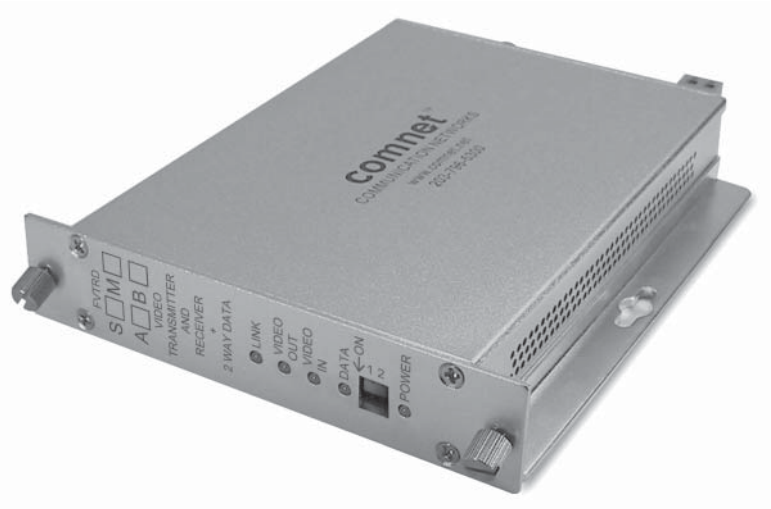
comnet
Communication Networks

FVTRD(M)(S)1

10-bit digital bi-directional video or video sync + bi-directional data



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Description

The ComNet™ FVTRD(M)(S)1 series video transmitter/receiver and data transceiver supports simultaneous transmission of short-haul quality 10-bit bi-directional digital video or video sync plus bi-directional data over one multimode or single mode optical fiber. The module is universally compatible with major CCTV camera manufacturers and supports RS232, RS422 and 2 or 4-wire RS485 data interfaces, and most major data protocols. 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.

Applications

- High-Performance CCTV with PTZ Control

Features

- 10-bit digital bi-directional video transmission or video sync + bi-directional data
- Exceeds all requirements for RS-250C short-haul transmission: True broadcast video performance
- Supports RS232, RS422 or RS485 (2 or 4-wire) data interfaces
- Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- 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.
- Automatic resettable fuses on all power lines
- Hot-swappable rack modules
- Interchangeable between stand-alone or rack mount use – ComFit
- Distances up to 30 miles (48 km)
- Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- Lifetime Warranty

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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

DATA

Data Format:	RS232, RS422, 2 or 4-wire RS485 w/Tri-State, Manchester and bi-phase
Data Rate:	DC-115 Kbps (NRZ)
WAVELENGTH	1310/1550 nm, MM and SM
NUMBER OF FIBERS	1
OPTICAL EMITTER	Laser Diode
LED INDICATORS	- Video - Received Data - Transmitted Data - Optical Carrier Detect

AGENCY COMPLIANCE

PART 15 COMPLIANT E322911 N24621

MADE IN THE USA

CONNECTORS

Optical:	ST (Standard) SC or FC (Optional)
Power:	Terminal Block
Video:	BNC (Gold Plated Center-Pin)
Data:	Terminal Block

ELECTRICAL & MECHANICAL

Power:	
Surface Mount:	8-15 VDC @ 2W
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

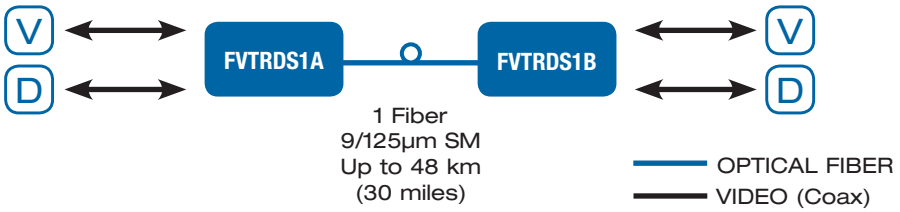
MTBF:	>100,000 hours
Operating Temp:	-40˚ C to +75˚ C
Storage Temp:	-40˚ C to +85˚ C
Relative Humidity:	0% to 95% (non-condensing)†

† 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
FVTRDM1A	Video Transmitter/Data Transceiver	1	Multimode 62.5/125µm	16 dB	3 km (2 miles)	1
FVTRDM1B	Video Receiver/Data Transceiver					
FVTRDS1A	Video Transmitter/Data Transceiver	1	Single Mode 9/125µm	16 dB	48 km (30 miles)	1
FVTRDS1B	Video Receiver/Data Transceiver					

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)
	Add '/SC' for SC Connectors
	Add '/FC' for FC Connectors
	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. **Check with control system manufacturer for distance limits on up-the-coax systems.
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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 06.11.10