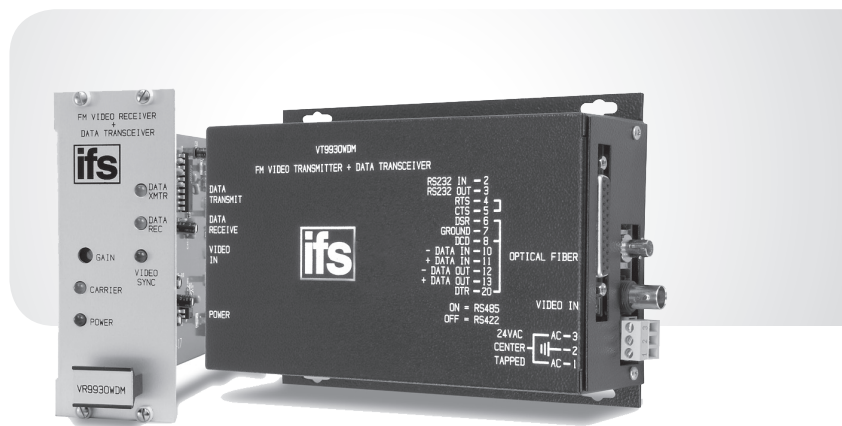


VT/VR9930WDM Series

IFS FM Video with Bi-Directional Data



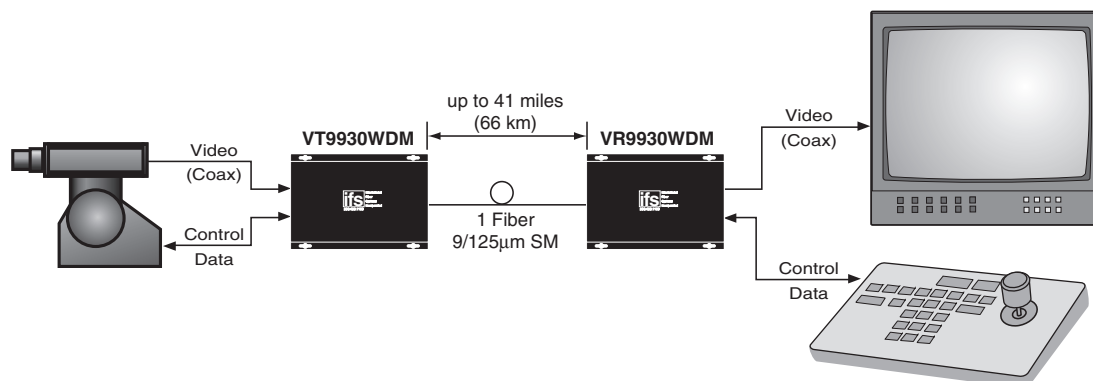
OVERVIEW

The IFS VT/VR9930WDM Series video transmitter/data transceiver and video receiver/data transceiver units utilize frequency modulation for high video quality that meets the requirements of EIA RS-250C. These environmentally hardened units provide the simultaneous transmission of video and full-duplex data over one single mode optical fiber and are ideal for use in unconditioned out-of-plant or roadside installations. Completely transparent to and universally compatible with any NTSC, PAL, or SECAM CCTV camera system, all standard pan-tilt-zoom control signals including RS-232, RS-422, and 2-wire RS-485 data are supported. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required. LED indicators are provided for rapidly ascertaining equipment operating status, and these units are available in either stand-alone or rack mount configurations.

APPLICATION EXAMPLES

- CCTV with PTZ Control

SYSTEM DESIGN



STANDARD FEATURES

- Frequency Modulation for High Quality Video Transmission
- Directly Compatible with All NTSC, PAL, or SECAM CCTV Camera Systems
- LED Status Indicators Provide Rapid Indication of Critical Operating Parameters
- Integrated WDM for Greater Reliability
- Solid-State Current Limiters on All Power Lines Provide Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required
- 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 NEMATS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Robust Design Ensures Extremely High Reliability in Unconditioned Roadside Environments
- Comprehensive Lifetime Warranty

VT/VR9930WDM Series

North America
T 855-286-8889

Latin America
T 561-998-6114

IFS FM Video with Bi-Directional Data

Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Single Mode 9/125µm	VT9930WDM	Video Transmitter/Data Transceiver (1310/1550 nm)	1	23 dB	41 miles (66 km)
	VR9930WDM	Video Receiver/Data Transceiver (1550/1310 nm)	1	23 dB	41 miles (66 km)
Accessories ♦	PS-24VACCT	24 volt AC Center Tap Power Supply (Included)			
	PS-24VACCT-230	24 Volt AC Center Tap 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)				

*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:	1 volt pk-pk (75 ohms)
Bandwidth:	5 Hz - 10 MHz min., @ -3 dB
Differential Gain:	<2%
Differential Phase:	<1.3°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	>60 dB @ Maximum Optical Loss Budget

Data

Data Interface:	RS-232, RS-422, RS-485 two-wire
Data Format:	NRZ, NRZI, Manchester, Bi-phase
Operating Mode:	Simplex or Full Duplex
Data Rate:	DC-100 Kbps (NRZ)
Bit Error Rate:	<1 in 10 ⁹ @ Maximum Optical Loss Budget

Wavelength

	1310/1550 nm, Singlemode
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Optical Emitter

	Laser Diode
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Number Of Fibers

	2
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LED Indicators

VT Transmitter/Data Transceiver Unit:	Video Input Sync Presence
	Transmitted Data
	Received Data
	Optical Carrier Detect
VR Receiver/ Data Transceiver Unit:	Operating Power
	Video Output Sync Presence
	Transmitted Data
	Received Data
	Optical Carrier Detect
	Operating Power

Connectors

Power:	Terminal Block with Screw Clamps
Data:	Type DB-25S
Video:	BNC (Gold Plated Center-Pin)
Optical:	ST

Electrical & Mechanical

Power:	
Surface Mount:	VT: 24 VAC C.T. @ 300 mA VR: 24 VAC C.T. @ 600 mA
Rack:	From Rack
Number of Rack Slots:	1
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size (in./cm.) (LxWxH)	
Surface Mount:	7.0 x 4.0 x 2.0 in., 17.8 x 12.5 x 5.1 cm
Rack Mount:	7.7 x 5.0 x 2.0 in., 19.6 x 12.7 x 5.1 cm
Shipping Weight:	< 2 lbs./0.9 kg
Environmental	
MTBF:	> 100,000 hours
Operating Temp:	-40° C to +74° C, ambient
Storage Temp:	-40° C to +85° C, ambient
Relative Humidity:	0% to 95% (non-condensing)

Agency Compliance

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



interlogix.com

Specifications subject to change without notice.

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VT/VR9930WDM