comnet
Communication Networks

Single, Dual or Quad-Channel 10-Bit Digitally Encoded Short-Haul Video and Contact Closure

FVR10C1(M,S)1, FVR20C2(M,S)2, and FVR40C4(M,S)4

POWER SUPPLY INCLUDED

CONTACT CLOSURE 1, 2 OR 4

VIDEO 1, 2 OR 4

The ComNet™ FVR10C1(M,S)1, FVR20C2(M,S)2, and FVR40C4(M,S)4 series video receivers support the transmission of one, two, or four independent short-haul quality 10-bit digital video signals and one, two, or four contact closures in the direction of the video over multimode or single mode optical fibers. This module is universally compatible with major CCTV camera manufacturers. It is compatible with the FVT1(M,S)1/M* or FVT10C1(M,S)1/M series single channel transmitters. 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 confirming operating status. These units may be either wall or rack-mounted.

FEATURES

› 10-bit Digital Video, Contact Closure Transmission: Receives one, two, or four real-time color video signals over one, two, or four optical fibers

› Contact Closure

› Exceptionally low video distortion with zero performance variation vs. optical path

› Compatible with all NTSC, PAL, or SECAM CCTV camera systems

› NTCIP compatible

› Designed to meet NEMA TS 1/TS 2 and Caltrans Traffic Signal Control Equipment Environmental Standards

› Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.

› Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters

› Automatic resettable fuses on all power lines

› Hot-Swappable Modules

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

› Lifetime Warranty

** FVT1(M,S)1/M not available in North America.*

FVR10C1(M,S)1, FVR20C2(M,S)2, and FVR40C4(M,S)4

Single, Dual or Quad-Channel 10-Bit Digitally Encoded Short-Haul Video and Contact Closure

SPECIFICATIONS

Video[1]

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)	>60 dB typical @ Max. Optical Loss Budget
Max. RG-59 COAX	100m (300ft) Camera to Fiber Optic Module to maintain bandwidth

[1] Video performance shown assumes operation with the ComNet FVT10C1(M,S)1/M. For video performance with FVT1(M,S)1/M, please refer to the data sheet for that model.

Contact

Interface Response time	0.5msec
Input	Dry Contact Closure
Input	SPST Relay, 0.5A Contact Rating - normally open

Optics

Wavelength	1310 nm, MM and SM
Optical Emitter	Laser Diode
Number of Fibers	1, 2 or 4 (see table below)

LED Indicators

– Video – Link – Contact

Connectors

Optical	ST
Power	Terminal Block
Video	BNC
Contact	Terminal Block

Power

Operating Voltage Range	8 to 15VDC
Power Consumption	2W (1 & 2 Channel Version) 4W (4 Channel Version)

Electrical & Mechanical

Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size (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)[2]

AGENCY COMPLIANCE

PART 15 COMPLIANT E322911 N24621

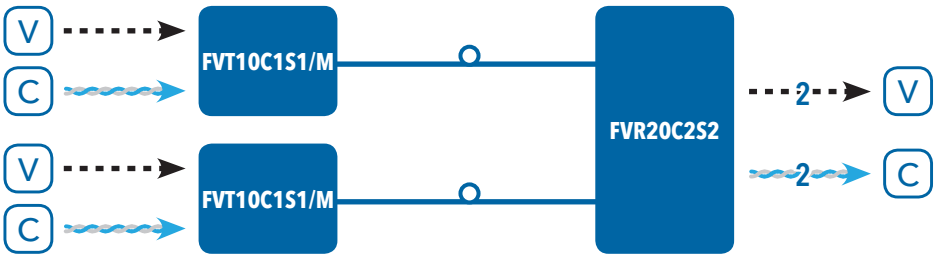
MADE IN THE USA

ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical Power Budget	Maximum Distance[3]	# Rack Slots
FVR10C1M1	1-Channel Video/Contact Receiver	1	Multimode – 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR10C1S1	1-Channel Video/Contact Receiver	1	Single Mode – 9/125µm	16 dB	54 km (33 mi)	1
FVR20C2M2	2-Channel Video/Contact Receiver	2	Multimode – 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR20C2S2	2-Channel Video/Contact Receiver	2	Single Mode – 9/125µm	16 dB	54 km (33 mi)	1
FVR40C4M4	4-Channel Video/Contact Receiver	4	Multimode – 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR40C4S4	4-Channel Video/Contact Receiver	4	Single Mode – 9/125µm	16 dB	54 km (33 mi)	1
Accessories	DC Plug-in Power Supply (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)					

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.
[3] Transmission distance will be diminished if additional losses are introduced by the optical connectors, splices and other factors regarding the quality of the fiber. Operating distance of multimode is limited by the characteristics of the fiber bandwidth. For additional information or support, contact the ComNet Applications Engineering Department.

TYPICAL APPLICATION



Low Power Consumption

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30 Jul 2013