



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: HDMI-TPS-RX87

FUNCTIONAL OVERVIEW

HDMI-TPS-RX87 is an HDBaseT™ (TPS) receiver extender for transporting uncompressed HDMI/DVI video with embedded audio over a single CATx cable from a compatible TPS transmitter or HDBaseT™ device. The unit outputs HDMI (HDMI 1.4 / DVI 1.0 compatible) and supports HDCP 1.4 compliance, transparent EDID and CEC, and Pixel Accurate Reclocking for a clean, jitter-free output. It also extends Ethernet (10/100), RS-232 pass-through, and infrared signals over the same TPS link, with PoE (PD) remote powering available.

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 supported over HDMI/TPS
- Audio formats: all formats in the line with HDMI 1.4 standard

POWERING

- External power adaptor via DC input: 12V DC (supplied adaptor: 12V DC, 2.5A)
- PoE PD via TPS port (IEEE802.3af)

CONTROL

- RS-232 port (3-pole Phoenix®): bidirectional serial data connection and firmware update (programming)
- RS-232 switch: Normal (pass-through) / Prog (pass-through disabled for firmware update)
- Infrared: IR input (3.5 mm Jack, 3-pole, TRS) and IR output (3.5 mm Jack, 2-pole, TS)
- IR mode switch: Emitter (38 kHz modulation on) / Wired (38 kHz modulation off)
- Ethernet extension over TPS: 10/100 Mbps; auto crossover

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