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

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

<table>
<thead>
<tr>
<th>Transmitter</th>
<th>Compatible Receiver</th>
<th>Fiber Optical Connector Type</th>
<th>Number of Fibers</th>
<th>Wavelength</th>
<th>Optical Power Budget</th>
<th>Maximum Transmission Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTV160S1ST</td>
<td>FRV160S1ST</td>
<td>ST</td>
<td>1</td>
<td>1310 nm</td>
<td>18 dB</td>
<td>54 km (33.6 mi)</td>
</tr>
<tr>
<td>FTV160S1FC</td>
<td>FRV160S1FC</td>
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<td>1</td>
<td>1310 nm</td>
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<tr>
<td>FTV320S1ST</td>
<td>FRV320S1ST</td>
<td>ST</td>
<td>1</td>
<td>1310 nm</td>
<td>18 dB</td>
<td>54 km (33.6 mi)</td>
</tr>
<tr>
<td>FTV320S1FC</td>
<td>FRV320S1FC</td>
<td>FC</td>
<td>1</td>
<td>1310 nm</td>
<td>18 dB</td>
<td>54 km (33.6 mi)</td>
</tr>
</tbody>
</table>

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

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