

FTV40/FRV40 Fiber Transmitter and Receiver

4-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 2 km (1.2 mi)
- Single-Mode Fiber Support for Distances up to 69 km (42.9 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



FRV40M1ST

The **FTV40/FRV40** fiber transmitter and receiver transmit four channels of video over one optical fiber. The **FTV40** transmitter and **FRV40** receiver are available in multimode and single-mode versions.

The **FTV40/FRV40** plug-and-play design ensures ease of installation by requiring no electrical or optical adjustments. Modular in design, **FTV40** and **FRV40** 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 **FTV40/FRV40** 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)						
FTV40M1ST	FRV40M1ST	ST	1	1310 nm	16 dB	2 km (1.2 mi)
Single Mode (9/125 µm)						
FTV40S1ST	FRV40S1ST	ST	1	1310 nm	23 dB	69 km (42.9 mi)
FTV40S1FC	FRV40S1FC	FC	1	1310 nm	23 dB	69 km (42.9 mi)

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

VIDEO

Number of Channels	4
Video Input (FTV40/Video Output (FRV40)	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	8 to 15 VDC at 3 W
Surface Mount	Provided by rack
Rack Mount	
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	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	0.4 kg (0.9 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

*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

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