



INCLUDED



HARDENED



FLEXIBILITY



8



2



1



The ComNet™ FVT/FVR80D2SFP series optical video link provides transmission of eight 10-bit short-haul quality digital video channels, two bi-directional data channels and one bi-directional contact closure channel through a selectable small form factor pluggable module (SFP). 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.

## FEATURES

- › Up to eight 10-bit digital video channels
- › Two Bi-directional data channels
- › One Bi-directional contact closure channel
- › Uses interchangeable SFPs for fiber type, distance and connector
- › Exceeds all requirements for RS-250C short-haul transmission
- › Compatible with all NTSC, PAL, or SECAM CCTV camera systems
- › Designed for installation in harsh out-of-plant/unconditioned industrial or roadside operating environments (-40° to +75°C ambient). Fully compliant with the environmental requirements of NEMA TS-2 for Traffic Signal Control Equipment
- › Voltage transient protection on all power and signal input/output line provide protection from voltage surges and other transient events
- › Bi-color LED status indicators confirm operating status
- › Hot-swappable rack modules
- › Interchangeable between stand-alone or rack mount use - ComFit
- › Lifetime warranty
- › Made in the USA

\* SFP = Small Form-Factor Pluggable Module (sold separately)

**SPECIFICATIONS**

**Video**

|                             |   |
|-----------------------------|---|
| Video Input                 | 1 volt pk-pk (75 ohms)  |
| Overload                    | >1.5 V pk-pk  |
| Bandwidth                   | 5 Hz - 6.5 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    | 100 m (300 ft) Camera to Fiber Optic Module to maintain 6 Mhz 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)                             |

**Contact Interface**

|               |  |
|---------------|--|
| Response Time | 0.5 msec   |
| Input         | Dry Contact Closure                              |
| Output        | SPST Relay, 0.5 A Contact Rating – normally open |

**Connectors**

|                 |                |
|-----------------|----------------|
| Optical         | SFP modules    |
| Power           | Terminal Block |
| Video           | BNC            |
| Data            | Terminal Block |
| Contact Closure | Terminal Block |

**Wavelength**

SFP dependent

**Number of Fibers<sup>1</sup>**

SFP dependent

**Optical Emitter**

SFP dependent

**Indicating LEDs**

- › Fiber Status
- › Video Sync Presence
- › Received Data
- › Transmitted Data
- › Power

**Power**

|                   |             |
|-------------------|-------------|
| Surface Mount     | 8 to 15 VDC |
| Power Consumption | 5 W         |
| Rack Mount        | From Rack   |

**Electrical & Mechanical**

|                       |   |
|-----------------------|---|
| Number of Rack Slots  | 3   |
| Current Protection    | Automatic Resettable Solid-State Current Limiters |
| Circuit Board         | Meets IPC Standard                                |
| Size (in./cm) (L×W×H) | 6.1 × 5.3 × 2.2 in (15.5 × 13.5 × 5.6 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) <sup>2</sup> |

[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  |
|----------------------|--|
| FVT80D2SFP           | 8 Channel Video, 2 Channel Data / 1 Channel Contact  |
| FVR80D2SFP           | 8 Channel Video, 2 Channel Data / 1 Channel Contact  |
| Included Accessories | DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)   |
| Options              | [2] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory)<br>User-selection of SFP modules (Extra charge, consult factory)<br>DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1 or DINBKT4) |

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**

