

## 10-bit digital bi-directional video or sync



### Description

The ComNet™ FVTR(M)(S)1 series video transmitter/receiver supports the transmission of short-haul quality 10-bit digital bi-directional video or sync 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.

### Features

- 10-bit Digital Video Transmission
- Bi-directional Video or Sync
- 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 30 miles (48 km) 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 rack modules
- Interchangeable between stand-alone or rack mount use
  - ComFit
- Automatic resettable fuses on all power lines
- Lifetime Warranty

### Applications

- CCTV



## specifications

### VIDEO

Video Input:	1 volt pk-pk (75 ohms)
Overload:	>1.5V pk-pk
Bandwidth:	5 Hz - 10 MHz
Differential Gain:	<2%
Differential Phase:	<0.7°
Tilt:	<1%
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

1310/1550 nm, Multimode  
and Single Mode

### NUMBER OF FIBERS

1

### LED INDICATORS

- Video Present - Power - Optical

### CONNECTORS

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

### ELECTRICAL & MECHANICAL

Power:	8-15 VDC @ 2 W
Surface Mount:	From Rack
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 × 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)†

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



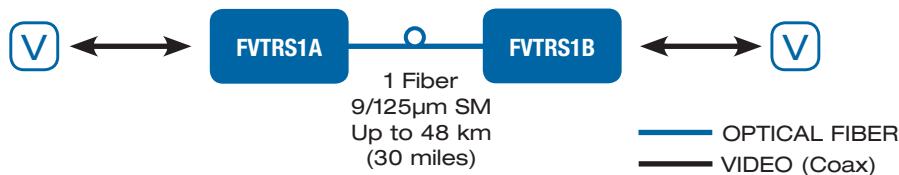
PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. DISTANCE‡	# RACK SLOTS
FVTRM1A	Video Transmitter (1310/1550 nm)	1	Multimode 62.5/125µm	16 dB	3 km (2 miles)	1
FVTRM1B	Video Receiver (1310/1550 nm)					
FVTRS1A	Video Transmitter (1310/1550 nm)	1	Single Mode 9/125µm	16 dB	48 km (30 miles)	1
FVTRS1B	Video Receiver (1310/1550 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.

‡ 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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