

Audio Intercom System



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 Switching, Internal Power Supplies
- 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
- Three Pin Terminal Blocks

DESCRIPTION:

The Series 900 and 900i are Frequency Modulated (FM) based, Intercom compatible fiber optic audio transmission systems that operate over one or two multimode or singlemode fibers. The Series 900 product family supports most Intercom manufacturers including: Aiphone, TOA, Bogen, Dukane, etc. Optional features include FM video capabilities (See Series 950). The Series 900'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 FM carrier detect, voltage, temperature, audio, optical levels, etc. See the SpectraSmart™ brochure for more details.

CONFIGURATIONS:

The 900 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:

Audio

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

Data

Formats..... Contact Closure
Rate..... DC to 300 Kb/s
Bit Error Rate..... 10^{-9} *

Connectors

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

Power**

Card..... 3.2 W
Module..... 130 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)..... 900 g (32 oz.)
Card..... 450 g (16 oz.)
Number of Rack Slots..... One

Enviromental

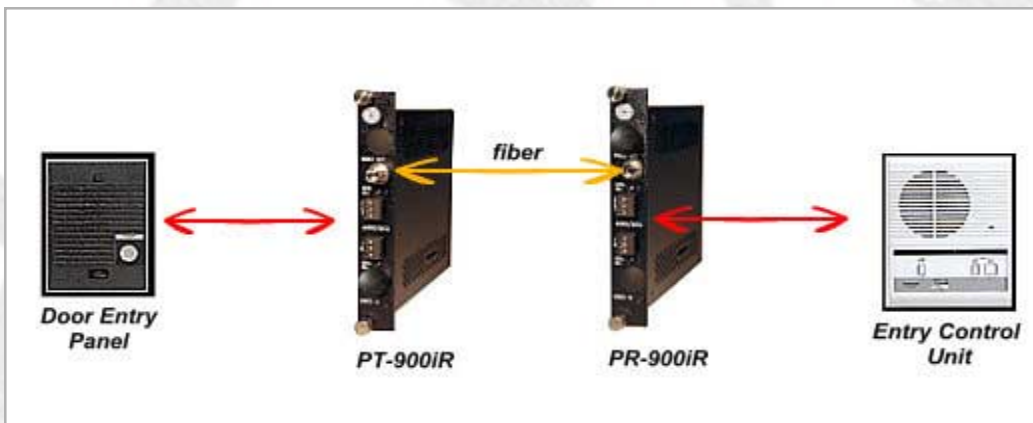
Operating Temperature..... -40°C to +74°C
Storage Temperature..... -55°C to +85°C
Relative Humidity..... 0 to 95% Non-condensing

Quality

MTBF..... >210,000 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)	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 50/125µm fiber, subtract 3dB

*** Higher output lasers available

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