

FM Video with
 “Up-The-Coax” Data



FEATURES:

- Compatible with most “Up-The-Coax” systems
- 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
- 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

DESCRIPTION:

The Series 600iR - V / 2 A,C,D Frequency Modulated (FM) fiber optic video systems that transmit video and “up the coax” data control signals on 1 fiber. The series is available in multimode and singlemode versions and supports NTSC, PAL or SECAM formats, color or B&W. The maximum distances are determined by the control equipment manufacturer’s “up the coax” specifications on coaxial cable. The Series 600i capabilities are enhanced by it’s compatibility with Meridian’s PC based SpectraSmart™ Network Management and Diagnostic software system. SpectraSmart™ supervises and monitors the operating parameters of the transmission system such as status on video levels, sync, FM carrier detect, power supply voltages, temperature, optical levels and more. See the SpectraSmart™ brochure for more details.

CONFIGURATIONS:

The 600iR - V / 2 A,C,D 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
 Intelligent Transportation System (ITS)
 Video Teleconferencing
 Distance Learning

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

Data

Formats. **Up-the-Coax Option A,C,D:**
 2A - Pelco and Video Alarm
 2C - Proteus w/o VD2
 2D - Proteus with VD2

Connectors

Video/Data 75 Ohm BNC (Gold Center Pin)
 Optical ST™, FC

Power **

Card 4.0 W
 Module 175 mA @ 24VAC
 Adapter for SR-500/S. Model WP-24

Indicators (LEDs)

Red Power On

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, 20 mm (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

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

* As per RS-250C, measured @ 1Km (multimode), @ 2Km (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, fiber bandwidth and characteristics of the control equipment

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

*** Higher output lasers available

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