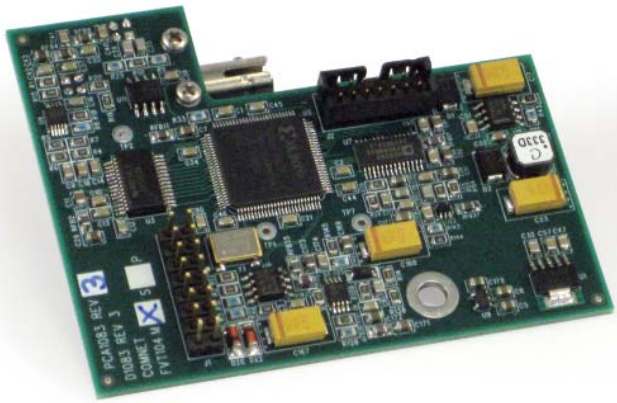
comnet
Communication Networks

FVT1031(M)(S)1-P

10-bit digital video with bi-directional data



Applications

- High-Performance CCTV with PTZ Control

Description

The ComNet™ FVT1031-P series video transmitter along with the ComNet™ FVR1031 series receiver supports simultaneous broadcast-quality video transmission of 10-bit digital video and bi-directional RS422 data over one multimode or single mode optical fiber. The FVT1031-P is designed to plug directly into the Pelco Spectra III/IV dome, and connects with power, video input and two way data via the Pelco electrical connector.

Features

- 10-bit digital video transmission
- Exceeds all requirements for RS-250C short-haul transmission
- Compatible with Pelco Spectra III/IV
- Voltage transient protection on all power and signal input/output lines provides unconditional protection from power surges and other voltage transient events.
- Distances up to 60 km (37 miles)
- Designed to be internally mounted within a Pelco Spectra dome
- Lifetime Warranty

PART NUMBER	FIBERS REQUIRED	FIBER
FVT1031M1-P FVR1031M1	1 (1310/1550 nm)	Multimode 62.5/125µm
FVT1031S1-P FVR1031S1	1 (1310/1550 nm)	Single Mode 9/125µm

FVT1031(M)(S)1-P 10-bit digital video with bi-directional data

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
Max. RG-59 COAX Distance:	100m (300ft) Camera to Fiber Optic Module to maintain 6Mhz Bandwidth

DATA

Data Format:	RS-422
Data Rate:	DC-115 Kbps (NRZ)

WAVELENGTH

1310/1550 nm, MM and SM

NUMBER OF FIBERS

1

OPTICAL EMITTER

Laser Diode

CONNECTORS

Optical:	ST

ELECTRICAL & MECHANICAL

Power:	8-15 VDC, 80 mA from Dome
Current Protection:	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size (in./cm) (LxWxH)	4.0 x 2.5 in., (10.16 x 6.4 cm)
Shipping Weight:	<0.5 lb./0.225 kg

ENVIRONMENTAL

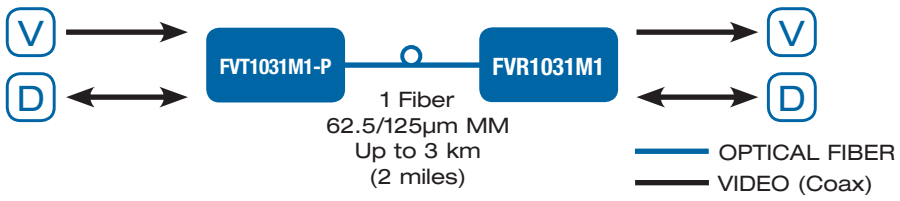
MTBF:	>100,000 hours
Operating Temp:	-40˚ C to +75˚ C
Storage Temp:	-40˚ C to +85˚ C
Relative Humidity:	0% to 95% (non-condensing)†

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

PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. DISTANCE**
FVT1031M1-P FVR1031M1	Video Transmitter/Data Transceiver Video Receiver/Data Transceiver	1	Multimode 62.5/125µm	16 dB	3 km (2 miles)
FVT1031S1-P FVR1031S1	Video Transmitter/Data Transceiver Video Receiver/Data Transceiver	1	Single Mode 9/125µm	20 dB	60 km (37 miles)
Options	Add '/C' for Conformally Coated Circuit Boards (Extra charge, consult factory)				

**Distance may be limited by optical dispersion.

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.



comnet Communication Networks

3 CORPORATE DRIVE | DANBURY, CT 06810 | USA
T: 203.796.5300 | F: 203.796.5303 | TECH SUPPORT: 1.888.678.9427 | INFO@COMNET.NET

8 TURNBERRY PARK ROAD | GILDERSOME | MORLEY | LEEDS, UK LS27 7LE
T: +44 (0)113 307 6400 | F: +44 (0)113 253 7462 | INFO-EUROPE@COMNET.NET

© 2010 Communications Networks Corporation. All Rights Reserved. "ComNet" and the "ComNet Logo" are registered trademarks of Communication Networks, LLC.