

FTV10 Transmitter

SINGLE-CHANNEL DIGITALLY ENCODED VIDEO

Product Features

- 10-Bit Digitally Encoded Video for High-Quality Video Transmission over a Single Fiber
- 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 Diode 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
- Voltage Transient Protection on All Power and Signal Input/Output Lines
- LED Status Indicators for Monitoring All Critical Operating Parameters
- Stand-Alone or Rack-Mountable Modular Design

The **FTV10** fiber transmitter transmits one channel of video over one optical fiber. The **FTV10** transmitter is compatible with the FRV20 receiver and is available in both multimode and single-mode versions.

The **FTV10** plug-and-play design ensures ease of installation by requiring no electrical or optical adjustments. Modular in design, **FTV10** units can be rack-mounted using the EURACK/USRACK chassis, or stand-alone modules can be placed on a desktop or mounted to a wall (wall mount kit not required).

For stand-alone and wall mount installations, external power is required for the **FTV10** units. The units can be powered with the recommended FEXTPS fiber external power supply.



FTV10S1T

TECHNICAL SPECIFICATIONS

MODELS

| Transmitter | Compatible Receiver | Fiber Optical Connector Type | Number of Fibers | Wavelength | Optical Power Budget | Maximum Transmission Distance* |
|---|---------------------|------------------------------|------------------|------------|----------------------|--------------------------------|
| Multimode (62.5/125 μm) | | | | | | |
| FTV10M1ST | FRV20M2ST | ST | 1 | 1310 nm | 12 dB | 4 km (2.5 mi) |
| Single Mode (9/125 μm) | | | | | | |
| FTV10S1ST | FRV20S2ST | ST | 1 | 1310 nm | 16 dB | 54 km (33.6 mi) |
| FTV10S1FC | FRV20S2FC | FC | 1 | 1310 nm | 16 dB | 54 km (33.6 mi) |
| <p>Note: This product requires a fiber installation with a minimum 30 dB connector return loss.</p> <p>*Transmission distance will be diminished if additional losses are introduced by the optical connectors, splices, and other factors regarding the quality of the fiber. The operating distance of multimode is limited by the characteristics of the fiber bandwidth.</p> | | | | | | |

VIDEO

| | |
|---------------------------|---|
| Number of Channels | 1 |
| Video Input | 1.0 Vp-p, 75 ohms; NTSC, PAL, SECAM |
| Overload | >1.5 Vp-p |
| Bandwidth (minimum) | 5 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 6 Mhz bandwidth |

ELECTRICAL

| | |
|--------------------|---|
| Power | |
| Surface Mount | 8 to 15 VDC at 2 W |
| Rack Mount | Provided by rack |
| MTBF | >100,000 hours |
| Current Protection | Automatic resettable solid-state current limiters |
| Circuit Board | Meets IPC standards |
| LED Indicators | Video, Link, Power |

MECHANICAL

| | |
|----------------------|------------------------------|
| Connectors | |
| Power | Terminal block |
| Optical | ST or FC |
| Video | BNC (gold-plated center pin) |
| Number of Rack Slots | 1 |

GENERAL

| | |
|-----------------------|--|
| Dimensions | 15.5 × 13.5 × 2.8 cm (6.1" D × 5.3" W × 1.1" 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 | 0.34 kg (0.75 lb) |
| Shipping Weight | 0.90 kg (2.00 lb) |

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

[†]At the time of this printing, all certifications are pending. Please consult the factory, our Web site (www.pelco.com), or the most recent B.O.S.S.[®] update for the current status of certifications.

RECOMMENDED ACCESSORIES

| | |
|--------|---|
| EURACK | 4 RU rack accessory with European power supply |
| USRACK | 4 RU rack accessory with North American power supply |
| 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 |

Pelco by Schneider Electric

3500 Pelco Way, Clovis, California 93612-5699 United States

USA & Canada Tel (800) 289-9100 Fax (800) 289-9150

International Tel +1 (559) 292-1981 Fax +1 (559) 348-1120

www.pelco.com

Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. All other product names and services are the property of their respective companies. Product specifications and availability are subject to change without notice.

©Copyright 2012, Pelco, Inc. All rights reserved.