TPS Technology Leaflet

visual engineering
LIGHTWARE

The following table is to summarize the technologies that are available in the smart TPS devices. Please note, that certain features are firmware-dependent.

	4K and 3D Support	Audio Embedder and/or De-embedder Function	Autoselect Function for Video Inputs	Deep Color Support and Conversion	Event Manager	Forced Button Lock	Frame Detector	HDCP-compliant	Pixel Accurate Reclocking	RS-232 Transmission	Remote Power	Signal Transmission up to 170m	Consumer Electronics Control	Miniweb	TPS Cable Diagnostic Tool	Dark Mode	USB Extension	Infra Code Sending	RS-232 Recognizer	Basic IT Security	Batch Coamnds	Event Manager +	TCP Recognizer
DVI-HDCP-TPS-TX210	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
DVI-HDCP-TPS-TX220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
DP-TPS-TX210	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
DP-TPS-TX220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
HDMI-TPS-TX210	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
HDMI-TPS-TX220	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
HDMI-TPS-TX226	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	!	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
HDMI-TPS-RX110AY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
HDMI-TPS-RX110AY-Plus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
HDMI-TPS-RX220AK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MMX4x2-HT200	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
SW4-TPS-TX240	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
SW4-TPS-TX240-Plus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
UMX-TPS-TX120	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
UMX-TPS-TX130	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
UMX-TPS-TX140	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
UMX-TPS-TX140K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
UMX-TPS-TX140-Plus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
WP-UMX-TPS-TX120-US	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
WP-UMX-TPS-TX130-US	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
WP-UMX-TPS-TX130-Plus-US	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
FP-UMX-TPS-TX120	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
FP-UMX-TPS-TX130	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗

! The remote power function of the HDMI-TPS-TX226 device is not PoE-compatible.

Peterdy 15, Budapest H-1071, Hungary +36 1 255 3800 sales@lightware.com www.lightware.com

TPS Technology Leaflet

Technology Descriptions

4K and 3D Support

High bandwidth allows extension of resolutions of up to 4K, and even 3D sources and displays are supported.

Autoselect Function for Video Inputs

The Autoselect feature can sense the port status on the video input ports and select one of them automatically. With ‘First detect’, ‘Last detect and ‘Priority detect’ modes.

Basic IT-security

These entry-level network security improvements help prevent unauthorized access to the Lightware device: plain-text login, TCP port blocking and MAC address filtering.

Batch Commands

A batch of LW3 commands (salvo) can be run by the Lightware device either by a previously stored macro or by sending a file to the device with the desired commands.

Audio Embedder and/or De-embedder Function

Breakaway audio/video switching allows switching audio and video separately by de-embedding and embedding audio from/into HDMI signals.

Consumer Electronics Control

Supports transmitting standard CEC commands in order to remote control the source or sink device.

Dark Mode

All illuminating elements of the housing can be switched off. This feature is useful in live-stage shows or other environments where flashing LEDs would be distracting.

Deep Color Support and Conversion

It is possible to transmit the highest quality 36-bit video streams for perfect color reproduction.

Event Manager

The Event Manager tool takes care of all the necessary control in a smaller configuration by performing predefined actions in response to device status changes.

Event Manager +

Triggering a condition, defining variables and checking up to four conditions for an action – these features are available by the improved Event Manager.

Frame Detector

The exact video and audio signal format can be determined such as timing, frequencies, scan mode, HDCP encryption, color range, color space and audio sample rate.

Forced Button Lock

The front panel buttons can be locked and unlocking them is only possible via LW3 protocol command.

HDCP-compliant

The device fulfills the HDCP standard. HDCP capability on the digital video inputs can be disabled when non-protected content is extended.

Infra Code Sending

IR code sending in Pronto Hex format – in Command injection mode, too. The code sending is available as an Action in Event manager, too.

Miniweb

The Miniweb is able to display an adaptive surface with a virtual crosspoint and buttons for Event manager Actions. The miniweb can be displayed in a mobile device, too.

Pixel Accurate Reclocking

Each output has a clean, jitter free signal, eliminating signal instability and distortion caused by long cables or connector reflections.

Remote Power

The devices can be powered locally by the supplied power adaptor, or remotely via the TPS connection with a compatible power source equipment.

RS-232 Recognizer

Supports recognizing incoming RS-232 messages to integrate with 3rd party devices like the videoconference codec devices.

RS-232 Transmission

AV systems can also contain serial port controllers and controlled devices. Serial port pass-through supports any unit that works with standard RS-232.

Signal Transmission up to 170 m

Video and audio signal transmission (HDMI, Ethernet, RS-232, and Infra-Red) over a single CAT5e…CAT7e cable.

TCP Recognizer

Supports recognizing the incoming TCP messages to integrate with 3rd party devices like the videoconference codec devices.

TPS Cable Diagnostic Tool

The TPS Cable Diagnostics Tool within the LDC software will help you identify potential twisted pair cable issues in your TPS-capable (HDBaseT compliant) system.

USB Extension

KVM extension for USB HID devices (Human Interface Devices, e.g. keyboard, mouse, presenter).

Peterdy 15, Budapest H-1071, Hungary +36 1 255 3800 sales@lightware.com www.lightware.com