



The ComNet™ FVT/FVR8SFP2RD8 series optical video link provides eight 10-bit medium-haul quality digital video channels, eight bi-directional data channels and has dual optical SFP* ports to provide a redundant Point-to-Point topology. The redundant Point-to-Point topology using the dual optical ports provide fail safe operation in the event of loss of one fiber or one optical module. Each port accepts a wide variety of SFP modules. The data channels support RS232, RS422 and 2 wire and 4 wire RS485. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required. 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

- › Up to eight 10-bit digital video channels
- › 8 Bi-directional data channels
- › Dual optical ports (SFP) Redundant Point-to-Point configuration
- › Exceeds all requirements for RS-250C medium haul transmission
- › Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- › Designed to meet 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 protection from power surges and other voltage transient events.
- › Automatic resettable fuses on all power lines
- › Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- › Hot-swappable rack modules
- › Interchangeable between stand-alone or rack mount use - ComFit
- › Lifetime Warranty

* Small Form-Factor Pluggable Module. Sold separately.

SPECIFICATIONS

Video

Video Input	1 volt pk-pk (75 ohms)
Overload	>1.5V pk-pk
Bandwidth	5 Hz - 6.5 MHz
Differential Gain	<2%
Differential Phase	TBA
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 Interface	RS232, RS422 and RS485 (2W/4W)
Data Format	NRZ, NRZI, Manchester, Bi-Phase and Sensornet
Data Rate	DC-250 Kbps (NRZ)

Wavelength

SFP (Small Form-Factor Pluggable) dependent

Number of Fibers¹

SFP (Small Form-Factor Pluggable) dependent

Optical Emitter

SFP (Small Form-Factor Pluggable) dependent

LED Indicators

> Fiber Status > Video Sync Presence
> Received Data > Transmitted Data > Power

Connectors

Optical	2 SFP modules Dual Port configuration (Required for Redundant Point-to-Point operation)
Power	Terminal Block
Video	BNC
Data	Terminal Block

Power

Operating Voltage Range	8 to 15 VDC
Power Consumption	3W
Rack Mount Power	From Rack

Electrical & Mechanical

Number of Rack Slots	3
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size	6.1 × 5.3 × 3.3 in (15.5 × 13.5 × 8.3 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

[1] Multimode fiber needs to meet or exceed fiber standard ITU-T G.651.
Single mode fiber needs to meet or exceed fiber standard ITU-T G.652

AGENCY COMPLIANCE



ORDERING INFORMATION

Part Number	Description
FVT8SFP2RD8	8 Channel Video Transmitter, 8 Channel Data Transceiver
FVR8SFP2RD8	8 Channel Video Receiver, 8 Channel Data Transceiver
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)
Options	[2] Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - With mounting hardware (Optional, order model DINBKT1) Selection of SFP(s) (Extra charge, consult factory and/or refer to ComNet "SFP Modules" data sheet)

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.

TYPICAL APPLICATION

