



High Performance — The DVI-7313 and DVI-7314 are high performance 4K Optical Extenders that transmit high resolution DVI / HDMI signals over extreme distances using a single fiber optic cable. These extenders support HDMI v1.4 (non-HDCP) signals with resolutions up to 4K (4096x2160 / 30p) over cable distances up to 1640 ft. (DVI-7313) and up to 1.2 miles (DVI-7314).

Fiber Optic Extension — Each extender set consists of an optical transmitter module that converts the DVI / HDMI signals into light pulses for transmission over a single strand of optical fiber cable. An optical receiver module converts the light pulses back to a DVI / HDMI signal for display on a monitor or projector. The transmitter unit includes an internal EDID memory that can acquire and store the EDID from any display. The DVI-7313 supports Multi-Mode optical fiber, while the DVI-7314 supports both Multi-Mode and Single-Mode fiber optic cable.

Cutting-Edge Optics — Most single-fiber optical extenders transmit signals over multiple optical wavelengths, which can suffer from chromatic dispersion over long cable runs. To avoid this issue, these extenders employ a cutting-edge, high-speed SerDes that combines the DVI / HDMI signal channels into a single uncompressed 10.3 Gbps bit stream. This enables the optical transmission of the signal over a single optical wavelength, which provides increased signal fidelity, stability and flawless image quality, regardless of cable length. These features make the DVI-7313 and DVI-7314 the ideal future-proof choices for systems designers and integrators who need to transmit high resolution DVI / HDMI signals over extreme distances.

FEATURES

- Supports DVI and HDMI v1.4 (not HDCP compliant)
- Supports 4K (UHD) and resolutions up to 4096x2160 / 30p
- DVI-7313 supports Multi-Mode fiber optic cable lengths up to 1640 ft. (500 meters)
- DVI-7314 supports Single-Mode fiber optic cable lengths up to (1.2 miles / 2.0 km) and Multi-Mode fiber up to (1640 ft. / 500 meters)
- Extends signals over a single strand of LC-terminated optical fiber
- Cutting-edge 10.3 Gbps SerDes enables extension using a single optical wavelength
- Transmitter includes EDID memory to cache the EDID from any display
- Optical fiber transmission is immune to environmental signal noise
- Low RFI / EMI profile for sensitive applications
- Transmitter unit can be powered by DVI source in most applications

DVI-7314-TX / RX



Front View



Rear View

SPECIFICATIONS

Model Numbers		DVI-7313	DVI-7314
Extender Set	DVI-7313:	4K MM Fiber Optic Extender, 1x LC	DVI-7314: 4K SM Fiber Optic Extender, 1x LC
Transmitter	DVI-7313-TX:	4K MM Fiber Optic Transmitter, 1x LC	DVI-7314-TX: 4K SM Fiber Optic Transmitter, 1x LC
Receiver	DVI-7313-RX:	4K MM Fiber Optic Receiver, 1x LC	DVI-7314-RX: 4K SM Fiber Optic Receiver, 1x LC
DVI-CUST-OPT	50/125µ Multi-Mode Optical Fiber Cable, Plenum-rated, 1x LC (specify length, select OM3 or OM4)	Optical Fiber Cable, Plenum-rated, 1x LC (specify length, select OM3 or OM4 50/125µ Multi-Mode, or select 9/125µ Single-Mode)	
Performance			
Compliance	DVI v1.0, HDMI v1.4		
Maximum Pixel Clock Frequency	340 MHz		
Maximum Video Bit Rate	3.40 Gbps		
Supported Color Depth	12-bit		
Supported HDTV Formats	Up to 4K (4096x2160 / 30p)		
Supported PC Resolutions	Up to 4096x2160 / 30p		
Digital Audio Support	8 channel LPCM, 192 kHz, 24-bit audio capability		
Connections			
DVI Input / DVI Output	1x 18+1 DVI-D male connector		
Optical	1x LC fiber optic connector		
Power Inputs	1x 3.5mm jack		
Optical			
Optical Technology	1x High Speed Optical Channel (10.3 Gbps)		
Optical Wavelength(s)	850 nm	1310 nm	
Optical Transmitter	Tx Module: 850 nm VCSEL, Class 1 laser product	Tx Module: 1310 nm FP Laser, Class 1 laser product	
Optical Receiver	Rx Module: 1x GaAs PIN Photo Diode		
Optical Transmitter Output Power	-6 dBm (minimum) / 0 dBm (maximum)		
Optical Receiver Input Sensitivity	-11.5 dBm (minimum) / 0 dBm (maximum)	-14.5 dBm (minimum) / 0 dBm (maximum)	
Optical Link Power Budget	5.5 dB (minimum)	8.5 dB (minimum)	
Cable			
Fiber Cable Type / Max. Length	50/125µ OM4 Multi-Mode Fiber: > 1,640 ft. (> 500 meters) 50/125µ OM3 Multi-Mode Fiber: > 1,000 ft. (> 300 meters)	9/125µ Single-Mode Fiber: > 1.2 miles (> 2000 meters) 50/125µ OM4 Multi-Mode Fiber: > 1,640 ft. (> 500 meters) 50/125µ OM3 Multi-Mode Fiber: > 1,000 ft. (> 300 meters)	
DVIGear Fiber Cable	OFNP, Plenum-rated – additional data and custom lengths available on request		
Cable Jacket	OFNP, Plenum-rated, Black PVC Jacket		
Cable Outside Diameter	5.0 mm		
DDC Support			
EDID Support	An EDID memory built into the Tx module can learn and store the display's EDID information.		
HDCP Support	HDCP communications are NOT supported!		
Mechanical			
Construction	High-impact metal alloy enclosure with jet black finish		
Dimensions (L x W x H)	2.7" x 1.6" x 0.6" (69.5 mm x 39.5 mm x 15.2 mm)		
Net Weight	Tx Unit: 2.0 oz. (56 g); Rx Unit: 2.0 oz. (58 g)		
Environmental			
Temperature	Operating: 32° to +158° F (0° to +70°C); Storage: -40° to +185° F (-40° to +85°C)		
Humidity	Operating: 5% to 80% (non-condensing); Storage: 5% to 95% (non-condensing)		
Power Requirements			
Optical Transmitter	Tx module requires at least 320 ma of DC current from pin 14 of DVI (source) connector. The optional included external power supply may be used if needed.		
Optical Receiver	Must be powered using the supplied external power supply.		
External AC Power Adapter	Input: 100-240VAC / 50-60Hz 0.2A; Output: 5VDC, 3.0A		
Power Consumption	Tx Unit: 1.6 watts; Rx Unit: 1.4 watts		
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		
Accessories Included			
2x External AC Power Adapters with USA plugs, 1x Quick Start Guide, 2x DVI Female to HDMI Male Adapter Cables (DVI-8511c)			
Optional Accessories			
International AC Power Adapter (DVI-7211-PS) with USA, Euro, UK, or Australia plugs			