Communication Networks

(4) 10-Bit Digital Video Channels With 4 Bi-Directional Data Channels With Small Form-Factor Pluggable (SFP) Optical Devices

FVT/FVR40D4SFP

POWER SUPPLY	75° -40°	SFP	VIDEO	DATA
INCLUDED	HARDENED	FLEXIBILITY	4	4

The ComNet™ FVT/FVR40D4SFP series optical video link provides transmission of four 10-bit medium-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.

FEATURES

› Up to four 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 medium haul transmission

› Compatible with all NTSC, PAL, or SECAM CCTV camera systems

› Automatic resettable fuses on all power lines

› 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)

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SPECIFICATIONS

Video

Video Input	1 volt pk-pk (75 ohms)
Overload	>1.5V pk-pk
Bandwidth (minimum)	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	RS-232, RS-422 and RS-485 (2W/4W)
Data Format	NRZ, NRZI, Manchester, Bi-phase and Sensornet
Data Rate	DC-250 Kbps (NRZ)

Wavelength	SFP dependent
Number of Fibers	SFP dependent
Optical Emitter	SFP dependent
LED Indicators	› Fiber Status › Video Sync Presence
	› Received Data › Transmitted Data › Power

Connectors

Optical	ST
Power	Terminal Block
Video	BNC
Data	RJ45 (5pc Included)

Power

Operating Voltage Range	8 to 15 VDC
Power Consumption	4 W
Rack Mount	From Rack

Electrical & Mechanical

Number of Rack Slots	2
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board	Meets IPC Standard
Size (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)[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

FC PART 15 COMPLIANT   CE   cULus E322911   RoHS COMPLIANT   N24621

MADE IN THE USA

ORDERING INFORMATION

Part Number	Description
FVT40D4SFP	4 Channel Video / 4 Channel Data Transmitter
FVR40D4SFP	4 Channel Video / 4 Channel Data Receiver
Included Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included) 5 × RJ45 - RJ45 Breakout Wiring Kit (Includes cable and terminal block)
Options	[2] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) User-selection of SFP modules (Extra charge, consult factory) 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

V —4→ D ←4→ **FVT40D4SFP** —○— **FVR40D4SFP** —4→ V ←4→ D

○— OPTICAL FIBER
— COPPER CABLE

Optic Fiber Count and Type dependent on user selection of SFP modules.