



PRODUCT SPECIFICATION

AM VIDEO RECEIVER WITH AUTOMATIC GAIN CONTROL (AGC)

VR1100 SERIES



DESCRIPTION

The IFS VR1100 series video receiver detects an AM video signal on one multimode fiber optic cable. The receiver utilizes automatic gain control (AGC) and is compatible with the IFS VT1101M, VT1101M-AC, and VT1001 series transmitters. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The receiver incorporates a power and AGC status indicating LED's for monitoring proper system operation. The module is available in either stand-alone or rack mount version.

APPLICATION EXAMPLES

- CCTV (Fixed Video)

FEATURES

- AM Video
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- Full Range Automatic Gain Control (AGC)
- No In-field Electrical or Optical Adjustments Required
- Power and AGC Status Indicating LED's to Monitor System Performance
- 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**	VR1100 AGC Video Receiver (850 nm)	1	14 dB	2.5 miles (4 km)
	VR1100 Series is compatible with: VT1101M, VT1101M-AC and VT1001 Series Transmitters			
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)			

* 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

AM VIDEO RECEIVER WITH AUTOMATIC GAIN CONTROL (AGC)

VR1100 SERIES

SPECIFICATIONS

VIDEO

Video Output:	1 volt pk-pk (AGC controlled)
Bandwidth:	5 Hz - 10 MHz•
Differential Gain:	<5%
Differential Phase:	<5°
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	> 55 dB @ 10 dB ATTN. > 60 dB @ 7 dB ATTN.

WAVELENGTH

850 nm, Multimode

NUMBER OF FIBERS

1

CONNECTORS

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

ELECTRICAL & MECHANICAL

Power:	
Surface Mount:	12 VDC @ 150 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., 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° 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.

• At 6 dB Attenuation

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT



MADE IN THE USA

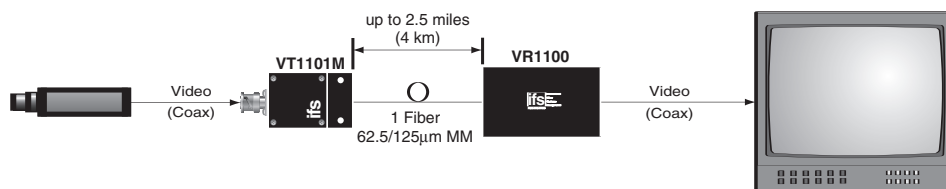
Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J

OPTICAL POWER BUDGET

FIBER	WAVELENGTH	TRANSMITTER		RECEIVER		OPTICAL PWR BUDGET	MAX. DISTANCE*
		MODEL	OUTPUT	MODEL	SENSITIVITY		
Multimode 62.5/125µm**	850 nm	VT1101M-AC VT1001 VT1101M	25µw (-16 dBm)	VR1100	1 µw (-30 dBm)	14 dB	2.5 miles (4 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. † Requires 6 dB minimum attenuation.

SYSTEM DESIGN



International
Fiber
Systems
Incorporated

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