



INCLUDED



-40°TO +75°



1, 2 OR 4



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The ComNet series video transmitters and receivers support the transmission of one, two, or four independent short-haul quality 10-bit digital video signals and one, two, or four contact closures in the direction of the video over multimode or single mode optical fibers. This module is universally compatible with major CCTV camera manufacturers. The receivers are compatible with the FVT10C1(M,S)1[/M] series or FVT1(M,S)1/M* single channel transmitters. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required.

FEATURES

- › 10-bit Digital Video, Contact Closure Transmission: Receives one, two, or four real-time color video signals over one, two, or four optical fibers
- › Supports one, two or four Contact Closures in the direction of video, ideal for tamper switch, etc.
- › Exceptionally low video distortion with zero performance variation vs. optical path
- › Distances up to 4 km (2.5 mi) over Multimode Fiber
- › Distances up to 54 km (33.6 mi) over Single Mode Fiber
- › Exceeds All Requirements for EIA RS-250C Short-Haul Transmission Specifications
- › Compatible with NTSC, PAL, or SECAM Video Standards
- › NTCIP compatible
- › Designed to meet 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 NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- › Voltage transient protection on all power and signal input/output lines provides protection from power surges and other voltage transient events.
- › LED status indicators confirm operating status
- › Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required.
- › Automatic resettable fuses on all power lines
- › Hot-Swappable Modules
- › 12 VDC or 24 VAC powered FVT10C1/M mini unit can be powered directly from camera
- › ComFit units are Interchangeable between stand-alone or rack mount use, or can be DIN-rail mounted with optional DINBKT1 or DINBKT4 mounting kit.
- › Lifetime Warranty

* FVT1(M,S)1/M not available in North America.

SPECIFICATIONS

Video

Video Input	1 V pk-pk (75Ω)
Overload	>1.5 V pk-pk
Bandwidth	5 Hz - 10 MHz
Differential Gain	<2%
Differential Phase	<0.7°
Tilt	<1%
Signal-to-Noise Ratio (SNR)	>60 dB typical @ Max. Optical Loss Budget
Max. RG-59 COAX	100 m (300 ft) Camera to Fiber Optic Module to maintain bandwidth

Contact

Interface Response time	0.5msec
Input	Dry Contact Closure
Output	SPST Relay, 0.5A Contact Rating - normally open

Fiber Optic

Wavelength	1310 nm, MM and SM
Optical Emitter	Laser Diode
Number of Fibers	1, 2 or 4 (see table below)

AGENCY COMPLIANCE



MADE IN THE
USA

Connectors

Optical	ST
Power	Terminal Block
Video	BNC
Contact	Terminal Block

Power

Operating Voltage Range	Mini: 9 to 36 VDC or 12 to 24 VAC ComFit units: 8 to 15 VDC
Power Consumption	2 W (1 & 2 Channel Units), 4 W (4 Channel Unit)
Current Protection	Automatic Resettable Solid-State Current Limiters

Electrical & Mechanical

LED Indicators	Video Contact Link (Receivers only)
Circuit Board	Meets IPC Standard
Size	Mini: 4.5 × 2.2 × 1.1 in (11.7 × 5.5 × 2.7 cm) ComFit: 6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
Shipping Weight	2 lb / 0.9 kg

Environmental

MTBF	>100,000 hours
Operating Temp	-40° C to +75° C
Storage Temp	-40° C to +85° C
Relative Humidity	0% to 95% (non-condensing) ¹

ORDERING INFORMATION

Part Number	Description	Fibers	Fiber Type	Optical Power Budget	Maximum Distance ²	Rack Slots
FVT10C1M1/M	Mini Video Transmitter	1	Multimode	12 dB into a 62.5μm core	4 km (2.5 mi)	N/A
FVT10C1S1/M	Mini Video Transmitter	1	Single Mode	16 dB into a 9μm core	54 km (33 mi)	N/A
FVT10C1M1	1-Channel ComFit Transmitter	1	Multimode	12 dB into a 62.5μm core	4 km (2.5 mi)	1
FVT10C1S1	1-Channel ComFit Transmitter	1	Single Mode	16 dB into a 9μm core	54 km (33 mi)	1
FVR10C1M1	1-Channel ComFit Receiver	1	Multimode	12 dB into a 62.5μm core	4 km (2.5 mi)	1
FVR10C1S1	1-Channel ComFit Receiver	1	Single Mode	16 dB into a 9μm core	54 km (33 mi)	1
FVR20C2M2	2-Channel ComFit Receiver	2	Multimode	12 dB into a 62.5μm core	4 km (2.5 mi)	1
FVR20C2S2	2-Channel ComFit Receiver	2	Single Mode	16 dB into a 9μm core	54 km (33 mi)	1
FVR40C4M4	4-Channel ComFit Receiver	4	Multimode	12 dB into a 62.5μm core	4 km (2.5 mi)	1
FVR40C4S4	4-Channel ComFit Receiver	4	Single Mode	16 dB into a 9μm core	54 km (33 mi)	1

Accessories DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included, for benign 0 to 50°C applications only. Hardened power supply available, consult factory)
Mounting Bracket (Included with FVT10C1(M,S)1/M mini transmitter only)

Options 12-inch Coax Jumper (Optional, consult factory)

[1] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)
DIN-Rail Mounting Adaptor Plate Kit - With mounting hardware (Optional, order model DINBKT1 or DINBKT4)

[2] 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.

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

In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

TYPICAL APPLICATION

