



The ComNet™ FVT/FVR41 multiplexer simultaneously transmits four channels of video over one optical fiber utilizing state-of-the-art digital encoding and decoding for high-quality video transmission. These environmentally hardened units are ideal for use in unconditioned roadside or out-of-plant installations. These units are completely transparent to and universally compatible with any NTSC, PAL, or SECAM CCTV camera systems. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required.

## FEATURES

- › Digitally encoded video transmission, transmits 4 real-time color video signals on one optical fiber
- › Exceptionally low video distortion with zero Performance Variation vs. Optical Path Loss
- › Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- › Wide optical dynamic range: optical attenuators are never required
- › NTCIP compatible
- › 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
- › Automatic resettable solid-state current limiters
- › 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

### Video

Video Input	1 volt pk-pk (75 ohms)
Overload	>1.5 V pk-pk
# Input/Output Channels	4
Bandwidth (minimum)	10 Hz - 6.5 MHz
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 6Mhz Bandwidth

### Wavelength

1310 nm, Multimode and Single Mode

### Number of Fibers

1

### Connectors

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

### LED Indicators

› Video Present › Optical Carrier Detect › Power

### Power

Surface Mount	8 to 15 VDC
Power Consumption	3 W
Rack Mount	From Rack

### Electrical & Mechanical

Number of Rack Slots	1
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size	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) <sup>1</sup>

AGENCY COMPLIANCE



MADE IN THE  
**USA**

## ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical PWR Budget	Max Distance <sup>2</sup>	# Rack Slots
FVT41M1	4-Channel Video Transmitter (1310 nm)	1	Multimode 62.5/125µm	16 dB	2 km (1.2 miles)	1
FVR41M1	4-Channel Video Receiver (1310 nm)					
FVT41S1	4-Channel Video Transmitter (1310 nm)	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
FVR41S1	4-Channel Video Receiver (1310 nm)					
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	[2] 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.

## TYPICAL APPLICATION

