



The ComNet™ FVT/FVR20D2I1C4E environmentally hardened units provide transmission of two independent video channels and two bi-directional data channels. They also provide transmission of one Aiphone™ intercom channel and four contact closure channels with tamper supervision in addition to one 10/100Mbps Ethernet channel. The FVT/FVR20D2I1C4E has dual SFP optical ports to provide a redundant point-to-point fail safe topology in the event of loss of one fiber or one optical module. Plug-and-play design ensures ease of installation and no electrical or optical adjustments are ever required.

## FEATURES

- › 2 channels of 10-bit digital video encoding and decoding for high-quality video transmission that meets the requirements of EIA RS-250C for short-haul video transmission
- › 2 Bi-directional data channels supporting RS232, RS422, and 2 or 4-wire RS485 with tri-state data interfaces
- › Duplex Aiphone™ intercom channel
- › Four contact closure channels with supervision
- › True 100Mb Ethernet channel
- › Dual SFP optical ports redundant Point-to-Point configuration
- › Exceeds all requirements for RS-250C short-haul transmission
- › 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 in addition to alarm contacts for fault monitoring
- › Operational status monitored via web management interface through the addition of the ComNet network managed chassis and network management interface module
- › Hot-Swappable Modules
- › Interchangeable between stand-alone or rack mount use - ComFit
- › Lifetime Warranty
- › Made in the USA

\* Small Form-Factor Pluggable Module. Sold separately.

## SPECIFICATIONS

### Video

Video Channels	2
Video Input	1 volt pk-pk (75 ohms)
Overload	>1.5V pk-pk
Bandwidth	10 Hz - 6.5 MHz
Differential Gain	<2%
Differential Phase	<0.7°
Tilt	<1%
Signal-to-Noise Ratio:	67 dB Typical

### Data

Data Channels	2
Data Interface	RS232, RS422 and RS485 (2W/4W)
Data Format	NRZ, MRZI Manchester, Bi-Phase and Sensornet
Data Rate	DC-250 Kbps (NRZ)
Bit Error Rate:	<1 in 10 <sup>9</sup> @ Maximum Loss Budget
Operating Mode:	Simplex or Full-Duplex

### Intercom

Channels	1
Compatibility	Aiphone™ LED and LEF

### Ethernet

Data Interface	10/100 BASE-T/TX
Data rate	10/100 Mbps Full Duplex
Maximum Bitrate	100Mbps

### Contact Closure

Channels	3 Simplex, 1 Duplex
Response Time	25 msec
Input	Dry Contact Closure
Output	SPST Relay, 0.5 A Contact rating - normally open
Supervision	Open Circuit / Short Circuit Detection

### LED Indicators

- Power - Link - Video - Data  
- Intercom - Contact Closure - Ethernet

### Connectors

Optical	2 × SFP, Dual Port configuration <sup>1</sup>
Power	Terminal Block
Video	BNC
Data	RJ45
Intercom	RJ45
Contacts	RJ45
Ethernet	RJ45
Alarms	RJ45

### Power

Operating Voltage Range	Dual Redundant Input 8 to 24VDC
Power Consumption	4W

### Electrical & Mechanical

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) <sup>2</sup>

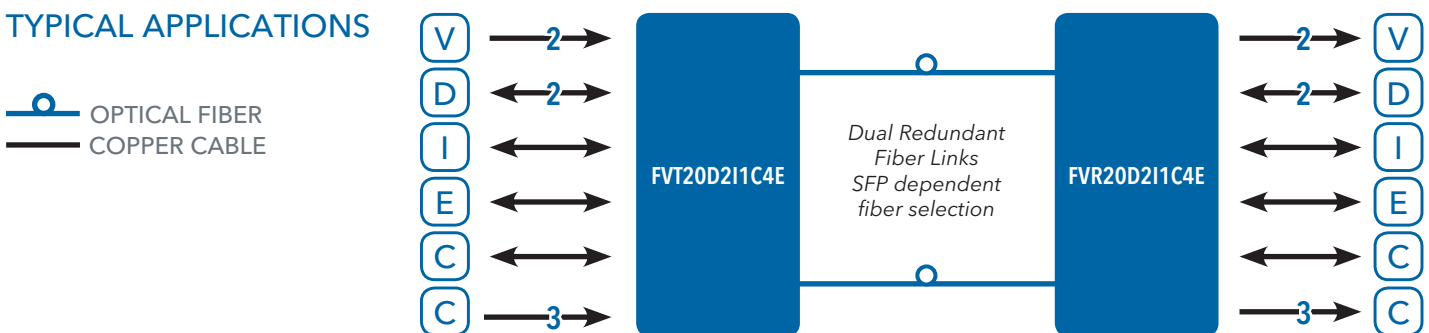


## ORDERING INFORMATION

Part Number	Description	Fiber Information	# Rack Slots
FVT20D211C4E	Transmitter 2 Video / Bi-directional Data / Aiphone™ Intercom / 4 Contact Closure / 100Mb Ethernet / SFP	See SFP Modules data sheet	2
FVR20D211C4E	Receiver 2 Video / Bi-directional Data / Aiphone™ Intercom / 4 Contact Closure / 100Mb Ethernet / SFP	See SFP Modules data sheet	2
Accessories	DC Plug-in Power Supply (Included)		
Options	[2] Add suffix 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - with Mounting Hardware (Optional, order model DINBKT1)		

[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. 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 APPLICATIONS



Low Power Consumption