

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









INCLUDED

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.

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

SPECIFICATIONS

Video1

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° <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

Dry Contact Closure

SPST Relay, 0.5A Contact Rating - normally open Input

Optics

1310 nm, MM and SM Wavelength

Optical Emitter Laser Diode

Number of Fibers 1, 2 or 4 (see table below) **LED Indicators** - Video - Link - Contact

Connectors

ST Optical

Power Terminal Block Video BNC

Terminal Block Contact

Power

8 to 15VDC **Operating Voltage Range**

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

 $6.1 \times 5.3 \times 1.1$ in (15.5 × 13.5 × 2.8 cm) Size (L×W×H)

Shipping Weight 2 lb./0.9 kg

Environmental

MTRF >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









ORDERING INFORMATION

Part N	Number	Description	Fibers Required	Fiber	Optical Power Budget	Maximum t Distance ³	# Rack Slots
FVR10C	C1M1	1-Channel Video/Contact Receiver	1	Multimode - 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR10C	C1S1	1-Channel Video/Contact Receiver	1	Single Mode - 9/125µm	16 dB	54 km (33 mi)	1
FVR20C	C2M2	2-Channel Video/Contact Receiver	2	Multimode - 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR20C	C2S2	2-Channel Video/Contact Receiver	2	Single Mode - 9/125µm	16 dB	54 km (33 mi)	1
FVR40C	C4M4	4-Channel Video/Contact Receiver	4	Multimode - 62.5/125µm	12 dB	4 km (2.5 mi)	1
FVR40C	C4S4	4-Channel Video/Contact Receiver	4	Single Mode - 9/125µm	16 dB	54 km (33 mi)	1
Accesso Options		DC Plug-in Power Supply (Included) [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,

TYPICAL APPLICATION

contact the ComNet Applications Engineering Department.







