

8-channel 10-bit digital video



Description

The ComNet™ FVT/FVR801 video transmitter and video receiver series utilize 10-bit digital encoding and decoding for high-quality video transmission that exceeds the requirements of EIA RS-250C for short-haul video transmission. These environmentally hardened units provide transmission of eight independent video channels over one optical fiber and are ideal for use in unconditioned roadside or out-of-plant installations. 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.

Features

- 10-Bit digitally encoded video transmission, transmits 8 real-time color video signals
- Exceeds all requirements for EIA RS-250C short-haul transmission: Extremely high video performance
- Exceptionally low video distortion with zero Performance Variation vs. Optical Path Loss
- Ideally suited to networks requiring multiple physical layers where video degradation may be a problem
- 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.
- Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- Robust design ensures extremely high reliability in unconditioned out-of-plant environments
- Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- Hot-swappable rack modules
- Interchangeable between stand-alone or rack mount use
 - ComFit
- Lifetime Warranty

Applications

- High-Performance CCTV (Fixed Video)



specifications

VIDEO

Video Input: 1 volt pk-pk (75 ohms)
 Overload: >1.5V pk-pk
 # Input/Output Channels: 8
 Bandwidth (minimum): 10 Hz - 6.5 MHz per channel
 Differential Gain: <2%
 Differential Phase: <0.7°
 Tilt: <1%
 Signal-to-Noise Ratio (SNR): 67 dB Typical
 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 1

LED INDICATORS - Video Sync Presence for Each Video Channel
 - Optical Carrier Detect - Power

OPTICAL EMITTER Laser Diode

CONNECTORS

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

ELECTRICAL & MECHANICAL

Power: 8-15 VDC @ 4W
 Surface Mount: From Rack
 Rack Mount: 2
 Number of Rack Slots: Automatic Resettable Solid-State Current Limiters
 Current Protection: Meets IPC Standard
 Circuit Board: 6.1 x 5.3 x 2.2 in., (15.5 x 13.5 x 5.6 cm)
 Size (in./cm) (LxWxH)
 Shipping Weight: <2 lb./0.9 kg

ENVIRONMENTAL

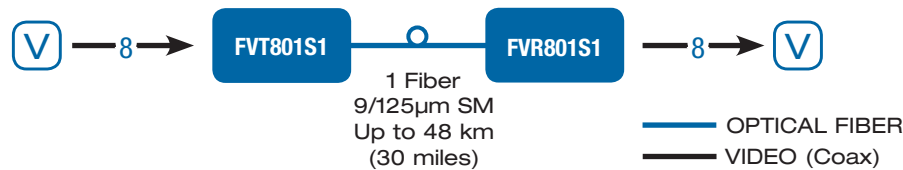
MTBF: >100,000 hours
 Operating Temp: -40° C to +75° C
 Storage Temp: -40° C to +85° C
 Relative Humidity: 0% to 95% (non-condensing)*

* 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
FVT801M1	Video Transmitter (1310 nm)	1	Multimode 62.5/125µm	16 dB	2 km (1.2 miles)	2
FVR801M1	Video Receiver (1310 nm)					
FVT801S1	Video Transmitter (1310 nm)	1	Single Mode 9/125µm	16 dB‡	48 km (30 miles)	2
FVR801S1	Video Receiver (1310 nm)					
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.
 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.
 † Distance may be limited by optical dispersion. High bandwidth 50/125µm fiber is required to achieve maximum multimode distance. Contact ComNet tech support before using these units for distances greater than 2 km. ‡ Add "HP" to model number for 23 dB.



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