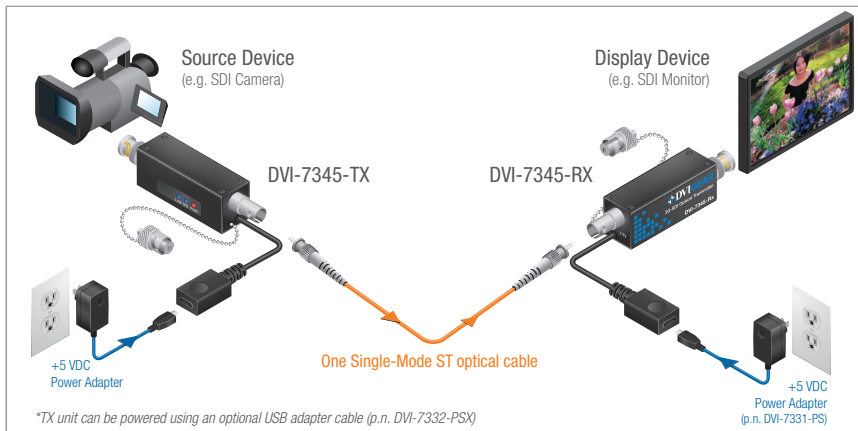




**High Performance** — The DVI-7345 is an ultra-compact, high performance fiber optic extender that supports SDI, HD-SDI, and 3G-SDI signal extension over a single strand of Single-Mode optical fiber at distances up to 1.2 miles (~2,000 meters). The extender set consists of an optical transmitter module that converts the SDI signals into light pulses for transmission over an optical fiber cable. An optical receiver module converts the light pulses back to an SDI signal for downstream processing or display on a monitor.

**Superior Design** — The transmitter includes an SDI signal EQ, a Laser driver and a laser diode module that uses a single optical wavelength of 1310nm. The receiver includes an SDI copper cable driver, a photo diode, a transimpedance amplifier (TIA), as well as a limiting amplifier. Both Tx and Rx use low-profile, metal cases equipped with rugged locking 75-ohm BNC SDI connectors. The locking ST fiber connectors are supplied with twist-locking metal covers to prevent dust buildup inside the fiber optic connectors. These features make the DVI-7345 the perfect solution for extension of SDI, HD-SDI, and 3G-SDI signals over extreme distances in even the most demanding broadcast, studio, and live environments.

### STAND-ALONE DIAGRAM



### FEATURES

- Supports:
  - SMPTE 259M (SD-SDI)
  - SMPTE 344M (ED-SDI)
  - SMPTE 292M (HD-SDI)
  - SMPTE 424M (3G-SDI)
- Supports data rates up to 2.97 Gbps
- Supports Single-Mode optical fiber distances up to 1.2 miles (~ 2 km)
- Extended length 25 miles (~ 40 km) option available
- Utilizes a single optical cable and a single optical wavelength
- Ultra-compact, rugged metal enclosure
- Locking BNC SDI connectors and locking ST optical connectors with metal dust covers
- Wide operational temperature range: -40° to +185°F (-40° to +85°C)
- Low RFI / EMI profile for sensitive applications
- Optical fiber transmission is immune to environmental signal noise

DVI-7345-TX / RX



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## 3G-SDI Fiber Optic Extender, 1x ST

### SPECIFICATIONS

Performance	
Compliance	SMPTE 259M (SD-SDI); SMPTE 344M (ED-SDI); SMPTE 292M (HD-SDI); SMPTE 424M (3G-SDI);
Maximum Video Bit Rate	2.97 Gbps (3G-SDI)
Supported Color Depth	12-bit
Input Impedance	75 ohms
Signal Level	800mVpp +/- 50mV
Supported Video Formats	480i, 480p, 576i, 576p, 720/30p, 720/60p, 1080i, 1080/30p, 1080/60p
Digital Audio Support	HD and SDI = 16 Channels of embedded 48 kHz, 24-bit audio channels 3G-SDI = 32 Channels of embedded 48 kHz, 24-bit audio channels
Connections / Indicators	
SDI Input / SDI Output	1x BNC Coaxial Male Connector
Optical Input / SDI Output	1x ST optical connector with detachable dust cover
Power Inputs	1x 6-inch pigtail with Female USB Micro-B connector
Optical	
Optical Technology	1x Discrete Optical Channel
Optical Data Rates	up to 2.97 Gbps
Optical Transmitter	Tx Module: 1310nm FP Laser, Class 1 Laser Product
Optical Receiver	Rx Module: 1x GaAs PIN Photo Diode
Optical Transmitter Output Power	-6 dBm (minimum) / -1 dBm (maximum)
Optical Transmitter Extinction Ratio	>5.0 dB
Optical Receiver Input Sensitivity	<-20.5 dBm (minimum) / 0 dBm (maximum)
Optical Link Power Budget	14.5 dB (minimum)
Cable	
Fiber Cable Type / Max. Length	9/125µ Single-Mode Fiber with 1x ST connector / 1.2 miles (2.0 km) <sup>(1)</sup>
DVIGear Fiber Cable	OFNP, Plenum-rated, Indoor/Outdoor-rated, Black PVC Jacket (additional data and custom lengths available on request)
Cable Outside Diameter	0.12" – .2" (3.0 – 5.0 mm)
Mechanical	
Construction	High-impact metal enclosure with black finish
Case Dimensions (L x W x H)	3.2" x 0.7" x 0.8" (82.1 mm x 16.9 mm x 19.1 mm)
Net Weight	DVI-7345-TX: 1.5 oz. (42 g) / DVI-7345-RX: 1.5 oz. (42 g)
Environmental	
Operating / Storage Temperature	-40° to +185°F (-40° to +85°C)
Operating / Storage Humidity	Operating: 5% to 80% (non-condensing); Storage: 5% to 95% (non-condensing)
Power Requirements	
Optical Transmitter / Receiver	The Tx and Rx units can be powered from a functioning USB port using a USB adapter cable, or by the supplied external power adapters
External AC Power Adapter	Input: 100-240VAC / 50-60Hz 0.2A Output: 5VDC, 2.0A
Maximum Power Consumption	DVI-7345-TX: 200mA (1.0 watt) DVI-7345-RX: 200mA (1.0 watt)
Regulatory Approvals	
Fiber Optic Extender Unit	FCC, CE, RoHS
AC Power Adapter	FCC, CE, UL, C-UL, CEC, GS, PSE, RoHS
Warranty	
Limited Warranty	3 Years Parts and Labor
Model Numbers	
DVI-7345	3G-SDI Fiber Optic Extender, 1x ST
DVI-7345-TX	3G-SDI Fiber Optic Transmitter, 1x ST
DVI-73451-TX	3G-SDI Fiber Optic Transmitter, 10K, 1x ST
DVI-7345-RX	3G-SDI Fiber Optic Receiver, 1x ST
DVI-CUST-OPT	9/125µ Single-Mode Optical Fiber Cable, Plenum-rated, 1x ST (specify length)
Accessories	
<b>Included:</b> 2x External AC Power Adapters (p.n. DVI-7331-PS) with USA plug; 1x Quick Start Guide <b>Optional:</b> External AC Power Adapter (p.n. DVI-7331-PS) with Euro, UK, or Australia plugs; USB Type A Male to USB Micro-B Male Adapter Cable (p.n. DVI-7332-PSX); +5 VDC Power Distribution Unit (p.n. DVI-7525-PDU); Custom Optical Cables (contact DVIGear for details)	

**Note 1:** Extended range (10KM or 40KM) version available on request.

All specifications are subject to change without notice.