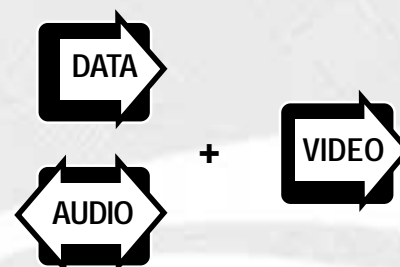


**Audio Intercom System  
with FM Video****FEATURES:**

- 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 Hz to 15 KHz Audio Bandwidth
- Single Direction Contact Closure
- Frequency Modulated (FM) Transmission
- SpectraSmart™ Compatible
- Meets NEMA TS1/TS2 and Caltrans Specifications
- Utilizes Internal Switching Power Supplies
- ED 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
- Three Pin Terminal Blocks

**DESCRIPTION:**

The Series 950 and 950i are Frequency Modulated (FM) based, Intercom compatible fiber optic audio transmission systems that operate over one or two multimode or singlemode fibers. The Series 950 product family supports most Intercom manufacturers including: Aiphone, TOA, Bogen, Dukane, etc. Features include FM video capabilities. The Series 950'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(s) such as status on FM carrier detect, voltage, temperature, audio, optical levels, video levels, sync., etc. See the SpectraSmart™ brochure for more details.

**CONFIGURATIONS:**

The 950 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  
Intercom Systems  
Nurse Call Stations  
Residential Intercom

## 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	4-8 Ohm
	Unbalanced
I/O Level	-40 to +15 dBm
Frequency Responce	10 Hz to 15 KHz
THD	<1%, 1KHz @ max modulation
SNR	>60 dB (weighted)*

### Data

Formats	Contact Closure
Rate	DC to 300 Kb/s
Bit Error Rate	10 <sup>-9</sup> *

### Connectors

Audio	3 Pin Terminal Block
Data	3 Pin Terminal Block
Optical	ST™, FC
Power	2 Pin Terminal Block

### Power\*\*

Card	5 W
Module	205 mA @ 24 VAC
Adapter for SR-1000/S	Model PS-100

### Indicators (LEDs)

Red	Power On
Red	Audio Level Set
Red	Audio Over Modulation

### 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)	900g (32oz.)
Card	450g (16oz.)
Number of Rack Slots	One

### Enviromental

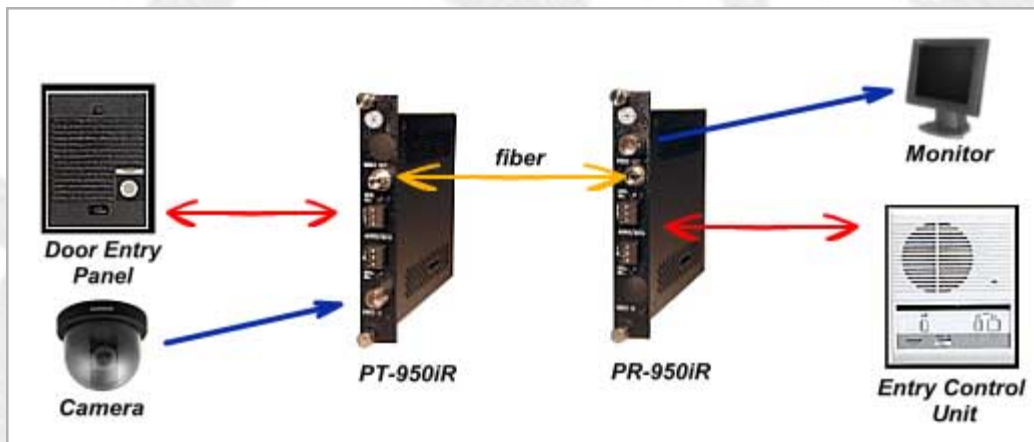
Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

### Quality

MTBF	>180,000 hours @ Ground Fix
	35°C per MIL217F

\* 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)	Receiver 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 50/125µm fiber, subtract 3dB

\*\*\* Higher output lasers available

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