

(8) 10-bit digital video channels with 4 bi-directional data channels with small form-factor pluggable (SFP) optical devices



## Description

The ComNet™ FVT/FVR80D4SFP series optical video link provides transmission of eight 10-bit short-haul quality digital video channels and four bi-directional data channels 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. Bi-color (Red/Green) LED indicators are provided for confirming operating status. These units are interchangeable between stand-alone or card mount configurations.

## Features

- Up to eight 10-bit digital video channels
- 4 Bi-directional data channels
- 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
- Tested and certified by an independent laboratory for 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 unconditional protection from power surges and other voltage transient events.
- Automatic resettable fuses on all power lines
- Hot-swappable rack modules
- Interchangeable between stand-alone or rack mount use
  - ComFit
- Bi-color (Red/Green) LED status indicators provide rapid indication of critical operating parameters
- Lifetime Warranty



# FVT/FVR80D4SFP (8) 10-bit digital video channels with 4 bi-directional data channels with small form-factor pluggable (SFP) optical devices

## 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:          | <0.7°                               |
| Tilt:                        | <1%                                 |
| Signal-to-Noise Ratio (SNR): | 67 dB @ Maximum Optical Loss Budget |

### 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 FIBERS<sup>1</sup>

SFP (Small Form-Factor Pluggable) dependent

### OPTICAL EMITTER

SFP (Small Form-Factor Pluggable) dependent

### LED INDICATORS

|   |  |
|---|--|
| <b>FVT Transmitter/Data Transceiver Unit:</b> | <b>FVR Receiver/Data Transceiver Unit:</b> |
| - Fiber Status                                | - Fiber Status                             |
| - Video Input Sync Presence                   | - Video Output Sync Presence               |
| - Received Data                               | - Received Data                            |
| - Transmitted Data                            | - Transmitted Data                         |
| - Power                                       | - Power                                    |



### CONNECTORS

|          |                        |
|----------|------------------------|
| Optical: | SFP modules            |
| Power:   | Terminal Block         |
| Video:   | BNC                    |
| Data:    | RJ45 (5 pcs. Included) |

### ELECTRICAL & MECHANICAL

|                        |   |
|------------------------|---|
| Power:                 | 8-15 VDC @ 3W                                     |
| Surface Mount:         | From Rack   |
| Rack Mount:            | 3   |
| Number of Rack Slots:  | Automatic Resettable Solid-State Current Limiters |
| Current Protection:    | Meets IPC Standard                                |
| Circuit Board:         | 6.1 x 5.3 x 3.3 in., (15.5 x 13.5 x 8.3 cm)       |
| Size (in./cm) (LxWxH): | <2 lb./0.9 kg                                     |
| Shipping Weight:       |   |

### ENVIRONMENTAL

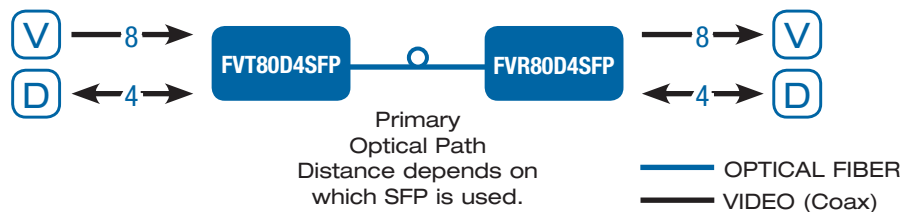
|                    |   |
|--------------------|---|
| MTBF:              | >100,000 hours                          |
| Operating Temp:    | -40° C to +75° C                        |
| Storage Temp:      | -40° C to +85° C                        |
| Relative Humidity: | 0% to 95% (non-condensing) <sup>†</sup> |

<sup>1</sup> 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

<sup>†</sup> May be extended to condensation conditions by adding suffix '/C' to model number for conformal coating.

|             |  |
|-------------|--|
| Accessories | 9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)<br>(5) RJ45 - RJ45 Breakout Wiring Kit (Includes cable and terminal block) |
| Options     | Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)   |

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.



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