

FTV80/FRV80 Fiber Transmitter and Receiver

8-CHANNEL DIGITALLY ENCODED VIDEO



Product Features

- 10-Bit Digitally Encoded Video for High-Quality Multichannel Video Transmission over a Single Fiber
- Multimode Fiber Support for Distances up to 3 km (1.9 mi)
- Single-Mode Fiber Support for Distances up to 48 km (29.8 mi)
- Exceeds All Requirements for EIA RS-250C Short-Haul Transmission Specifications
- Compatible with NTSC, PAL, or SECAM Video Standards
- Designed to Meet NEMA TS 1/TS 2 and Caltrans Traffic Signal Control Equipment Environmental Standards
- Laser Diode for Transmission of Optical Signals
- 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

FRV80M1ST

The **FTV80/FRV80** fiber transmitter and receiver transmit eight channels of video over one optical fiber in a two-slot wide design. The **FTV80** transmitter and **FRV80** receiver are available in multimode and single-mode versions.

The **FTV80/FRV80** plug-and-play design ensures ease of installation by requiring no electrical or optical adjustments. Modular in design, **FTV80** and **FRV80** 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 **FTV80/FRV80** units. The units can be powered with the recommended FEXTPS fiber external power supply.

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)						
FTV80M1ST	FRV80M1ST	ST	1	1310 nm	16 dB	3 km (1.9 mi)
Single Mode (9/125 µm)						
FTV80S1ST	FRV80S1ST	ST	1	1310 nm	16 dB	48 km (29.8 mi)
FTV80S1FC	FRV80S1FC	FC	1	1310 nm	16 dB	48 km (29.8 mi)
<p>Note: This product requires a fiber installation with a minimum 30 dB connector return loss.</p> <p>*Distance may be limited by optical dispersion. High bandwidth 50/125 µm fiber is required to achieve maximum multimode distance. Contact Pelco Product Support before using these units for distances greater than 2 km (1.2 mi).</p>						

VIDEO

Number of Channels	8
Video Input (FTV80/)	
Video Output (FRV80)	1.0 Vp-p, 75 ohms; NTSC, PAL, SECAM
Overload	>1.5 Vp-p
Bandwidth (minimum)	10 to 6.5 MHz
Differential Gain	<2%
Differential Phase	<0.7°
Tilt	<1%
Signal-to-Noise Ratio	67 dB typical
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 4 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 Sync, Power

MECHANICAL

Connectors	
Power	Terminal block
Optical	ST or FC
Video	BNC (gold-plated center pin)
Number of Rack Slots	2

GENERAL

Dimensions	15.5 × 13.5 × 5.6 cm (6.1" D × 5.3" W × 2.2" 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	0.7 kg (1.5 lb)
Shipping Weight	0.9 kg (2.0 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

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

▲ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.
 ▲ **ADVERTENCIA:** Cáncer y Daño Reproductivo - www.P65Warnings.ca.gov.
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