

HDBaseT™ Compatible TPS Receiver with USB KVM



The Lightware HDMI-TPS-RX220AK receiver offers seamless **HDBaseT™ integration** with additional Lightware product lines and developments, including TPS matrices and 25G boards. The device receives digital video at a **resolution up to 4K**, as well as audio and control up to 170 meters* over a single CAT cable. Furthermore, the device utilizes **control over USB KVM**, and can be remotely **powered over TPS link with PoE** (IEEE 802.3af), a useful array of features to further **simplify the operation** for system integrators and users.

Features

- Built-in Event Manager automation feature
- 1920x1080@120Hz/4:4:4, 4096x2048@30Hz/4:4:4 or 60Hz/4:2:0 maximum resolutions (300MHz)
- Command injection on RS-232 and IR ports
- Bi-directional RS-232 and IR extension (pass-through and control)
- USB KVM (HID) extension
- Extends DVI or HDMI 1.4 + Audio + Ethernet + RS-232 + IR over one CAT5/6/7 cable
- Can be remote powered through CATx cable (PoE PD)
- HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant
- Built-in Event Manager automation feature
- Supports HDMI 3D signal formats (frame packing, side-by-side and top-bottom)
- HDCP 1.4 compliant
- Uncompressed video up to 9 Gbps datarate (300 MHz pixel clock)
- No signal latency, zero frame delay
- TPS link quality and cable length monitoring
- Adjustable analog audio settings (volume, gain, balance)
- Audio de-embedding
- Balanced analog audio output for audio de-embedding
- Firmware upgrade through Ethernet
- Cross compatible with TPS series Lightware extenders and I/O boards (HDBaseT compatible)
- Supports all embedded audio formats (including PCM, Dolby Digital and DTS high bitrate audio)

- Extension distance up to 170 meters (with CAT7 S/FTP AWG23 cable, 1920x1080p60)
- HDBaseT compatible
- Ethernet extension (100 Mbps)
- Advanced EDID Management
- Pixel Accurate Reclocking
- Device control via Ethernet (TCP/IP) and RS-232
- Multiple TCP/IP connections
- Intuitive control software for device configuration
- Supports HDMI 4K signal formats (4K UHD @30Hz RGB 4:4:4 or @60Hz YUV 4:2:0, up to 9 Gbps)
- No video compression
- Built-in video test pattern generator
- Twist-and-lock DC power connector
- Frame Detector (analyze detailed video timings)
- External universal power adaptor
- 2x Relay modules
- 5-pole Phoenix balanced analog audio connectors
- Mounting options for rack, furniture or truss

Advanced Control Features:

- Support RS-232 protocol for communication and control of third party devices like VC codecs. This allows the Cisco Room Kit login on RS-232–USB connection
- Support to receive CEC commands for control of displays and Lightware Event Manager to automate room actions
- Support to send CEC commands on HDMI ports for control of other devices
- Support true Infrared messages using HEX codes to control TVs, media players and other devices with IR emitters
- 100 available event slots in 'Plus' extenders

*Depends on cable category and quality

Applications

- Classrooms
- Meeting and conference rooms
- Control room
- Home cinema

Compatible products

- MX Modular matrix frames - MX-TPS/TPS2-OB
- 25G Modular matrix frames - 25G-TPS2-OB
- Standalone TPS matrix frames – MMX6x2-HT series
- TPS Transmitters:
 - HDMI-TPS-TX95/97
 - DVI-HDCP-TPS-TX95/97
 - UMX-TPS-TX100 series
 - WP-UMX-TPS-TX100 series
 - SW4-TPS-TX240
 - HDMI-TPS-TX200 series
 - DP-TPS-TX200 series
- Single port standalone TPS power injector – TPS-PI-1P1

Specification

Resolution:	Up to 4K UHD 3840x2160@30Hz, 1600x-1200@60Hz, FullHD 1920x1080@60Hz
Digital audio formats:	Supports up to 8 channel PCM, Dolby TrueHD and DTS-HD Master Audio 7.1 formats
Input cable equalization:	Automatic max 170 m*
EDID emulation:	Yes, Advanced EDID Management
EDID memory:	120 factory preset, 15 user programmable
HDCP pass through:	Yes
RS-232 pass-through:	Yes, configurable
RS-232 (control option):	9600, 19200, 38400, 57600, 115200 Baud Rx,Tx (local or through TPS)(default: 57600)
Local power:	2-pole, DC 12V, 1A
Power over TPS:	DC 48V, 0.3A
Power consumption:	10W
Dimensions:	221 W x 100.4 D x 26 H mm
Enclosure:	1 mm metal
Compliance:	CE
Warranty:	3 years

*Depends on cable category and quality

Supplied Accessories



IR emitter and IR eye

(Part No: 1374 0003 TX, 1374 0002 RX)

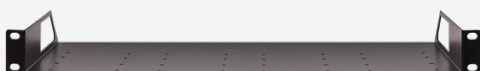
IR emitter is supplied with TPS-TX, IR eye is supplied with TPS-RX units. Needed for IR extension.



PSU-12VU Universal DC adaptor (Part No: 1180 0098)

Wall power adaptor with interchangeable plug for international use. Universal input: 100-240 V AC, 50-60 Hz, output: 12 V DC, 2.5 A

Optional Accessories



Rack shelf (Part No: 5240 0269)

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



Under desk mounting kit double (Part No: 5240 0276)

The UD-kit double makes it easy to mount multiple devices on any flat surface (e.g. furniture).

Connectors

Digital video output:	2 x HDMI connector
Digital video input:	1 x HDMI connector
Balanced audio output:	3.5mm jack
USB device:	2 x USB-A
USB control:	mini-USB-B connector
Ethernet:	1 x RJ45
IR in and out:	3.5mm jack
TPS input:	1 x RJ45
Serial port:	3-pole Phoenix (Euroblock)
Power:	Locking DC connector (2.1 / 5.5 mm)

Analog audio output

Volume:	-57 .. 0 dB
Mute function:	yes
Balance:	-100 .. 0 .. 100%