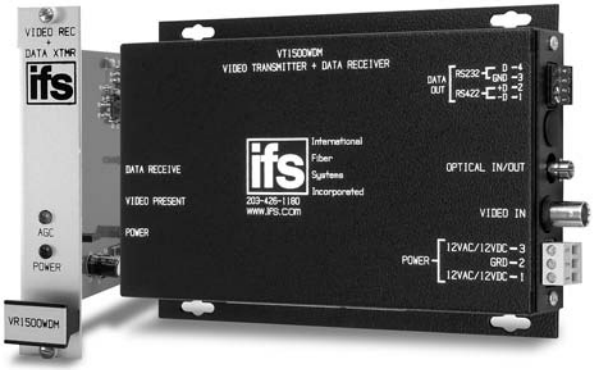
PRODUCT SPECIFICATION
VIDEO WITH ONE-WAY DATA
VT/VR1500 SERIES



DESCRIPTION

The IFS VT/VR1500 series video and data transceiver supports the simultaneous transmission of video and one-way return data over one or two multimode optical fibers. The module is universally compatible with major CCTV camera manufactures and supports RS-232 and RS-422 data interfaces and all major data protocols. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The modules incorporate power, video presence, optional contact closure, data out, and AGC status indicating LED's to monitor proper system operation. The VR1500WDM-CC features an optional contact closure input that allows an additional device such as a dome tamper switch or alarm input to be added and its signal transmitted back to the monitoring location. This feature eliminates the need for installing additional wiring to support the alarm contact closure. The modules are available in either stand-alone or rack mount

APPLICATION EXAMPLES

- CCTV with One-Way PTZ Camera Control
- CCTV with Remote Signalization

FEATURES

- AM Video Transmission
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- Supports RS-232 or RS-422 Data Interfaces
- Transparent to Data Encoding/Compatible with Major CCTV Camera Manufacturers
- Full Range Automatic Gain Control (AGC)
- No In-field Electrical or Optical Adjustments Required
- Power, Video Presence, Data Out, and AGC Status Indicating LED's to Monitor System Performance
- Integrated WDM for Greater Product Reliability
- Distances up to 2.5 miles (4 km) without Repeaters
- NTCIP Compatible
- 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.
- Hot-Swappable Rack Modules
- Available in FiberPak™
- Automatic Resettable Fuses on all Power Lines
- Comprehensive Lifetime Warranty

V D CC OPTIONAL

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**	VT1500 VR1500	Video Transmitter/Data Receiver (850 nm) Video Receiver/Data Transmitter (850 nm)	2	14 dB	2.5 miles (4 km)
	VT1500WDM VR1500WDM	Video Transmitter/Data Receiver (850/1310 nm) Video Receiver/Data Transmitter (1310/850 nm)	1	14 dB	2.5 miles (4 km)
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 '-CC' for Contact Closure on Receiver Only.				

*** 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.**

♦ All accessories are third party manufactured.

TECHNICAL SPECIFICATION
VIDEO WITH ONE-WAY DATA
VT/VR1500 SERIES

SPECIFICATIONS

VIDEO

Video Input:	1 volt pk-pk (75 ohms)
Bandwidth:	5 Hz - 10 MHz
Differential Gain:	<5%
Differential Phase:	<5°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	> 55 dB @ 10 dB ATTN.

DATA

Data Interface:	RS-232, RS-422
Data Format:	NRZ, NRZI, Manchester, Bi-phase
Data Rate:	DC-100 Kbps (NRZ)

LOSS OF RELAY

Loss of Video Relay (Optional):	SPST Relay 100 v, 0.5 A Contact Rating (Normally Open)

WAVELENGTH

850/1310/1550 nm, Multimode

NUMBER OF FIBERS

VT/VR1500:	2
VT/VR1500WDM:	1

CONNECTORS

Optical:	ST
Power and Data:	Terminal Block with Screw Clamps
Video and Sync:	BNC (Gold Plated Center-Pin)

ELECTRICAL & MECHANICAL

Power:	
VT:	24 VAC C.T., 11 - 14 VDC @ 200 mA
VR:	12 VDC @ 200 mA
Rack:	From Rack
Number of Rack Slots:	1
Current Protection:	Automatic Resettable Solid-State Current Limiters
Max. RG59 Cable Length:	750 ft.
Circuit Board:	Meets IPC Standard
Size (in./cm.) (LxWxH)	
Surface Mount:	7.0 x 4.9 x 1.0 in., 17.8 x 12.5 x 2.5 cm
Rack Mount:	7.7 x 5.0 x 1.0 in., 19.6 x 12.7 x 2.5 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 condensati conditions by adding suffix '–C' to model number for conformal coating.

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT CE c UL us GSA

Federal Supply Schedule
Contract No. GS-07F-0049M

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	OUTPUT	MODEL	SENSITIVITY		
Multimode 62.5/125µm**	850 nm	VT1500	25 µw (-16 dBm)	VR1500	1 µw (-30 dBm)	14 dB	2.5 miles (4 km)
	850/1310 nm	VT1500WDM		VR1500WDM			2.5 miles (4 km)

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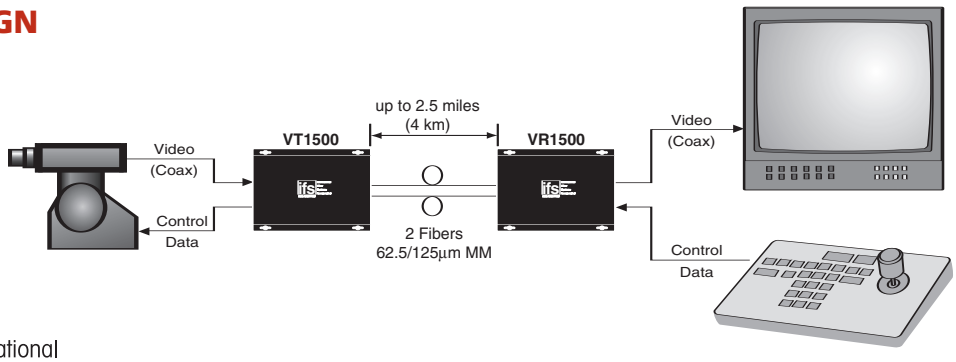
SYSTEM DESIGN



International Fiber Systems Incorporated

TEL (203)426-1180 ■ FAX (203)426-3326 ■ www.ifs.com ■ sales@ifs.com
16 Commerce Road ■ Newtown, CT 06470