

# 10-Bit Digital Video with Bi-Directional Data Transmitter for Pelco Dome Cameras

FVT1031(M,S)1/P







FOR PELCO® SPECTRA III/IV CAMERAS



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 dome cameras
- > Voltage transient protection on all power and signal input/ output lines provides protection from power surges and other voltage transient events.
- Designed to meet full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/lowline voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.

- Distances up to 60 km (37 mi)
- > Designed for internal mounting within a Pelco Spectra dome
- > Lifetime Warranty

### **APPLICATIONS**

> High-Performance CCTV with PTZ Control

# 10-Bit Digital Video with Bi-Directional **Data Transmitter for Pelco Dome Cameras**

#### **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° <1% Signal-to-Noise Ratio (SNR)

Max. RG-59 COAX Distance

67 dB @ Maximum Optical Loss Budget 100 m (300 ft) Camera to Fiber Optic Module to

maintain 6 Mhz Bandwidth

**Data** 

**Data Format** RS-422

Data Rate DC-115 Kbps (NRZ)

Wavelength 1310/1550 nm, MM and SM

**Number of Fibers** 

**Optical Emitter** Laser Diode

**Optical Connectors** ςT

#### Power

Operating Voltage 8 to 15 VDC, 80 mA from Dome

#### **Electrical & Mechanical**

**Current Protection** Automatic Resettable Solid-State Current Limiters

Circuit Board Meets IPC Standard

Size  $4.0 \times 2.5$  in (10.16 × 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)1











#### ORDERING INFORMATION

Part Number	Description	Fiber	Optical PWR Budget	Maximum Distance <sup>2</sup>
FVT1031M1/P	Video Transmitter/Data Transceiver	Multimode 62.5/125µm	16 dB	3 km (2 miles)
FVR1031M1	Video Receiver/Data Transceiver	Multimode 62.5/125µm	16 dB	3 km (2 miles)
FVT1031S1/P	Video Transmitter/Data Transceiver	Single Mode 9/125µm	20 dB	60 km (37 miles)
FVR1031S1	Video Receiver/Data Transceiver	Single Mode 9/125µm	20 dB	60 km (37 miles)
Options	[1] Add suffix '/C' for Conformally Coated Circuit Boards to extend to condensation conditions (extra charge, consult factory)			

[2] 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.

## TYPICAL APPLICATION

