

Dual-Link DVI fiber extender

Highlight features

- Extend Dual-Link DVI signals over fiber
- Built-in Advanced EDID Management
- Local monitor Output on transmitter
- USB control
- TMD5 Reclocking



Designed for rental and professional use, the Lightware DVIDL-OPT-TX200 and DVIDL-OPT-RX100 extender pair can transmit Dual-Link DVI signals over two multimode fiber cables for up to 2600 meters distance. Neutrik OpticalCON DUO connectors ensure reliable operation which are also compatible with industry standard LC Duplex fiber cables.

Dual-Link signal transmission supports '120 Hz' 3D signals. In this application the 3D picture is made up from two 60 Hz signals (with up to 2K or WUXGA or 1080p resolution) and transmitted through a Dual-Link DVI interface.

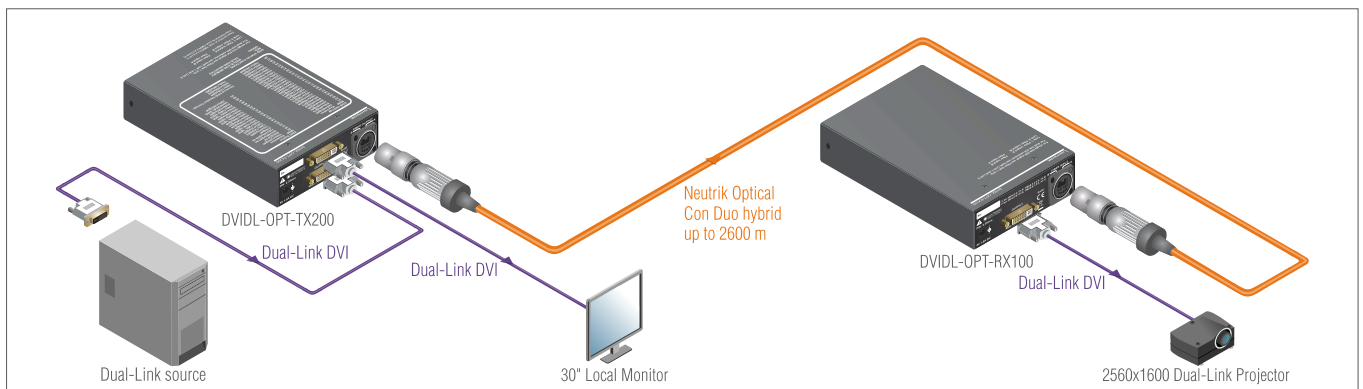
DVI Single-Link transmission is available as well with only one optical fibre. In Single-Link operation the transmitter and the receiver are fully compatible with Single-Link Lightware optical products.

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. This feature is crucial in 3D applications and systems where audio is processed separately.

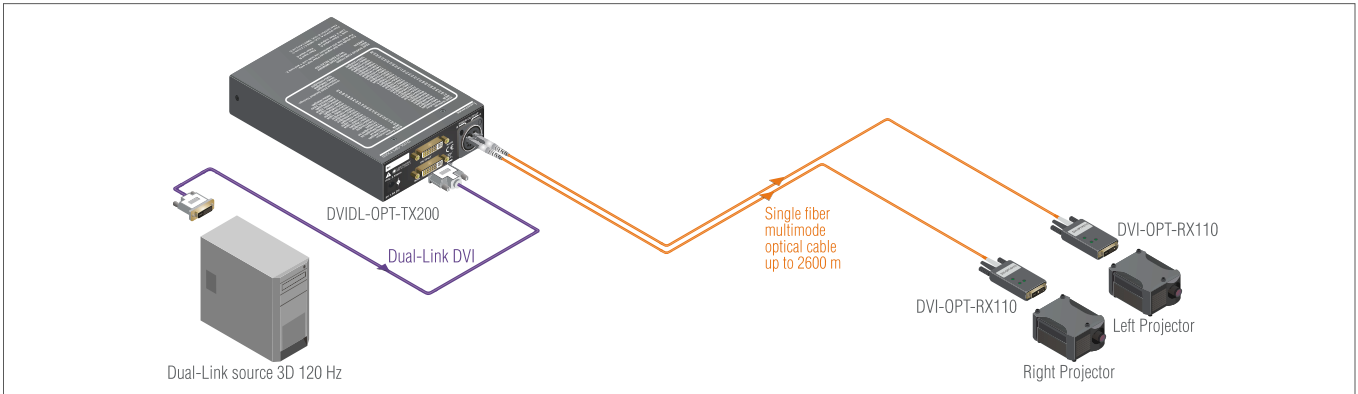
Cross compatibility between Lightware optical products is ensured thanks to our attentive design. In a standalone application DVIDL-OPT-TX200 and DVIDL-OPT-RX100 can work together simply, but with Lightware's hybrid modular matrix concept, it is even possible to connect these extender boxes directly to the matrix router using an MX-DVIDL-OPT series Input or Output board.

Advanced EDID Management with USB control: using this unique feature there is no need to negotiate EDID information between the source and remote display. The transmitter DVIDL-OPT-TX200 stores up to 100 different EDID versions in its non volatile memory and keeps the selected one continuously fixed on its Dual-Link Input available for the source computer. According to the user's setting any exotic pixel resolution can be created and emulated via Lightware's Advanced EDID Creator software.

Standalone application



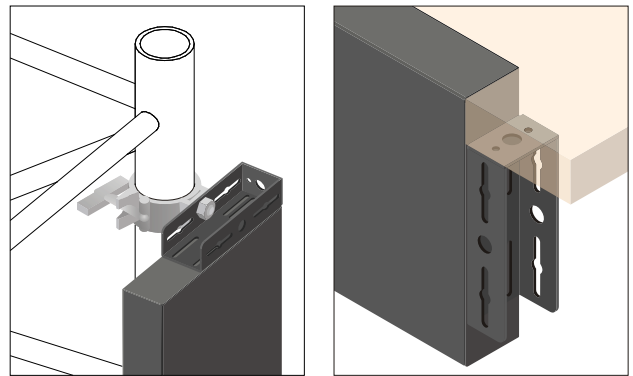
60 + 60 Hz active 3D application



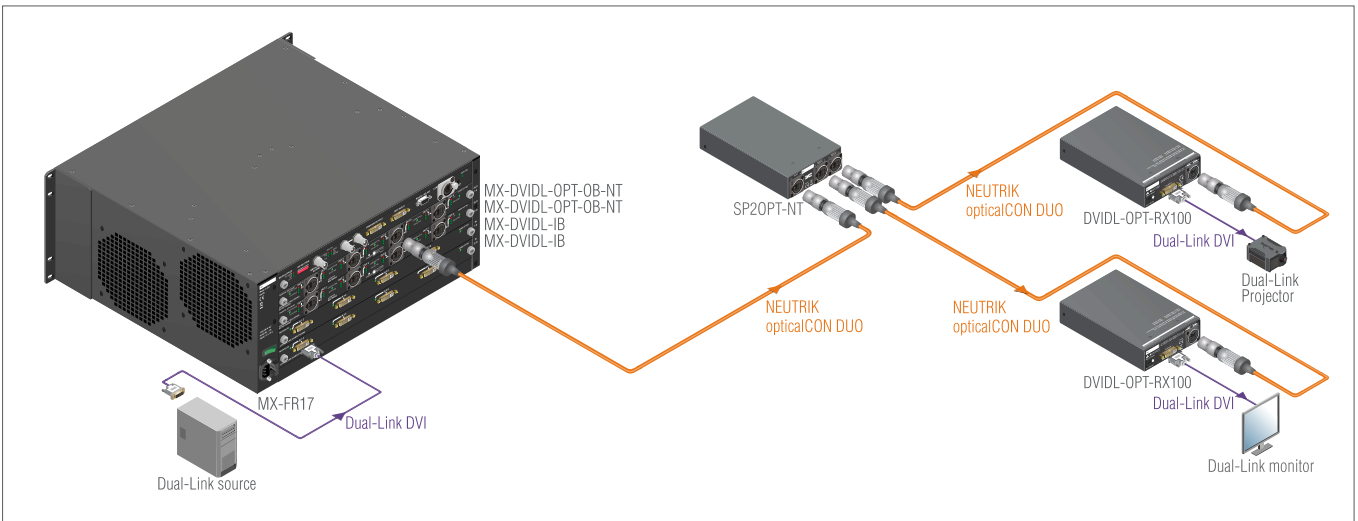
Devices can be mounted several ways, depending on the application. Rack shelf and mounting bracket is available which offers easy mounting on truss systems with standard clamps or using the unit built in to furniture.

Compatible fiber cables

- Neutrik 2M-4S75 hybrid
- Neutrik 2M
- LC-LC Multimode Duplex cable (two fibers needed)



Integrated system operation



Transmitter and receiver rear view



DVIDL-OPT-TX200



DVIDL-OPT-RX100

Compatibility table

- [.../fiber_extension_cross_comp.pdf](#)

Applications

- Rental and staging
- Military and GIS
- Medical
- Scientific visualizations
- Virtual Reality Training
- Simulation
- Conference rooms, collaborative telepresence
- Custom resolution and refresh rate EDID emulation
- '120 Hz' 3D visualizations (60 + 60 Hz active 3D)

Features

- Extends Dual-Link DVI-D signals over two fibers
- 4096 x 2400 maximal resolution
- Single-Link operation mode with one fiber
- Zero frame latency - No delay
- No compression
- Neutrik OpticalCON fiber connectors
- Advanced EDID Management in transmitter
- USB port for control and firmware upgrade
- Status LEDs: source, signal, monitor and laser loss detection
- Local monitor buffered loop Output at transmitter
- TMDS Reclocking in receiver
- Improved ESD protection
- Rack, truss or furniture mounting accessories

Connectors

Power:	locking DC connector (2.1 / 5.5 mm)
DVI:	29 pole DVI-I connectors (only digital pins are connected)
Fiber:	Neutrik NO2-4FDW type LC duplex
Control:	mini USB (B type)

Specifications

Data rate:	1.65 Gbps per color
Resolution:	up to 4096 x 2400
Video delay:	0 frames
HDCP pass through:	no
EDID emulation:	yes, Advanced EDID Management
EDID memory:	50 factory preset, 50 user programmable EDID in transmitter
EDID support:	256 byte Extended EDID v1.3
Front panel control:	EDID management in transmitter
LED indicators (-TX200):	power, source connected, signal present, hotplug, laser active
LED indicators (-RX100):	power, laser detect, signal present, monitor connected
RS-232 pass through:	no
Fiber:	50/125 LC 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 dBm (worst case)
Transmission distance:	2600 m (using OM3e type fiber)
Power supply:	External power adaptor (100 to 240 V AC, 50/60 Hz), (5 V DC, 2.5 A)
Power consumption (-TX200):	3.5 W
Power consumption (-RX100):	4 W
Enclosure:	1U quarter rack, 1mm metal
Dimensions:	110 W x 181 D x 42.2 H mm
Net weight (-TX200):	1420 grammes
Net weight (-RX100):	1340 grammes
Compliance:	CE
Warranty:	3 years

OMA*: Optical Modulation Amplitude

Supplied accessory



Universal DC adaptor

Wall power adaptor with interchangeable plug for international use.

Universal Input: 100-240 V AC, 50-60 Hz

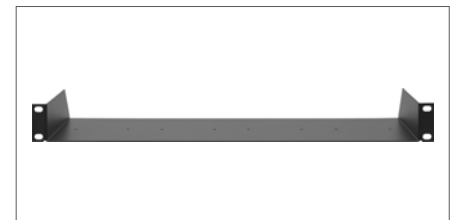
Output: 5 V DC, 2.5 A

Optional accessories



Mounting bracket

It makes through-furniture and under-desk mounting easy, and allows truss mounting with standard clamps.



Rack shelf

The 1U high rack shelf provides mounting holes for fastening two half-rack or four quarter-rack sized units.