



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: HDMI-TPS-RX86

FUNCTIONAL OVERVIEW

HDMI-TPS-RX86 is an HDBaseT™ (TPS) receiver that extends uncompressed digital video with embedded audio over a single CATx cable from a compatible TPS transmitter. It receives the TPS (HDBaseT™) signal (video, audio, RS-232, IR, Ethernet, CEC) and outputs HDMI/DVI digital video and embedded audio at the display end. The unit supports HDCP and EDID transparency, provides Pixel Accurate Reclocking, and can be powered locally from 12V DC or via 12V remote powering through the TPS link (when used with compatible Lightware devices).

VIDEO INPUT AND OUTPUT

- Video input (via TPS input)
 - Connector: RJ45 female
 - Compliance: HDBaseT™
 - HDCP compliance: HDCP 1.4
 - Transferred signals: Video, Audio, RS-232, Infrared, Ethernet, CEC
 - Video latency: 0 frame
 - Supported resolutions at 8 bits/color: up to 4096x2048@30Hz (4:4:4) or 4096x2048@60Hz(4:2:0);upto3840x2160@30Hz(4:4:4)or3840x2160@60Hz(4:2:0)
 - Color space: RGB, YCbCr
- Video output (HDMI output)
 - Connector: 19-pole HDMI Type A receptacle
 - Standard: DVI 1.0, HDMI 1.4
 - Supported resolutions at 8 bits/color: up to 4096x2048@30Hz (4:4:4) or 4096x2048@60Hz(4:2:0);upto3840x2160@30Hz(4:4:4)or3840x2160@60Hz(4:2:0)
 - Color space: RGB, YCbCr
 - EDID support: Transparent
 - CEC support: Transparent (only between HDMI-TPS-TX96 and HDMI-TPS-RX96 models)
 - Reclocking: Pixel Accurate Reclocking
 - Equalization: adaptive, automatic

AUDIO CAPABILITIES

- Embedded digital audio is transported via TPS (HDBaseT™) and output on HDMI
- Audio formats: all formats in line with HDMI 1.4 standard

POWERING

- Local power supply via 12V DC input (external power adaptor; supplied power adaptor: 12V DC, 2.5A; locking DC connector)
- 12V remote powering via TPS port (power sending or receiving through the TPS RJ45 connection; for compatible Lightware devices)

CONTROL

- RS-232 pass-through via local RS-232 port (3-pole Phoenix® connector); RS-232 switch supports Normal (pass-through) and Prog (firmware update/programming readiness)
- Infrared pass-through via IR input (3.5 mm Jack, 3-pole, TRS) and IR output (3.5 mm Jack, 2-pole, TS); IR output modulation selectable (Emitter 38 kHz ON / Wired 38 kHz OFF)
- Ethernet pass-through over TPS link (transferred via TPS)
- CEC transparency over HDMI/TPS (only between HDMI-TPS-TX86 and HDMI-TPS-RX86 models)

GENERAL

- Dimensions: 100.4 W x 100.4 D x 26 H (mm)
- Weight: 315 g (0.69 lbs)
- Enclosure material: 1 mm steel
- Mounting options (compatibility)
 - 1U High Rack Shelf (4x)
 - UD Mounting Kit (1x)
 - UD Mounting Kit Double (2x)
 - UD Mounting Plate F110 (1x)
 - UD Mounting Plate F120 (2x)
 - PRC-16-312 rackmount cage (16x)
- LVD compatibility: Electrical safety compliance EN 62368-1:2024

- Supplied accessories
 - 12V DC power adaptor with interchangeable plugs
 - Phoenix combicon 3-pole connector
 - Safety and Warranty Info
 - Quick Start Guide
- Warranty period: 3 years
- Cooling: Passive
- Packaging: product has a full paper / green packaging

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
v1	2026-08-14	Initial version	Tamas Forgacs