DVI-OPT-TX110 and DVI-OPT-RX110

Small form factor DVI fiber extender SingleFiberTechnology – Zero delay

Part No: 9151 0001 (TX110), 9151 0002 (RX110)

Highlight Features

- DVI connector sized extenders
- Several status LEDs
- Single Fiber Technology, zero frame delay
- New and more stable SC connector avoids accidental unplugging

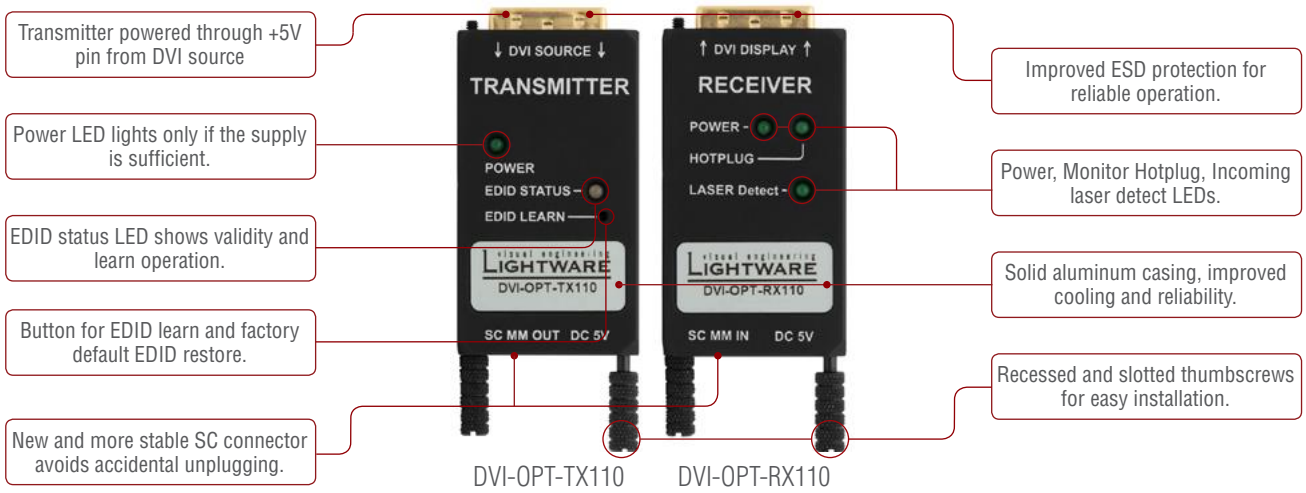
DVI-OPT-TX110 and DVI-OPT-RX110 pair is a DVI to fiber transmitter / receiver set for up to 2500 m distance transmission. Using Single Fiber Technology the DVI-D signal is transmitted over only one multimode 50/125 fiber core. Sources and display devices are galvanically isolated against ground loops and hum effects, and no delay occurs in the signal, the video image is transported without any frame latency.

Cross compatibility between Lightware fiber products is ensured thanks to our attentive design. In a standalone application DVI-OPT-TX110 and DVI-OPT-RX110 can work together simply, but with Lightware's hybrid modular matrix concept, it is even possible to connect these extender units directly to the matrix router using an MX-DVI-OPT series input or output board.

Galvanic isolation between source and display helps to avoid ground loops and hum effects. No delay occurs in the signal during optical conversion, the video image is transported without any frame latency. Powered from DVI source the DVI-OPT-TX110 transmitter does not need external power adaptor simplifying system installation. Transmitter is shipped with a preprogrammed factory default EDID with can be restored any time.

Recessed thumbscrews allow easy mounting directly to DVI receptacle by hand, or by using a flat-bladed screwdriver. This is most useful in space constraint applications, where the connectors are too close, and can be reached only from the rear side. Massive solid aluminum casing provides excellent cooling and maximum reliability.

Transmitter and Receiver Benefits



DVI-OPT-TX110 and DVI-OPT-RX110

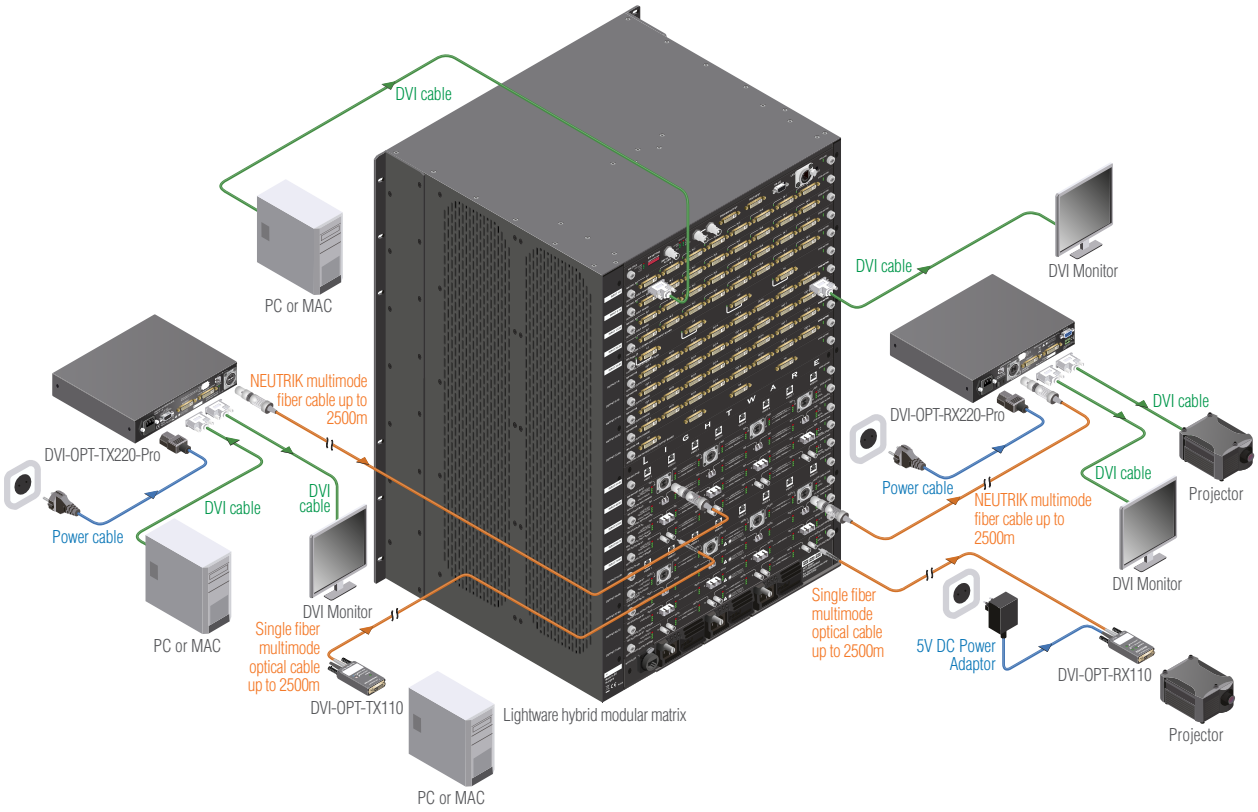
Applications

- Professional AV systems, conference rooms
- Fixed installations, Rental and Staging
- Digital signage
- Long distance lossless DVI signal transmission
- Ground loop isolation

Features

- Extends DVI-D signals with Single Fiber Technology
- 1920x1200 or 2048x1080 maximal resolutions
- Cross compatibility with Lightware Fiber devices
- Plug & Play
- Zero frame latency – No delay
- No compression
- EDID emulation in TX110
- TX Status LEDs: Accurate power detection, EDID state
- RX Status LEDs: Power, laser detect, hotplug detect
- External universal power adaptor for receiver
- Power supplied through DVI connector for transmitter
- DVI connector sized form factor
- Solid aluminum housing for professional use
- Recessed (slotted) thumbscrews
- Improved ESD protection
- Improved mechanical stability SC connectors
- Secure snap DC plug
- Restorable factory default EDID

Integrated System Operation



DVI-OPT-TX110 and DVI-OPT-RX110

Connectors

TX input , RX output:	24 pole DVI-D plug
DC Power:	1.35 / 3.5 mm barrel receptacle
Fiber:	SC simplex

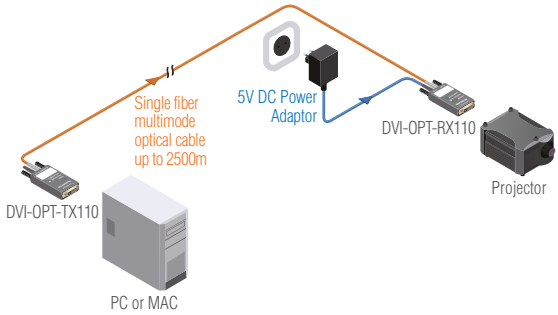
Compatibility Table

- http://www.lightware.eu/pdfs/fiber_extension_cross_comp.pdf

Maximum Extension Distances

	OM1 (62,5/125)	OM2 (50/125)	OM3 (50/125)	OM4 (50/125)
1080p@60Hz 24 bpp	250 m	600 m	1200 m	2500 m

Stand alone Operation

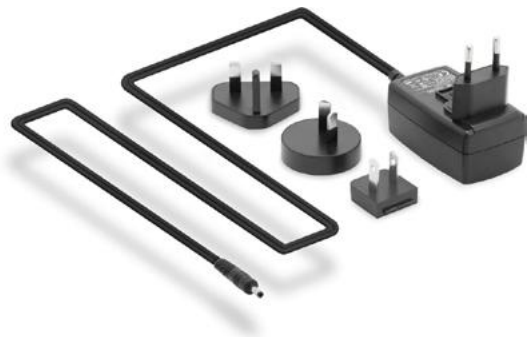


Specifications

Data rate:	1.65 Gbps per color
Max resolution:	1920 x 1200 or 2048 x 1080 pixels
Video delay:	0 frames
HDCP pass through:	No
EDID emulation:	Yes, EDID learning by button
EDID memory:	1 user programmable EDID in transmitter
EDID support:	256 Byte Extended EDID v1.3
Front panel control:	EDID learn button
LED indicators (transmitter):	Power, source connected, signal present, laser active
LED indicators (receiver):	Power, laser detect, signal present, monitor connected
RS-232 pass through:	No
Fiber:	50/125 SC Multimode
Laser wavelengths:	4 ch. CWDM: 778; 800; 825; 850 nm (high speed)
Laser class specification:	Class 3
Transmitter output OMA*:	-6.25 dBm (worst case)
Receiver OMA* sensitivity:	-14.25 dBm (worst case)
Optical loss budget:	8 dB (worst case)
Transmission distance:	2500 m (using OM4 type fiber)
Power supply:	External power adaptor (100 to 240 V AC, 50/60 Hz)(5V DC, 1 A)
Power consumption (transmitter):	1.4 W
Power consumption (receiver):	0.8 W
Enclosure:	Solid aluminum
Dimensions:	39 W x 87,5 D x 15,4 H mm
Net weight (transmitter):	95 g
Net weight (receiver):	95 g
Compliance:	CE
Warranty:	3 years

OMA*:Optical Modulation Amplitude

Supplied Accessories



PSU-5VS Universal DC adaptor (Part No: 1180 0050)
Wall power adaptor with interchangeable plug for international use.
Universal input: 100-240 V AC, 50-60 Hz
Output: 5 V DC, 1 A

USB DC power cable (Part No: 1373 0009)
USB DC power cable one end is a male USB-A connector that can plug to a USB port, another end is a round shape male connector that can fit the extender's DC input.