

# 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.



by Schneider Electric

International Standards  
Organization Registered Firm;  
ISO 9001 Quality System



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# TECHNICAL SPECIFICATIONS

## MODELS

Transmitter	Compatible Receiver	Fiber Optical Connector Type	Number of Fibers	Wavelength	Optical Power Budget	Maximum Transmission Distance*
<b>Single Mode (9/125 μm)</b>						
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)
<b>Note:</b> 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<sup>†</sup>

- 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

<sup>†</sup> At the time of this printing, all certifications are pending. Please consult the factory, our Web site ([www.pelco.com](http://www.pelco.com)), or the most recent B.O.S.S.<sup>®</sup> 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

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