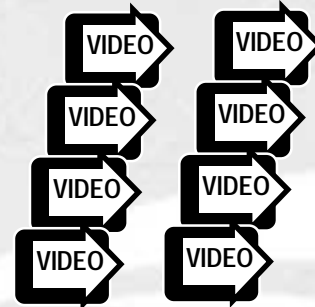


**FM Video  
 Eight Channel Mux**

**FEATURES:**

- SpectraSmart™ Network Management Compatible
- Surface Mount technology (SMT) for High Reliability and Repeatability
- Hot-swappable Rack Cards
- FM / FDM Design
- Transmits Eight Real-Time Video Signals
- ST™, FC Optical Connector
- 7 MHz Video Bandwidth per Individual Channel
- Requires No In-field Electrical or Optical Adjustments
- Meets EIA RS-170, RS-343A
- Meets NEMA TS1/TS2 and Caltrans specifications
- Utilizes Internal Switching Power Supplies
- Meets RS-250C Transmission Requirements
- NTSC, PAL, SECAM Compatible
- Automatic Resettable, Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required
- BNC Video Connectors

**DESCRIPTION:**

The 8000i is a reliable, cost effective, state-of-the-art, one fiber video transmission system. The 8000i is frequency Modulated/Frequency Division Multiplexed (FM/FDM) for superior performance. Cross talk on adjacent channels is eliminated. This fiber optic system transmits eight channels of real-time video over one fiber. The 8000i accepts PAL, SECAM, and NTSC formats. B&W or Color signals are seamlessly transmitted distances of up to 2Km (multimode) and 80 km (singlemode). The 8000i capabilities are enhanced by it's compatibility with Meridian's PC based SpectraSmart™, Network Management and Remote 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 8000i product family is available as rack mount cards that can be installed in all of Meridian's card chassis, desk chaises and 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These products require no user adjustments & features superior quality and performance.

**APPLICATIONS:**

Security and Surveillance  
 Intelligent Transportation System (ITS)  
 Access Control Systems  
 Campus Lecture Networks

## SPECIFICATIONS:

### Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 6.8 MHz @ -3 dB
Differential Gain	<2% typical
Differential Phase	<2° typical
SNR	58 dB weighted*
Return Loss	>30 dB
Field Tilt	<0.5% max.
Highest Carrier Frequency	150 MHz

### Connectors

Video	75 Ohm BNC (Gold Center Pin)
Optical	ST™, FC
Power	5 Pin Male DIN

### Power \*\*

Card	12 W
Module	500 mA @ 24 VAC,
Adapter for SR-1000	Model PS-100

### Indicators (LEDs)

Red ..... Power On

### Physical

Dimensions:

Module (w/SR-1000) ..... 182 mm (7.16") L, 165 mm (6.5") W  
 ..... 44 mm (1.75") H

Card ..... 160 mm (6.3") L, 40 mm (1.7") W  
 ..... 100 mm (4") H

Weight:

Module (w/SR-1000) ..... 1350 g (48 oz.)

Card ..... 675 g (24 oz.)

Number of Rack Slots ..... Two

### Environmental

Operating Temperature ..... -40°C to +74°C

Storage Temperature ..... -55°C to +85°C

Relative Humidity ..... 0 to 95% Non-condensing

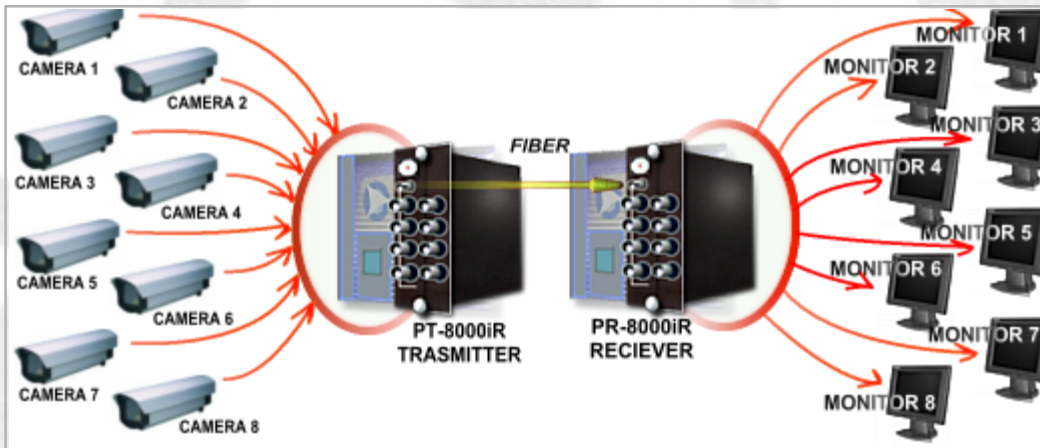
### Quality

MTBF ..... >100,000 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)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode* (Laser) 62.5/125	-10	-23	13**	850/1300	ST	39
Singlemode (Laser) 9/125	-10***	-25	15***	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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