

FM Video with Return Channel



OR



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
- 10 MHz Video Bandwidth
- 10 Hz to 20 KHz 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
- 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
- 3 Pin Terminal Block Connector for Data or Audio

DESCRIPTION:

The Series 200 and 200i are Frequency Modulated (FM), fiber optic video systems that transmit a video signal in one direction and an audio or data signal in the opposite direction over one fiber (Series 200i) or two fibers (Series 200). Distances of 6Km over one multimode fiber and over 100Km over one singlemode fiber. PAL, SECAM or NTSC formats, in B&W or color, are seamlessly transmitted. The Series 200's capabilities are enhanced by its 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 200 product family is available as rack mount cards that can be installed in all of 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. This product requires no user adjustments & features superior quality and performance.

APPLICATIONS:

Security and Surveillance
 Military Communications
 Intelligent Transportation System (ITS)
 Access Control

SPECIFICATIONS :

Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5Hz to 10 MHz @ -3dB
Differential Gain	<2% typical
Differential Phase	<1.5° typical
SNR	66 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 Responce	10 Hz to 20 KHz
THD	<1%, 1 KHz @ max modulation
SNR	>60 dB (weighted)*

Data

Formats	RS-232D, RS-422A, GenLock, Manchester, Biphase, 4-20mA 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	3 Pin Terminal Block
Data	3 Pin Terminal Block
Optical	ST™, FC
Power	2 Pin Terminal Block

Power **

Card	2.5 W
Module	100 mA @ 24 VAC
Adapter for SR-500/S	Model WP-24

Indicators (LEDs)

Red	Power On
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Physical

Dimensions:

Module (w/SR-500)	182 mm (7.16") L, 132 mm (5.21") W
	29 mm (1.15") H
	160 mm (6.3") L, 20 mm (0.8") W
Card	100 mm (4") H

Weight:

Module (w/SR-500)	900 g (32 oz.)
Card	450 g (16 oz.)
Number of Rack Slots	One

Enviromental

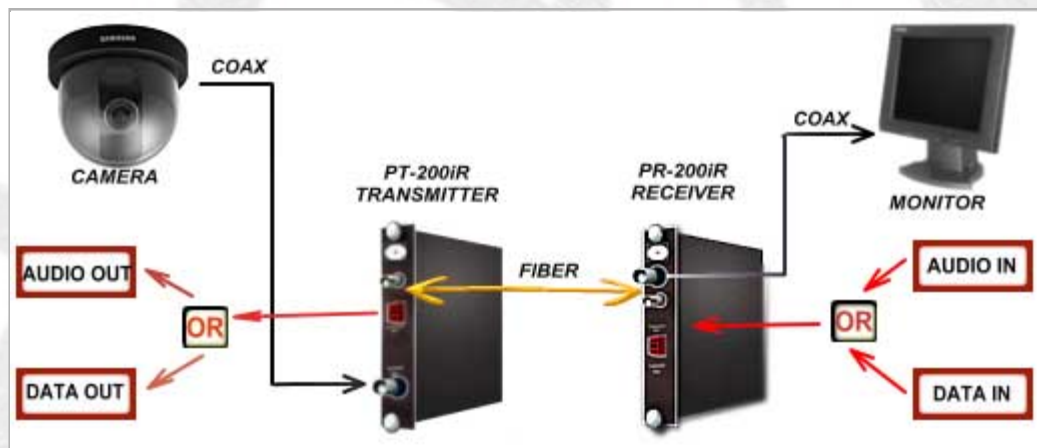
Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

Quality

MTBF	>235,000 hours @ Ground Fix 35°C per MIL217F
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* 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
62.5/125	-15/-18	-33/-33	15**	850/1300	ST	39
Singlemode (Laser)						
9/125	-7***	-36	29	1310	ST, FC	41
9/125	-10***	-36	26	1550	ST, FC	41
9/125	-10/-10	-34	24	1310/1550	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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