FTV10M Miniature Fiber Transmitter
SINGLE-CHANNEL DIGITALLY ENCODED VIDEO

Product Features

- Miniature Module Designed for Use in Pelco® EH2515/EH3512/EH3515 Series Camera Enclosures and in DF5/DF8 Series Fixed Mount Domes, or for Use as a Stand-Alone Module
- 10-Bit Digitally Encoded Video for High-Quality Transmission over a Single Fiber
- 1 Simplex Contact Closure
- Multimode Fiber Support for Distances up to 4 km (2.5 mi)
- Single-Mode Fiber Support for Distances up to 54 km (33.6 mi)
- Exceeds All Requirements for EIA RS-250C Short-Haul Transmission Specifications
- Laser for Transmission of Optical Signals
- Compatible with NTSC, PAL, or SECAM Video Standards
- Designed to Meet NEMA TS 1/TS 2 and Caltrans Traffic Signal Control Equipment Environmental Standards
- LED Status Indicators for Monitoring All Critical Operating Parameters

The FTV10M miniature fiber transmitter allows transmission of one composite video channel over one optical fiber. The FTV10M transmitter is compatible with the FRV20 Series receivers. The FTV10M transmitter is available in multimode and single-mode versions. When using single-mode fiber, the FTV10M transmitter and compatible receiver offer an optical power budget of up to 16 dB and provide a transmission distance of up to 54 km (33 mi).

Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. Specially designed for use in EH2515/EH3512/EH3515 Series camera enclosures and in DF5/DF8 Series fixed mount domes, the FTV10M transmitter can also be used as a stand-alone module. As a stand-alone module, the unit can be placed on a desktop or can be mounted to a wall.

For stand-alone and wall mount installations, external power is required for the FTV10M transmitter. The unit can be powered with the recommended FEXTPS fiber external power supply.
TECHNICAL SPECIFICATIONS

MODEL

<table>
<thead>
<tr>
<th>Transmitter</th>
<th>Compatible Receiver</th>
<th>Fiber Optical Connector Type</th>
<th>Number of Fibers</th>
<th>Wavelength</th>
<th>Optical Power Budget</th>
<th>Maximum Transmission Distance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTV10M1STM</td>
<td>FRV20M2ST</td>
<td>ST</td>
<td>1</td>
<td>1310 nm</td>
<td>12 dB</td>
<td>4 km (2.5 mi)</td>
</tr>
<tr>
<td>FTV10S1STM</td>
<td>FRV20S2ST</td>
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</tr>
<tr>
<td>FTV10S1FCM</td>
<td>FRV20S2FC</td>
<td>FC</td>
<td>1</td>
<td>1310 nm</td>
<td>16 dB</td>
<td>54 km (33.6 mi)</td>
</tr>
</tbody>
</table>

Note: This product requires a fiber installation with a minimum 30 dB connector return loss.

*Transmission distance will be diminished if additional losses are introduced by the optical connectors, splices and other factors regarding the quality of the fiber. Operating distance of multimode is limited by the characteristics of the fiber bandwidth.

VIDEO

Number of Channels: 1
Video Input: 1.0 Vp-p, 75 ohms
Overload: >1.5 Vp-p
Bandwidth (minimum): 5 Hz to 10 MHz
Differential Gain: <2%
Differential Phase: <0.7°
Tilt: <1%
Signal-to-Noise Ratio: >67 dB typical at maximum optical loss
Max. Coaxial Cable (RG59): 100 m (300 ft) camera to fiber optic module to maintain bandwidth

ELECTRICAL

Power Consumption: 2 W, 28 BTU/H
Power Input: 9 to 36 VDC; 12 to 24 VAC
MTBF: >100,000 hours
Optical Emitter: Laser
LED Indicators: Video, contact
Contact Closure Input: Closure to ground, 0.33 mA

MECHANICAL

Connectors
- Power: Terminal block
- Optical: ST or FC
- Video: BNC (gold-plated center pin)
- Contact: Terminal block
Current Protection: Automatic resettable solid-state current limiters
Circuit Board: Meets IPC standard

GENERAL

Dimensions: 5.72 × 7.62 × 2.74 cm (2.25” D × 3.00” W × 1.08” H)
Operating Temperature: –40° to 75°C (–40° to 167°F)
Storage Temperature: –40° to 85°C (–40° to 185°F)
Relative Humidity: 0% to 95%, noncondensing
Unit Weight: 0.15 kg (0.34 lb)
Shipping Weight: 0.90 kg (2.00 lb)

SUPPLIED ACCESSORIES

Wall mounting bracket (supplied); refer to dimension drawing

RECOMMENDED ACCESSORIES

- FKIT-DF5DF8: Fiber mount kit for use with DF5 Series and DF8 Series fixed mount domes
- FKIT-EH2500: Fiber mount kit for use with EH2500 Series enclosures
- FKIT-EH3500: Fiber mount kit for use with EH3500 Series enclosures
- FEXTPS: Fiber external power supply with multiple plug adaptors (North American, Australian, United Kingdom, and European); 100 to 240 VAC, 50 to 60 Hz input, 9 VDC output

CERTIFICATIONS/RATINGS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- C-Tick
- Designed to meet NEMA TS 1/TS 2 and Caltrans traffic signal control equipment environmental standards

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