)
Audio	DE-15 Female
Data	DE-15 Female
Optical	ST™, FC
Power	2 pin Terminal Block

Power**

Card	3.5 W
Module	140 mA @ 24 VAC
Adapter for SR-500/S	Model WP-24

Indicators (LEDs)

Green	Video, Audio,
	Data Activity
Red	Power On

Physical

Dimensions:	
Module (w/SR-500)	181 mm (7.15") L, 24 mm (.95") W
	132 mm (5.20") H
Card	160 mm (6.3") L, 20mm (0.8") W
	100 mm (4") H
Weight:	
Module (w/SR-500)	900 g (32 oz.)
Card	450 g (16 oz.)
Number of Rack Slots	One

Environmental

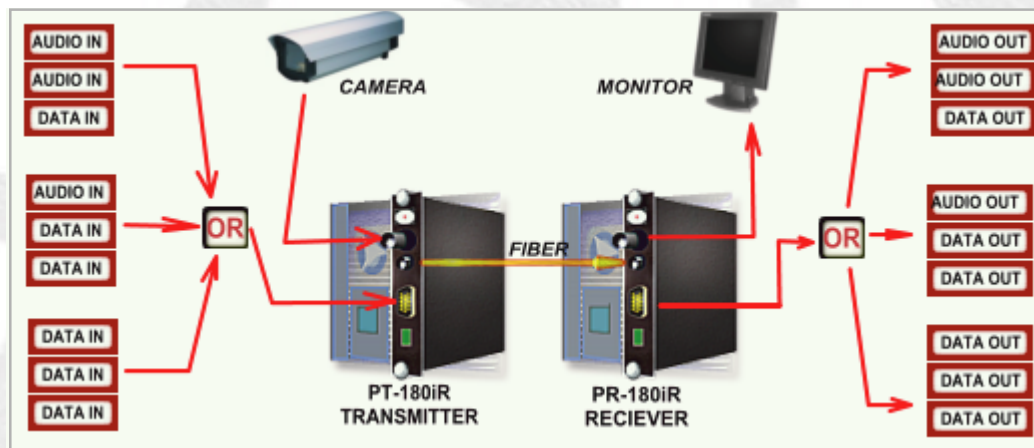
Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>165,000 hours @ Ground Fix
	35°C per MIL217F

* As per RS-250C, measured @ 1Km (multimode), @ 10Km (singlemode)

** Due to variations of drivers and diagnostic options power shown at maximum measurements



OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Reciever Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode* (SLED)						
62.5/125	-13	-34	21**	850	ST	39
62.5/125	-16	-34	18**	1300	ST	39
Singlemode (Laser)						
9/125	-7***	-36	29	1310	ST, FC	41
9/125	-10***	-36	26	1550	ST, FC	41

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

** For 50/125um fiber, subtract 3dB

*** Higher output lasers available

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