



PRODUCT SPECIFICATION

VT1101M SERIES

AM VIDEO MINI TRANSMITTER – DIRECT CAMERA MOUNT



DESCRIPTION

The IFS VT1101M series video mini-transmitter provides transmission of a fixed video signal using AM modulation on one multimode or single-mode fiber optic cable. The transmitter is direct camera mountable eliminating the use of coaxial cable at the camera connection and will fit in most camera housings. A BNC feed-through coupler is also supplied to connect to coaxial cable when not mounting the module directly to the camera. The VT1101M video transmitter is compatible with the IFS VR1000, VR1001, VR1100, and VR2100 series receivers, and the VT1130M is compatible with the VR1130. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. The transmitter incorporates a power status indicating LED for monitoring proper system operation. The transmitter is available in a stand-alone version only.

APPLICATION EXAMPLES

- CCTV (Fixed Video)

FEATURES

- AM Video Transmission
- NTSC, PAL, SECAM Compatible
- Full Color Compatibility
- Direct Camera Mountable
- No In-field Electrical or Optical Adjustments Required
- Optional 24VAC Adapter Available for Direct Use with 24VAC Camera Power Supply.
- Power Status Indicating LED to Monitor System Performance
- Distances up to 26 miles (42 km) Without Repeaters
- VT1125M Distances up to 26 miles (42 km)
- 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**	VT1101M	Video Transmitter (850 nm)	1	14 dB	2.5 miles (4 km)
SINGLE-MODE 9/125µm	VT1130M	Video Transmitter (1310 nm)	1	14 dB	26 miles (42 km)
	VT1101M Series is compatible with: VR1000, VR1001, VR1100, VR1130, VR2100 Series Receivers				
OPTIONS	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) PS-1101M 24 VAC Adapter (Optional, consult factory for availability) 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.



TECHNICAL SPECIFICATION

VT1101M SERIES

AM VIDEO MINI TRANSMITTER – DIRECT CAMERA MOUNT

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): 60 dB

WAVELENGTH

850 nm, Multimode
 1300 nm, Single-mode

NUMBER OF FIBERS

1

CONNECTORS

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

ELECTRICAL & MECHANICAL






Power: 9 - 12 VDC @ 150 mA
 10 - 14 VAC @ 200 mA
 Max. RG59 Cable Length: 750 ft.
 Circuit Board: Meets IPC Standard
 Size (in./cm.) (LxWxH)
 Surface Mount: 2.5 x 1.6 x 1.0 in., 6.4 x 4.1 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.

AGENCY COMPLIANCE

FCC PART 15 COMPLIANT     

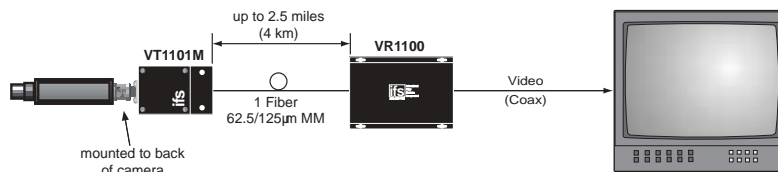
Emissions: FCC Part 15, ICES-003, AS/NZS 3548, EN55022
 Immunity: ENVS0204, EN61000-4-2,3,4,5,6,11
 Safety: UL1950, CAN/CSA 22.2, NO.950-95 **MADE IN THE USA**

OPTICAL POWER BUDGET

FIBER	WAVELENGTH	TRANSMITTER		RECEIVER		OPTICAL PWR BUDGET	MAX. DISTANCE*
		MODEL	OUTPUT	MODEL	SENSITIVITY		
Multimode 62.5/125µm**	850 nm	VT1101M	25µw (-16 dBm)	VR1000 VR1001 VR1100 VR2100	1 µw (-30 dBm)	14 dB	2.5 miles (4 km)
Single-mode 9/125µm	1310 nm	VT1130M	100µw (-10 dBm)	VR1130	4 µw (-24 dBm)	14 dB	26 miles (42 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.

SYSTEM DESIGN



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

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

09/20/02