

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

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

APPEARANCE







DESCRIPTION

The ComNet™ FVR10C1(M,S)1 and FVR20C2(M,S)2 series dual-channel video receivers support the transmission of one or two independent short-haul quality 10-bit digital video signals and one or two contact closures in the direction of the video over two multimode or single mode optical fibers. This module is universally compatible with major CCTV camera manufacturers. It is compatible with the FVT10C1(M,S)1/M series single channel transmitters. Plugand-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 or two real-time color video signals over two optical fibers
- > Contact Closure
- > Supports loopback for fiber link testing
- > 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

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

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): >60 dB typical @ Maximum Optical Loss

udget

Max. RG-59 COAX: 100m (300ft) Camera to Fiber Optic Module

to maintain bandwidth

Contact

Interface Response time: 0.5msec

Input: Dry Contact Closure

Input: SPST Relay, 0.5A Contact Rating - normally open

Wavelength 1550/1310 nm, MM and SM

Optical Emitter Laser Diode
Number of Fibers 1 or 2
LED Indicators - Video - Link

Connectors

Optical: S1

Power: Terminal Block

Video: BNC

Contact: Terminal Block

Electrical & Mechanical

Power:

Surface Mount: 8 – 15VDC @ 2W

Current Protection: Automatic Resettable Solid-State Current

Limiters

Circuit Board: Meets IPC Standard

Size (in./cm) (L×W×H) $6.1 \times 5.3 \times 1.1$ 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.







ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical Power Budget	Maximum Distance [†]	# 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
Accessories Options	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
	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.

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.

† 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





3 CORPORATE DRIVE | DANBURY, CT 06810 | USA

T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET

8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | INFO-EUROPE@COMNET.NET