

TPS Extender with DC 12V Remote Power



Part No: 9154 0080



The HDMI-TPS-TX226 is an all-round video, audio and control transmitter transferring over a single CAT cable up to a range of 170 meters dynamic and fixed environments such as small board rooms and classrooms, with remote power capabilities via DC 12V up to 30 meters to further simplify the AV system design, integration and operation.

Highlight Features

- Built-in Event Manager control automation feature
- 1920x1080@120Hz/4:4:4, 4096x2160@30Hz/4:4:4 or 60Hz/4:2:0 maximum resolutions (300MHz)
- Audio embedding (or replace original audio)
- Ethernet extension (100 Mbps)
- Command injection on RS-232 and IR ports
- GPIO control ports
- Bi-directional RS-232 and IR extension (pass-through and control)
- Local or remote (remote-send / remote-receive) power source
- Extends DVI or HDMI 1.4 + Audio + Ethernet + RS-232 + IR over one CAT5/6/7 cable

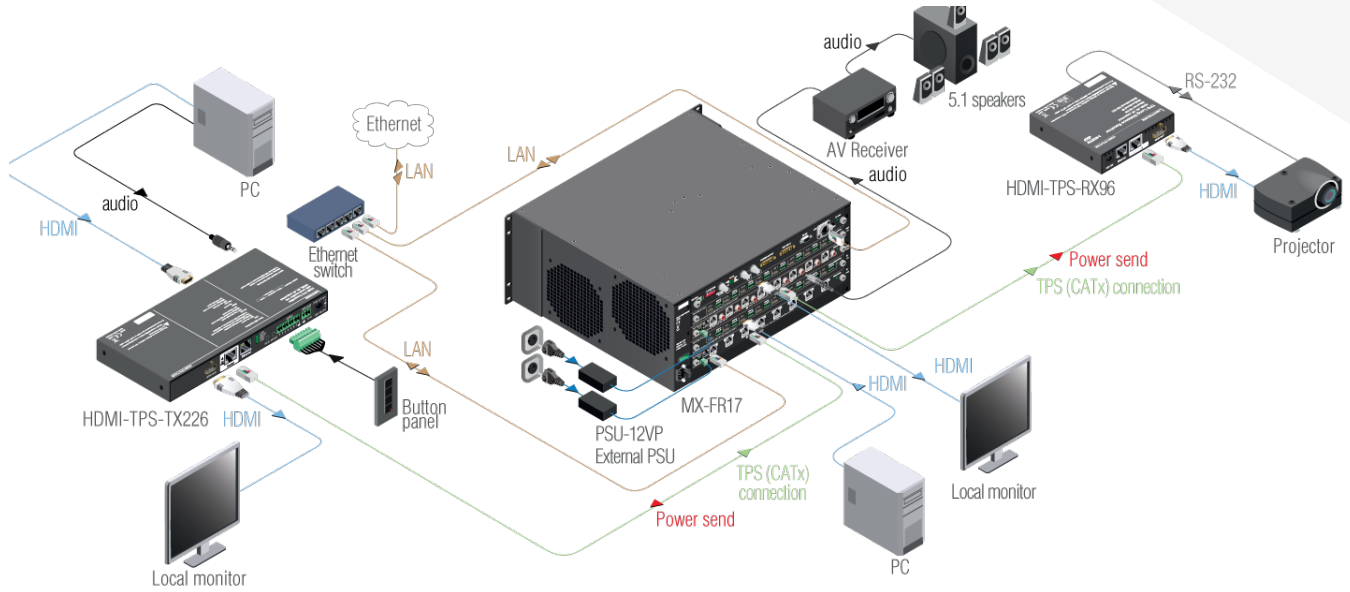
Applications

- Small classrooms
- Conference rooms, meeting rooms
- Control rooms
- Home cinemas

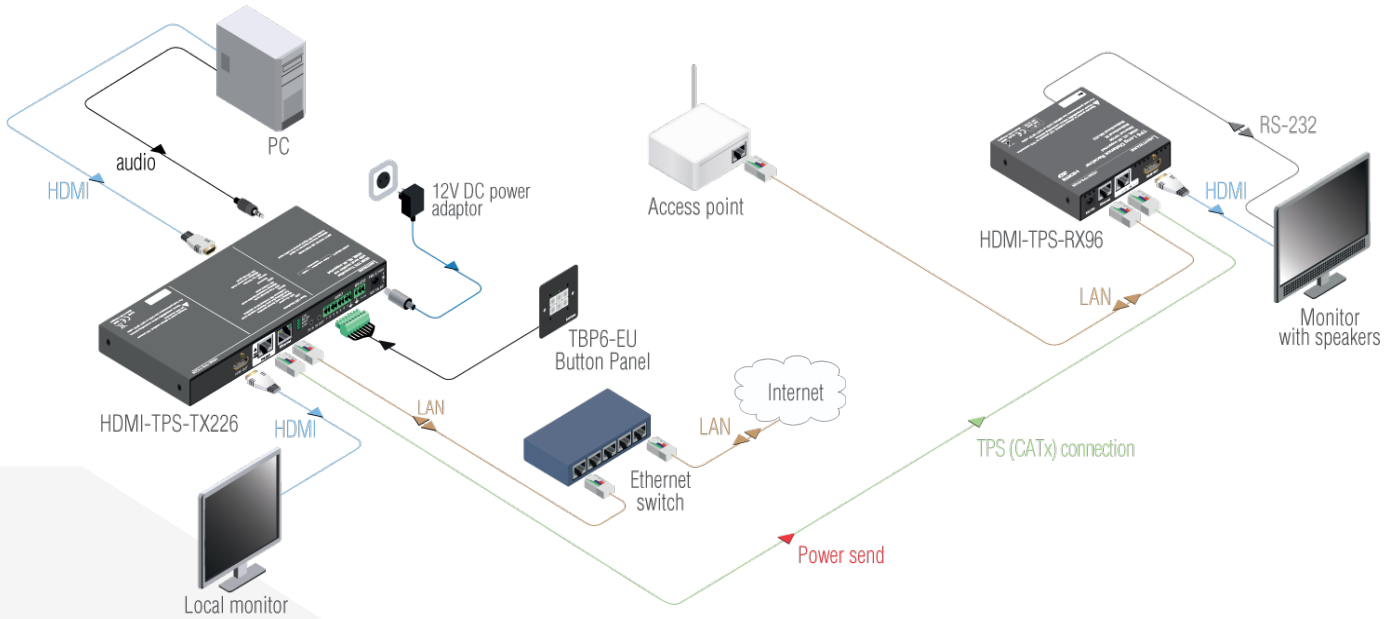
Compatible products

- MX Series matrix frames with MX-TPS-IB
- HDMI-TPS-RX95
- DVI-HDCP-TPS-RX95
- HDMI-TPS-RX96
- DVI-HDCP-TPS-RX96

Standalone Application Diagram



Application Diagram



The extender was designed to handle HDMI 1.4 digital video signals and analog stereo audio from local inputs or HDMI embedded audio up to 8 Channel PCM or HBR audio. Analog audio is converted to a digital format. The device has a local video output. The video and the embedded audio of the local output is the same as transmitted via TPS link.

The HDMI-TPS-TX226 handles HDCP encryption. Using the factory, custom or transparent EDID emulation the user can fix and lock EDID data on each input connector. Advanced EDID management forces the required resolution from any video source and fixes the output format to conform to

the system requirements. The unit offers bi-directional and transparent IR, RS232 and Ethernet transmission.

Furthermore the RS232 and IR connection supports command injection. Remote powering is available through the single CAT5e or better cable, but a local power supply can also be used. All devices can be mounted on a rack shelf or used in standalone formats. HDMI-TPS-TX226 is compatible with both the HDBaseT extenders and matrix switchers.

Specifications

Resolution:	Up to 4K UHD 3840x2160@30Hz, 1600x1200@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 20 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 (through CATx)(default: 57600)
Local power:	Universal power adaptor, DC 12V 2.5A
Power over TPS:	DC 12V
Power consumption:	8,5W (typ)
Enclosure:	1 mm metal
Dimensions:	221 W x 100.4 D x 26 H mm
Compliance:	CE
Warranty:	3 years

Connectors

Digital video input:	HDMI connector
Digital video output:	HDMI connector
Audio input:	3.5 mm stereo jack
Ethernet:	1 x RJ45
GPIO:	8-pole PHOENIX
IR:	3.5 mm jack
TPS output:	1 x RJ45
Serial port:	3-pole PHOENIX
Power:	Locking DC connector (2.1 / 5.5 mm)

Max cable lengths with the available firmware versions

Resolution	Pixel clock rate	Cable lengths (Auto / LR link mode)		
		CAT5e AWG24	CAT7 AWG26**	CAT7 AWG23
1024x768@60Hz	65 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1280x720p@60Hz	73,8 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1920x1080p@60Hz / 24bpp	148,5 MHz	100 m / 130 m*	90 m / 120 m*	120 m / 170 m*
1920x1200@60Hz	152,9 MHz	100 m / NA	90 m / NA	120 m / NA
1600x1200@60Hz	162 MHz	100 m / NA	90 m / NA	120 m / NA
1920x1080@60Hz / 36bpp	223 MHz	70 m / NA	70 m / NA	100 m / NA
3840x2160@30Hz UHD	297 MHz	70 m / NA	70 m / NA	100 m / NA
4096x2160@30Hz 4K	297 MHz	70 m / NA	70 m / NA	100 m / NA

*with long reach firmware option. Long reach firmware supports pixel clock frequencies up to 148,5 MHz.

**Distances are 20% shorter if remote powering used. AWG 26 cables are not recommended with remote powering.

