POWER SUPPLY
INCLUDED

75° -40°
HARDENED

VIDEO
8

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.

FEATURES

› Digitally encoded video transmission, transmits 8 real-time color video signals

› Exceptionally low video distortion with zero Performance Variation vs. Optical Path Loss

› Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 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.

› Robust design ensures extremely high reliability in unconditioned out-of-plant environments

› Bi-color LED status indicators confirm operating status

› Hot-swappable rack modules

› Interchangeable between stand-alone or rack mount use – ComFit

› Can be DIN-rail mounted with optional DINBKT1 or DINBKT4 mounting kit.

› Five Year warranty

› Made in the USA

APPLICATIONS

› High-Performance CCTV (Fixed Video)

SPECIFICATIONS

Data

Video Input	1 volt pk-pk (75 ohms)
Overload	>1.5 V 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 (300 ft) Camera to Fiber Optic Module to maintain 6 Mhz 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

Power

Surface Mount	8 to 15 VDC
Power Consumption	4 W
Rack Mount	From Rack

Electrical & Mechanical

Number of Rack Slots	2
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size	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)[1]

AGENCY COMPLIANCE

FC PART 15 COMPLIANT   CE   cULus E322911   RoHS COMPLIANT   N24621

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical PWR Budget	Max. Distance[2]	# 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[3]	48 km (30 miles)	2
FVR81S1	Video Receiver (1310 nm)					
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	[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)					

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.
[2] 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.   [3] Add "HP" to model number for 23dB.

TYPICAL APPLICATION

V —8→ **FVT81S1** ——○—— **FVR81S1** —8→ V

1 Fiber

○— OPTICAL FIBER
— VIDEO (Coax)