Multimode Fiber cable extenders
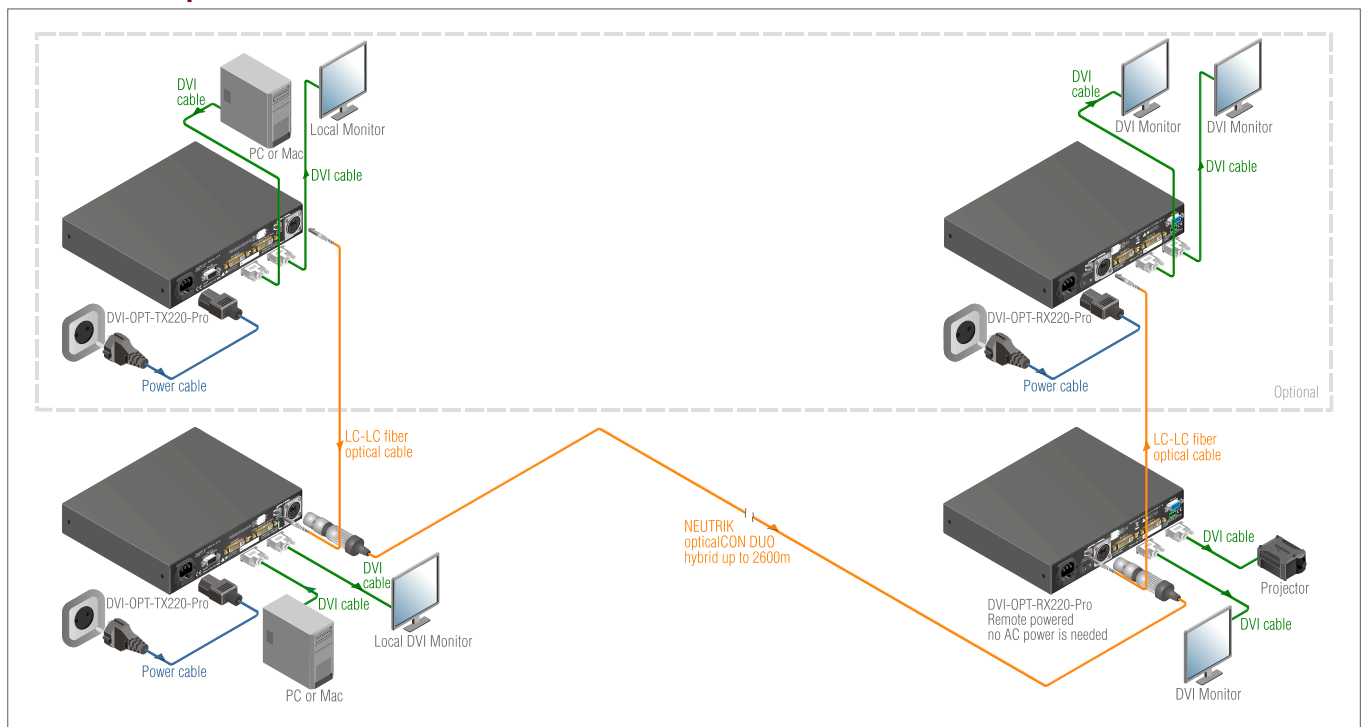## supporting DVI signals

Highlight features

- Advanced EDID management
- Serial port or front panel control
- Pixel Accurate Reclocking
- Remote powering option for receiver
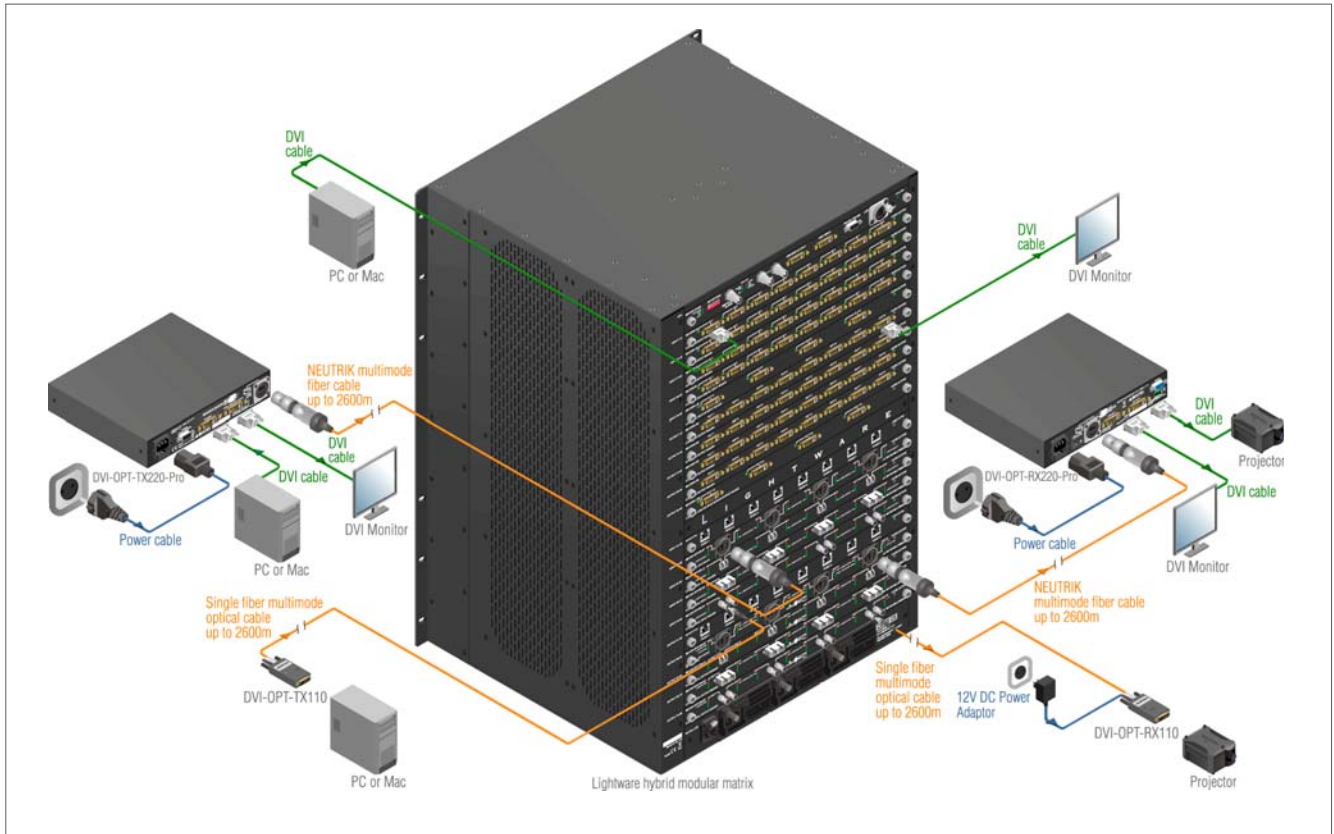- Several options for rack, furniture, or truss mounting

Designed for rental and professional use, the Lightware DVI-OPT 220-Pro series extenders can transmit DVI-D signals over multimode fiber cables for up to 2600 m distance. 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. The Neutrik OpticalCON fiber connectors ensure reliable operation in professional environments. These connectors are rugged, dust proof and very reliable, compatible with standard LC connectors.

Cross compatibility between Lightware fiber products is ensured thanks to our attentive design. In a standalone application DVI-OPT-TX220-Pro and DVI-OPT-RX220-Pro 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-DVI-OPT series Input or Output board.
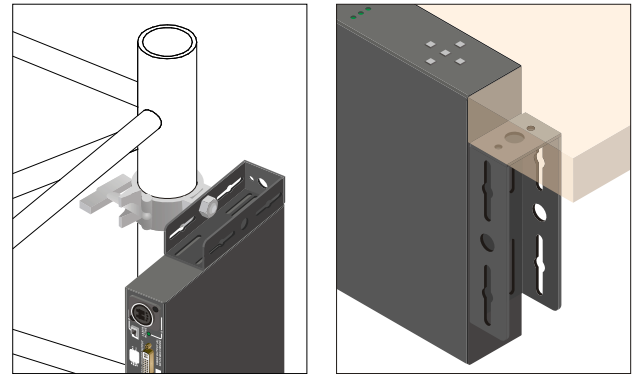
Stand alone operation

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Integrated system operation

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.
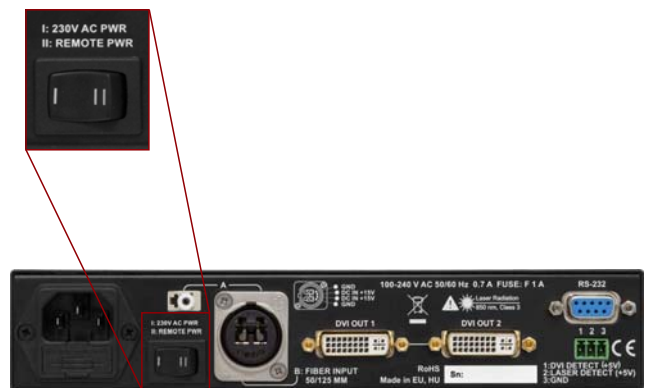

The receiver's power source can be switched to use the built-in local AC power supply, or to receive power remotely from the transmitter through special hybrid fibercopper cable (Neutrik 2M-4S75 only).

Transmitter and receiver back view

DVI-OPT-TX220-Pro

DVI-OPT-RX220-Pro

Applications

- Multiroom video and audio control
- Professional AV systems, conference rooms
- Rental and Staging
- Digital signage
- Long distance lossless DVI signal transmission

Features

- Extends DVI-D signals with Single Fiber Technology
- 1920 x 1200 or 2048 x 1080 maximal resolutions
- Cross compatibility with any Lightware Fiber device
- Zero frame latency - No delay
- No compression
- Neutrik OpticalCON fiber connectors
- Breakout LC connector for Neutrik B channel
- Advanced EDID Management through front panel LCD menu or Serial port (-TX220-Pro)
- Improved DVI signal detection circuit
- Firmware upgrade through serial port
- Status LEDs: source, monitor and laser loss detection
- Local monitor buffered loop output at transmitter
- Pixel Accurate Reclocking (-RX220-Pro)
- Two identical DVI-D outputs at receiver
- Alarm output for fiber and DVI link loss (-RX220-Pro)
- Built in universal power supply
- Remote power option for receiver (only when using Neutrik 2M-4S75 hybrid fiber cable with 2 fibers + 4 copper wires)
- Improved ESD protection
- Rack, truss or furniture mounting accessories

Connectors

Power:	IEC connector
DVI:	29 pole DVI-I connectors (only digital pins are connected)
Fiber:	Neutrik NO2-4FDW type LC duplex, LC simplex for B channel breakout
Alarm (only on receiver):	3 pole
RS-232:	9 pole standard D-SUB female

Specifications

Data rate:	1.65 Gbps per color
Resolution:	640 x 480 to 1920 x 1200
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 (-TX220):	power, source connected, signal present, laser active
LED indicators (-RX220):	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 dB (worst case)
Transmission distance:	2600 m (using OM3e type fiber)
Remote power distance:	600 m
Power supply:	Internal (100 to 240 V AC, 50/60 Hz)
Power consumption (-TX220-Pro):	3.5 W
Power consumption (-RX220-Pro):	4 W
Enclosure:	1U half rack, 1 mm metal
Dimensions:	221 W x 181 D x 42.2 H mm
Net weight (-TX220-Pro):	1420 gramms
Net weight (-RX220-Pro):	1340 gramms
Compliance:	CE
Warranty:	3 years

OMA*:Optical Modulation Amplitude

Compatible fiber cables

- Neutrik 2M-4S75 hybrid
- Neutrik 2M
- LC-LC Multimode cable

Compatibility table   .../fiber_extension_cross_comp.pdf
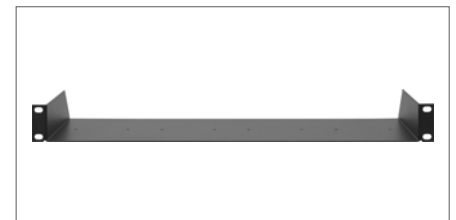
Optional accessories

DVI-OPT-TX110 and DVI-OPT-RX110
Connector sized DVI over multimode fiber extender.

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

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