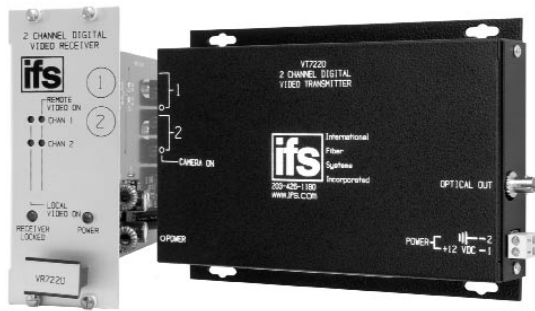




PRODUCT SPECIFICATION 2-CHANNEL DIGITAL VIDEO MULTIPLEXER

VT/VR7200 SERIES



DESCRIPTION

The IFS VT/VR7200 series multiplexers simultaneously transmits two channels of video over one optical fiber utilizing 8-bit digital encoding for the high-quality video transmission. These products exceed EIA RS-250C for Medium-Haul Video Transmission performance requirement. The modules are universally compatible with major CCTV camera manufacturers. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The modules incorporate Power, Receiver Locked and Video Presence Status indicating LED's to monitor proper system operation. The modules are available in either stand-alone or rack mount versions.

APPLICATION EXAMPLES

- CCTV

FEATURES

- 8-Bit Digitally Encoded Video Transmission Transmits 2 Real-Time Color Video Signals
- Exceeds RS-250C Medium-Haul Transmission Performance Standard Directly Compatible with All NTSC, PAL, or SECAM CCTV Camera Systems
- LED Status Indicators Provide Indication of Critical Operating Parameters
- Tested and Certified by an Independent Testing Laboratory for Full Compliance with the Environmental Requirements (Ambient Operating Temperature, Mechanical Shock, Vibration, Humidity with Condensation, High-Line/Low-Line Voltage Conditions and Transient Voltage Protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Solid-State Current Limiters on All Power Lines Provide Equipment Protection
- Exceeds NEMA TS-1/TS-2 and Caltrans Traffic Signal Control Equipment
- Compatible with Major CCTV Camera Manufacturers
- No In-field Electrical or Optical Adjustments Required
- Hot-Swappable Rack Modules
- Automatic Resettable Fuses on all Power Lines
- Comprehensive Lifetime Warranty

Available at:
www.ifs.com

- A & E Specifications, (CSI)
- AutoCAD Drawings
- Operation Manuals
- Technical Bulletins

ORDERING INFORMATION

	PART NUMBER	DESCRIPTION	FIBERS REQUIRED	OPTICAL PWR BUDGET	MAX. DISTANCE*
MULTIMODE 62.5/125µm**	VT7220	2 Channel Video Transmitter (1310 nm)	1	10 dB	1.2 miles (2 km)▲
	VR7220	2 Channel Video Receiver (1310 nm)			
SINGLEMODE 9/125µm	VT7230	2 Channel Video Transmitter (1310 nm)	1	20 dB	38 miles (60 km)
	VR7230	2 Channel Video Receiver (1310 nm)			
ACCESSORIES▲	PS-12VDC 12 Volt DC Plug-in Power Supply (Included)				
	PS-12VDC-230 12 Volt DC Plug-in Power Supply, 230 VAC Input (Included if specified at time of order)				
OPTIONS	Add '-R3' to Model Number for R3 Rack Mount - No Charge (Requires R3 Rack purchased separately)				
	Add '-C' for Conformally Coated Printed Circuit Boards (Extra charge, consult factory)				
	Add -SC for SC connector (Single-mode equipment only)				
	Add -'FC' to model number for FC Optical Connector (Single-mode equipment only)				
	Add -HP for High Power Transmitter				

* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. ** For 50/125 Fiber, subtract 4 dB from Optical Power Budget. ▲ This product may be used with 62.5µm graded index multimode fiber having a maximum run length of 2 km and/or a maximum optical loss of 10 dB.

♦ All accessories are third party manufactured.



TECHNICAL SPECIFICATION

2-CHANNEL DIGITAL VIDEO MULTIPLEXER

VT/VR7200 SERIES

SPECIFICATIONS

VIDEO

Video Input: 1 volt pk-pk (75 ohms)
Input/Output Channels: 2
Bandwidth (minimum): 10 Hz - 6.5 MHz
Differential Gain: <2%
Differential Phase: <0.7°
Tilt: <1%
Signal-to-Noise Ratio (SNR): 60 dB @ maximum Optical Loss Budget

OPTICAL EMITTER Laser Diode

WAVELENGTH 1310 nm, Multimode
1310 nm, Singlemode

NUMBER OF FIBERS 1

LED INDICATORS

VT Transmitter/ Data Transceiver Unit:
• Video Input Sync Presence for Each Video Channel
• Video Input overload for Each Video Channel
• Operating Power

VR Receiver/ Data Transceiver Unit:
• Video Output Sync Presence for Each Video Channel
• Video Output overload for Each Video Channel
• Optical Carrier Detect/ Link-Lock
• Operating Power

CONNECTORS

Optical: ST, SC or FC
Power: Terminal Block with Screw Clamps
Video: BNC (Gold Plated Center-Pin)

ELECTRICAL & MECHANICAL

Power: 12 VDC @ 500 mA (Surface Mount)
Surface Mount: From Rack
Rack: 2
Number of Rack Slots: Automatic Resettable Solid-State Current Limiters
Current Protection: Meets IPC Standard
Circuit Board:
Size (in./cm.) (LxWxH)
Surface Mount VT: 7.0 x 4.9 x 1.0 in., 17.8 x 12.5 x 5.1 cm
All Others: 7.7 x 5.0 x 2.0 in., 19.6 x 12.7 x 7.6 cm
Shipping Weight: < 2 lbs./0.9 kg

ENVIRONMENTAL

MTBF: > 100,000 hours
Operating Temp: -40° C to +74° C
Storage Temp: -40° C to +85° C
Relative Humidity: 0% to 95% (non-condensing)†

† May be extended to condensation conditions by adding suffix '-C' to model number for conformal coating.

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT



MADE IN THE USA

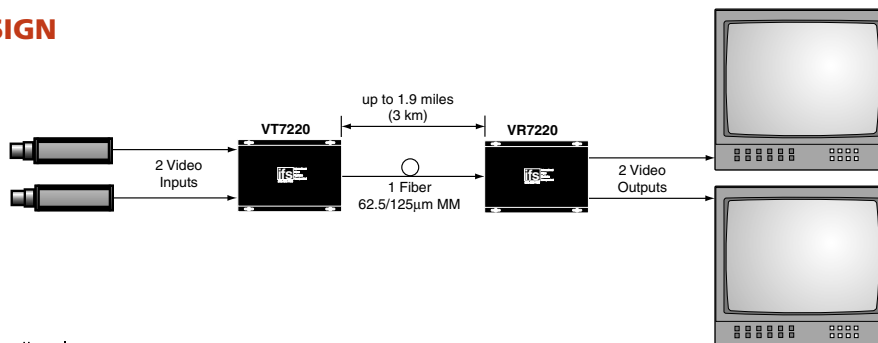
Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

OPTICAL POWER BUDGET

FIBER	WAVELENGTH	TRANSMITTER	RECEIVER	OPTICAL PWR BUDGET	MAX. DISTANCE*
		MODEL	MODEL		
Multimode 62.5/125µm**	1310 nm	VT7220	VR7220	10 dB	1.2 miles (2 km)▲
Singlemode 9/125µm		VT7230	VR7230	20 dB	38 miles (60 km)

* Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. ** For 50/125 Fiber, subtract 4 dB from Optical Power Budget. ▲ This product may be used with 62.5µm graded index multimode fiber having a maximum run length of 2 km and/or a maximum optical loss of 10 dB.

SYSTEM DESIGN



International
Fiber
Systems
Incorporated

Due to our continued effort to advance technology, product specifications are subject to change without notice.

09/09/04