

10-bit digital video





Description

The ComNet™ FVT/FVR1001 series video transmitter/ receiver supports the transmission of short-haul quality 10-bit digital video over one multimode or single mode optical fiber. This module is universally compatible with major CCTV camera manufacturers. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required. Bi-color (Red/Green) LED indicators are provided for rapidly ascertaining equipment operating status. Packaged in the exclusive ComNet ComFit housing, these units may be either wall or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 adaptor plate.

Applications

- CCTV

Features

- 10-bit Digital Video Transmission
- Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- Full Color Compatibility
- Exceeds RS-250C Short-Haul quality
- No In-field electrical or optical adjustments
- Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- Integrated WDM for greater product reliability
- Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- Distances up to 69 km (43 miles) without repeaters
- Tested and certified by an independent 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 NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Hot-Swappable Modules
- Automatic resettable fuses on all power lines
- Lifetime Warranty

specifications

VIDEO

 Video Input:
 1V pk-pk (75 ohms)

 Overload:
 >1.5V pk-pk

 Bandwidth:
 5 Hz - 10 MHz

 Differential Gain:
 <2%</td>

 Differential Phase:
 <0.7°</td>

Tilt: <0.7

Signal-to-Noise Ratio (SNR): >67 dB @ Maximum Optical Loss

Budget

Max. RG-59 COAX Distance: 100m (300ft) Camera to Fiber Optic

Module to maintain 6Mhz Bandwidth

WAVELENGTH 1310 nm, Multimode and Single Mode

NUMBER OF FIBERS

LED INDICATORS - Optical - Video - Power

CONNECTORS

Optical: ST

Power: Terminal Block

Video: BNC (Gold Plated Center-Pin)

ELECTRICAL & MECHANICAL

Power:

Surface Mount: 8-15 VDC @ 2 W
Rack Mount: From Rack

Number of Rack Slots: 1

Current Protection: Automatic Resettable Solid-State

Current Limiters

Circuit Board: Meets IPC Standard Size (in./cm) (L×W×H) $6.1 \times 5.3 \times 1.1$ in., $(15.5 \times 13.5 \times 2.8$ cm)

Shipping Weight: <2 lb./0.9 kg

ENVIRONMENTAL

MTBF: >100,000 hours Operating Temp: -40° C to $+75^\circ$ C Storage Temp: -40° C to $+85^\circ$ C

Relative Humidity: 0% to 95% (non-condensing)†

† May be extended to condensation conditions by adding suffix '/C' to model number for conformal coating.





PART Number	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. Distance [‡]	# RACK SLOTS
FVT1001M1 FVR1001M1	Video Transmitter (1310 nm) Video Receiver (1310 nm)	1	Multimode 62.5/125µm	16 dB	3 km (2 miles)	1
FVT1001S1 FVR1001S1	Video Transmitter (1310 nm) Video Receiver (1310 nm)	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1

Accessories 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)

Options Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)

DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1)

NOTE: This product requires a fiber installation with a minimum 30 dB connector return loss. The use of Super Polish Connectors is recommended. ‡ Distance may be limited by optical dispersion.

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.





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