

Overview

The IFS VT/VR6010 multiplexer simultaneously transmits four channels of real-time video signals over one multimode fiber optic cable. The modules utilize frequency modulation (FM) to reduce ghosting, jitter and cross-talk between channels, thereby providing superior video transmission. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The modules incorporate power and carrier detect status indicating LED's monitoring proper system operation. The modules are available in either stand-alone or rack mount version.

Application Examples

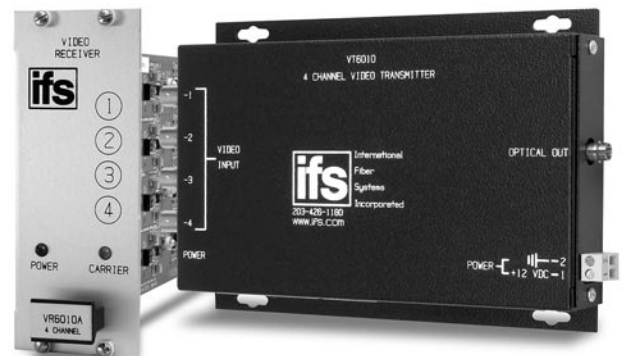
- Installations with Limited Fiber
- Retrofits/System Upgrades
- Conduit with Limited Space for Additional Cabling

Standard Features

- FM Design
- Transmits and Receives Four Real-Time Video Signals
- 10 MHz Bandwidth Per Individual Channel
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- Reduces Fiber/Cabling Cost
- No In-field Electrical or Optical Adjustments Required
- Power, Carrier Detect and Four Video Presence Status Indicating LED's for Each Individual Channel to Monitor System Performance
- Hot-Swappable Rack Modules
- Automatic Resettable Fuses on all Power Lines
- Comprehensive Lifetime Warranty

4-Channel Video Multiplexer

Simultaneously transmits 4 channels of real-time video signals over one multimode optical fiber.



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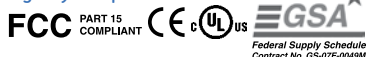
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gesecurity.com/ifs

Specifications subject to
change without notice

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Agency compliance



Made in the USA

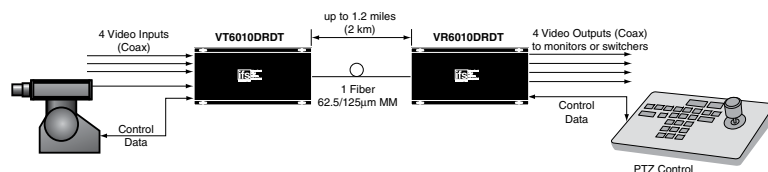
Complies with FDA Performance
Standard for Laser Products, Title 21,
Code of Federal Regulations, Subchapter J

Specifications

Video	
Video Input:	1 volt pk-pk (75 ohms)
Bandwidth:	10 Hz - 10 MHz (typical)
Differential Gain:	<5%
Differential Phase:	<5°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	55 dB (typical)
Wavelength	
850 nm, Multimode	
Number of fibers	
1	
Connectors	
Optical:	ST
Power and Audio:	Terminal Block with Screw Clamps
Video:	BNC (Gold Plated Center-Pin)
Electrical & Mechanical	
Power:	
Surface Mount:	VT: 12 VDC @ 400 mA VR: 12 VDC @ 300 mA
Rack:	From Rack
Number of Rack Slots:	2
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 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
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.

System Design



Ordering Information

	Part Number	Description	Fibers Required	Optical Pwr. Budget	Max. Distance*
Multimode 62.5/125µm**	VT6010 VR6010	4 Channel Video Transmitter/Multiplexer (850 nm) 4 Channel Video Receiver/Demultiplexer (850 nm)	1	10 dB	1.2 miles (2 km)***
Accessories*	PS-12 VDC 12 Volt DC Plug-in Power Supply (Included) PS-12 VDC 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)				

* 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.



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