



GENERAL DESCRIPTION

VERSITRON FVT1100 and FVR1100 Series Fiber Optic Video Modems are used to extend a frequency modulation (FM) video signal and return data over a single fiber optic cable. These modems provide high quality transmission of one channel simplex video and one channel return data at distances to 3km using multimode fiber and distances to 30km using singlemode fiber. A BNC connector provides the copper interface for the video input/output and a DB9 connector provides the copper interface for the data input/output. RS-422, RS-485, and RS-232 data interfaces are supported. ST and SC optical connectors are standard for the fiber optic interface. The FVT1100 and FVR1100 video modems are completely compatible with NTSC, PAL, or SECAM video standards.

The FVT1100 transmitter and FVR1100 receiver modems are available as standalone devices for easy plug and play installation. In addition, the FVR1100 receiver modems can be ordered as circuit card modules for installation in the Model FVC14 rack-mount chassis. The 14-slot chassis fits in a standard 19" rack and is offered with either 110VAC or 220VAC power supplies.

FEATURES

VERSITRON FVT1100 and FVR1100 Series Fiber Optic Video Modems utilize APC circuitry while maintaining stable optical power output. The fiber optic link established between the transmitter and receiver devices insures immunity from EMI, RFI, and ground loops. AD, Pelco, Phillips, and Vicon communication protocols are supported. The data interface is switch selectable to assure compatibility with cameras utilizing RS-422, RS-485, or RS-232 data protocols for their PTZ (pan, tilt, zoom) features. The plug and play design of the FVT1100 transmitters and FVR1100 receivers means no user adjustments are required. LED status indicators include video sync present (VD), data transmitted (TD), data received (RD), and power on (PWR)

SELECTION GUIDE

	Transmitters		
Model □	FVT1103	FVT1104	FVT1105
Fiber/Wavelength	MM/1310nm	MM/1310nm	SM/1310nm
Distance	3km	3km	30km
Connector	ST	SC	SC

	Receivers (Standalone)		
Model □	FVR1103	FVR1104	FVR1105
Fiber/Wavelength	MM/1310nm	MM/1310nm	SM/1310nm
Distance	3km	3km	30km
Connector	ST	SC	SC

	Receivers (Modules*)		
Model □	FVR1103M	FVR1104M	FVR1105M
Fiber/Wavelength	MM/1310nm	MM/1310nm	SM/1310nm
Distance	3km	3km	30km
Connector	ST	SC	SC

*Modules are installed in Model FVC14 Chassis.

ACCESSORIES

Model	Description	Weight
FVC-14-110	14-slot, 19" rack-mount chassis; 110VAC; Dimensions: 19.0 x 11.8 x 5.25 inch 48.2 x 30 x 13.3 cm	14lbs. (6.3kg)
FVC-14-220	14-slot, 19" rack-mount chassis; 220VAC; Dimensions: 19.0 x 11.8 x 5.25 inch 48.2 x 30 x 13.3 cm	15lbs (6.3kg)

SPECIFICATIONS

Model □	FVT1103/FVR1103/FVT1104/ FVR1104/FVT1105/FVR1105	FVR1103M, FVR1104M, FVR1105M
Dimensions	7.5L x 6.3W x 1.2H inch 19L x 16W x 3.2H cm	7.5L x 5.1W x 1.0H inch 19L x 12.9W x 2.5H cm
Weight	0.5kg 1.1lb.	.18kg 0.4lb
Operating Temperature	-30°C to +50°C	
Storage Temperature	-40°C to +85°C	
Humidity	0% to 95% non-condensing	
Altitude	Up to 10,000 feet	

ELECTRICAL INTERFACE

Power Requirements	+90VDC@650mA; -9VDC@100mA
Video Impedance	75 ohm
Video Input	1 volt peak to peak
Bandwidth	5Hz to 8MHz
Differential Gain	<3%
Differential Phase	<3°
Tilt	<2%
Signal-to-Noise Ratio	60dB
FM Carrier Technology	70Hz to 150Hz
Connector (video)	BNC
Connector (data)	DB9F
Data Rate	100Kbps
Bit Error Rate	10 ⁻⁹
Data Format	RS-232, RS-422, RS-485
Power Consumption	7W (max)

FIBER OPTIC INTERFACE

Model □	FVT1103/FVR1103 FVR1103M	FVT1104/FVR1104 FVR1104M	FVT1105/FVR1105 FVR1105M
Wavelength	1310nm multimode	1310nm multimode	1310nm singlemode
Connector	ST	SC	SC
Link Budget	20dB	20dB	25dB
Operating Range	3km	3km	30km

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