comnet
Communication Networks

ValueLine

FVT/FVR81(M)(S)1

8-channel digitally encoded video

V
8

Description

The ComNet™ FVT/FVR81 video transmitter and video receiver series utilizing state of the art digital encoding and decoding for high-quality 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.

Applications

- High-Performance CCTV (Fixed Video)

Features

- Digitally encoded video transmission, transmits 8 real-time color video signals
- Exceptionally low video distortion with zero Performance Variation vs. Optical Path Loss
- 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
- Five year warranty

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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:	<4%
Differential Phase:	<0.7˚
Tilt:	<1%
Signal-to-Noise Ratio (SNR):	57 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

OPTICAL EMITTER

Laser Diode

CONNECTORS

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

LED INDICATORS

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

ELECTRICAL & MECHANICAL

Power:	
Surface Mount:	8-15 VDC @ 4W
Rack Mount:	From Rack
Number of Rack Slots:	2
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size (in./cm) (L×W×H)	6.1 × 5.3 × 2.2 in., (15.5 × 13.5 × 5.6 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)†

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

AGENCY COMPLIANCE

PART 15 COMPLIANT · E322911 · N24621

MADE IN THE USA

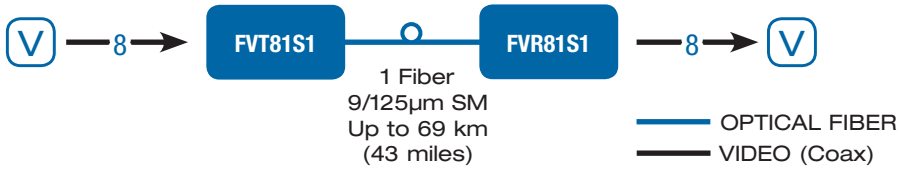
PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. DISTANCE‡	# RACK SLOTS
FVT81M1	Video Transmitter (1310 nm)	1	Multimode 62.5/125µm	16 dB	2 km (1.2 miles)	2
FVR81M1	Video Receiver (1310 nm)					
FVT81S1	Video Transmitter (1310 nm)	1	Single Mode 9/125µm	16 dB§	48 km (30 miles)	2
FVR81S1	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 23dB.



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