FTV160/FRV160, FTV320/FRV320 Fiber Transmitter and Receiver

16- OR 32-CHANNEL DIGITALLY ENCODED VIDEO

Product Features

- 10-Bit Digitally Encoded Video for High-Quality Multichannel Video Transmission over a Single Fiber
- Single-Mode Fiber Support for Distances up to 54 km (33.6 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
- Rack-Mountable Modular Design

FTV160S1ST

The **FTV160/FRV160** and **FTV320/FRV320** fiber transmitter and receiver transmit 16 or 32 channels of video, respectively, over one optical fiber. All models support single-mode fiber distances up to 54 km (33.6 mi).

The **FTV160/FRV160** and **FTV320/FRV320** plug-and-play design ensures ease of installation by requiring no electrical or optical adjustments. All models are shipped rack-mounted in the EURACK/USRACK chassis.

TECHNICAL SPECIFICATIONS

MODELS

Transmitter	Compatible Receiver	Fiber Optical Connector Type	Number of Fibers	Wavelength	Optical Power Budget	Maximum Transmission Distance*
Single Mode (9/125 µm)						
FTV160S1ST	FRV160S1ST	ST	1	1310 nm	18 dB	54 km (33.6 mi)
FTV160S1FC	FRV160S1FC	FC	1	1310 nm	18 dB	54 km (33.6 mi)
FTV320S1ST	FRV320S1ST	ST	1	1310 nm	18 dB	54 km (33.6 mi)
FTV320S1FC	FRV320S1FC	FC	1	1310 nm	18 dB	54 km (33.6 mi)

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

*Distance may be limited by optical dispersion.

VIDEO

Number of Channels	16 or 32
Video Input/Video Output	1.0 Vp-p, 75 ohms; NTSC, PAL, SECAM
Overload	>1.5 Vp-p
Bandwidth	10 to 6.5 MHz per channel
Differential Gain	<2%
Differential Phase	<0.7°
Tilt	<1%
Signal-to-Noise Ratio	67 dB at maximum optical loss budget
Max. Coaxial Cable (RG59)	100 m (300 ft) camera to fiber optic module to maintain 6 Mhz bandwidth

ELECTRICAL

MTBF	>100,000 hours
Input Power	
FTV/FRV160	90 to 264 VAC at 10 W maximum
FTV/FRV320	90 to 264 VAC at 20 W maximum
Rack Power Supply Output	9 VDC at 6.5 A
Fusing	1.25 A slow blow (rack power supply; plug-in modules are individually electronically fused)
Current Protection	Automatic resettable solid-state current limiters
Circuit Board	Meets IPC standards
LED Indicators	Video, Link, Power

MECHANICAL

Connectors	
Optical	ST or FC
Power	Terminal block
Video	BNC (gold-plated center pin)

GENERAL

Dimensions	48 × 19 × 15 cm (19" D × 7.5" W × 6" 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	
FTV160/FRV160	4.0 kg (8.8 lb)
FTV320/FRV320	5.3 kg (11.7 lb)
Shipping Weight	
FTV160/FRV160	5.08 kg (11.2 lb)
FTV320/FRV320	6.40 kg (14.1 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 MOUNTS

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

Pelco, Inc.
625 W. Alluvial Ave., Fresno, CA 93711 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

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