# **Communication Networks**

# 10-bit Digitally Encoded Video + 2 Bi-directional Data + Aiphone<sup>™</sup> Intercom + 4 Contact Closure + 100Mbps Ethernet + Redundant Point-to-Point Dual SFP\* Optical Ports FVT/FVR10D2I1C4E





The ComNet<sup>™</sup> FVT/FVR10D2I1C4E environmentally hardened units provide transmission of one independent video channel and two bi-directional data channels. They also provide transmission of one Aiphone<sup>™</sup> intercom channel and four contact closure channels with tamper supervision in addition to one 10/100Mbps Ethernet channel. The FVT/FVR10D2I1C4E 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**

- > 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<sup>™</sup> 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 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

<sup>\*</sup> Small Form-Factor Pluggable Module. Sold separately.

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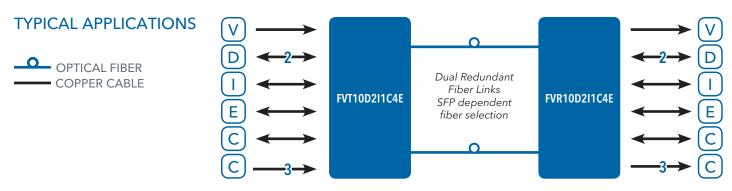
# **SPECIFICATIONS**

Video		Indicating LEDs	- Power - Link - Video - Data	
Video Channels	1	-	- Intercom - Contact Closure - Ethernet	
Video Input	1 volt pk-pk (75 ohms)	Connectors		
Overload	>1.5V pk-pk	Optical	2 × SFP, Dual Port configuration <sup>1</sup>	
Bandwidth	10 Hz - 6.5 MHz	Power	Terminal Block	
Differential Gain	<2%	Video	BNC	
Differential Phase	<0.7°	Data	RJ45	
Tilt	<1%	Intercom	RJ45	
Signal-to-Noise Ratio:	67 dB Typical	Contacts	RJ45	
Data		Ethernet	RJ45	
Data Channels	2	Alarms	RJ45	
Data Interface RS232, RS422 and RS485 (2W/4W)		Power		
Data Format	NRZ, MRZI Manchester, Bi-Phase and Sensornet	Operating Voltage Range	Dual Redundant Input 8 to 24 VDC	
Data Rate	DC-250 Kbps (NRZ)	Power Consumption	4 W	
Bit Error Rate:	<1 in 10-9 @ Maximum Loss Budget	<b>Electrical &amp; Mechanical</b>		
Operating Mode:	Simplex or Full-Duplex	Current Protection	Automatic Resettable Solid-State Current Limiters	
Intercom		Circuit Board	Circuit Board Meets IPC Standard	
Channels	1	Size ( $L \times W \times H$ )	6.1 × 5.3 × 2.2 in (15.5 × 13.5 × 5.6 cm)	
Compatibility	Aiphone™ LED and LEF	Shipping Weight	< 2 lb / 0.9 kg	
Ethernet		Environmental		
Data Interface	10/100 BASE-T/TX	MTBF	> 100,000 hours	
Data rate	10/100 Mbps Full Duplex	Operating Temp	-40°C to +75°C	
Maximum Bitrate	100Mbps	Storage Temp	-40°C to +85°C	
Contact Closure		Relative Humidity	0% to 95% (non-condensing) <sup>2</sup>	
Channels	3 Simplex, 1 Duplex			
Response Time	25 msec			
Input	Dry Contact Closure	AGENCY COMPLIANCE	MADE IN THE	
Output	SPST Relay, 0.5 A Contact rating – normally open			
Supervision	Open Circuit / Short Circuit Detection	PART 15 COMPLIANT E322911		

## **ORDERING INFORMATION**

Part Number	Description	Fiber Information	# Rack Slots
FVT10D2I1C4E	Transmitter Video / Bi-directional Data / Aiphone™ Intercom / 4 Contact Closure / 100Mb Ethernet / SFP	See SFP Modules data sheet	2
FVR10D2I1C4E	Receiver 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	ptions [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 or DINBKT4)		

[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.



## **G** Low Power Consumption

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