

## **DESCRIPTION**

The IFS VDT/VDR1505 series video and data transmission system is designed for full compatibility with 'Up-the-Coax' video/data systems from major manufactures such as Panasonic Proteus<sup>TM</sup>, Pelco Coaxitron<sup>TM</sup>, Bosch Bi-Linx<sup>TM</sup>, and others. The module supports simultaneous broadcast quality transmission of 10-bit digitally encoded video and "up the coax" data over one multimode or single-mode fiber. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The VDT/VDR1505 series 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 incorporate power, video and data status indicating LED's to monitor proper system operation. The modules are available in either stand-alone or rack mount versions.

## **APPLICATION EXAMPLES**

- Panasonic Proteus<sup>TM</sup>
- Pelco Coaxitron<sup>TM</sup>
- Bosch Bi-Linx<sup>TM</sup> (Add '-B' for Bosch Bi-Linx<sup>TM</sup> Compatibility)

### **FEATURES**

- Transmission of Video and 'Up-the-Coax' One-Way Data
- 10-Bit Digitally Encoded Video Transmission
- Exceeds RS-250C Short-Haul Transmission
- Optional Bi-Directional Contact Closure
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- No In-field Electrical or Optical Adjustments Required
- Power, Video and PTZ Data Status Indicating LED's to Monitor System Performance
- Integrated WDM for Greater Product Reliability
- Hot-Swappable Rack Modules
- Automatic Resettable Fuses on all Power Lines
- Distances up to 30 miles (50 km)
- Comprehensive Lifetime Warranty



- 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**	VDT1505WDM VDR1505WDM	Video Transmitter/Data Receiver (1310/1550 nm) Video Receiver/Data Transmitter (1310/1550 nm)	1	15 dB	3.0 miles (5 km)		
SINGLEMODE 9/125μm	VDT1535WDM VDR1535WDM VDT1535WDM-HP	Video Transmitter/Data Receiver (1310/1550 nm) Video Receiver/Data Transmitter (1310/1550 nm) Video Transmitter/Data Receiver (1310/1550)			15 miles (25 km) 30 miles (50 km)		
	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 '-B' for Bosch Bi-Linx <sup>TM</sup> Compatibility						

<sup>\*</sup> 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.

## **SPECIFICATIONS**

#### **VIDEO**

Video Input/Output: 1 volt pk-pk (75 ohms) Bandwidth: 5 Hz - 10 MHz

Differential Gain: <1%

Differential Phase: <0.7°

Differential Phase: <0.7°
Tilt: <1%

Signal-to-Noise Ratio (SNR): > 67 dB @ Maximum Optical Loss Budget

**DATA** 

Data Interface: Pelco Coaxitron<sup>TM</sup>,

Panasonic Proteus<sup>TM</sup>, Bosch Bi-Linx<sup>TM</sup>

WAVELENGTH 1310/1550 nm, Multimode

1310/1550 nm, Singlemode

NUMBER OF FIBERS 1

**CONNECTORS** 

Optical: ST

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

#### **ELECTRICAL & MECHANICAL**

Power:

Rack: From Rack

Number of Rack Slots:

Current Protection: Automatic Resettable Solid-State Current

Limiters

Circuit Board: Meets IPC Standard

Size (in./cm.) (LxWxH)

Surface Mount: 7.0 x 4.9 x 1.0 in., 10.7 x 8.9 x 2.5 cm Rack Mount: 7.7 x 5.0 x 1.0 in., 17.8 x 12.5 x 2.5 cm

Shipping Weight: < 2 lbs./0.9 kg

**ENVIRONMENTAL** 

MTBF: > 100,000 hours Operating Temp:  $-40^{\circ}$  C to  $+74^{\circ}$  C Storage Temp:  $-40^{\circ}$  C to  $+85^{\circ}$  C

Relative Humidity: 0% to 95% (non-condensing)†

Note: Coaxitron is a registered trademark of PELCO Viacoax is a registered trademark of Vicon Industries, Inc. Proteus is a registered trademark of Panasonic, Inc.

 $\dot{\tau}$  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	MAX.	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	MODEL	MODEL	PWR BUDGET	DISTANCE*	
Multimode 62.5/125µm**	1310/1550 nm	VDT1505WDM	VDR1505WDM	15 dB	3.0 miles (5 km)	
Singlemode 9/125µm		VDT1535WDM	VDR1535WDM	15 dB	15 miles (25 km)	
		VDT1535WDM-HP	VDR1535WDM-HP	18 dB	30 miles (50 km)	

<sup>\*</sup> 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.

## SYSTEM DESIGN



