



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: HDMI-TPX-RX107D

FUNCTIONAL OVERVIEW

The HDMI-TPX-RX107D is an SDVoE-based TPX receiver extender for HDMI 2.0 signals with Dante®/AES67 audio de-embedding capability. It receives an HDMI 2.0 compliant AV stream and associated control over a 10GBase-T TPX (RJ45) link from a compatible transmitter and outputs the stream on HDMI with ultra-low latency (under 8 ms). The unit supports HDCP 2.3, provides a dedicated Dante®/AES67 RJ45 output for 2-channel audio extracted from the HDMI stream, and offers Ethernet and RS-232 interfaces for integration and control.

VIDEO INPUT AND OUTPUT

- Video input (TPX / SDVoE)
 - Connector: RJ45 female (TPX input)
 - Data rate: 10GBase-T
 - Compliance: SDVoE
 - HDCP compliance: HDCP 2.3
 - Color space: RGB, YCbCr
 - Video latency: 0 frame (five lines / under 8 ms)
 - Compression ratio: 1.4 : 1 (applied only if AV signal exceeds HDMI 1.4 bandwidth)
 - Supported resolutions at 8 bits/color: up to 4096x2160@60Hz (4:4:4) or up to 3840x2160@60Hz (4:4:4)
 - Transferred signals: Video, Audio, RS-232, Infrared, Ethernet, CEC
- Video output (HDMI)
 - Connector: 19-pole HDMI Type A receptacle
 - Standard: DVI 1.0, HDMI 1.4, HDMI 2.0
 - Supported resolutions at 8 bits/color: up to 4096x2160@60Hz (4:4:4) or up to 3840x2160@60Hz (4:4:4)
 - CEC support: Transparent

AUDIO CAPABILITIES

- HDMI embedded audio is received over TPX and output embedded on HDMI
- Dante®/AES67 audio de-embedding output
 - Connector: RJ45 (Dante®/AES67 output)
 - Channels: 2-channel stereo
 - Audio type support: 2-ch LPCM supported; multichannel not supported; compressed DTS/Dolby not supported
 - Supported sample rates: 44.1, 48, 88.2, 96 kHz
 - AES67 mode supported (set in Dante® Controller software)

POWERING

- Local power via 12V DC input (locking DC connector; supplied power: 12V DC, 2A)
- Remote power via TPX input using PoE PD (IEEE802.3af)

CONTROL

- Control network via 1GBase-T Ethernet (RJ45)
- Configuration/monitoring via BlueRiver AV Manager
- API control via TCI API (TCP/IP terminal connection) and REST API
- RS-232 control via 3-pole Phoenix® connector (bi-directional serial communication)
- Factory reset via rear F (Factory Reset) button

GENERAL

- Dimensions: 138 W x 151.8 D x 26 H (mm)
- Mounting options compatibility
 - 1U High Rack Shelf: supported (3x)
 - UD Mounting Plate F120: supported (1x)
- LVD / electrical safety: EN 62368-1:2024
- Warranty period: 3 years
- Cooling: Passive



- Supplied accessories:
 - Safety and Warranty Info / Quick Start Guide
 - TPX / OPTX series extender (device)
 - 12V DC adaptor with interchangeable plugs
 - Phoenix® Combicon 3-pole connector
- Packaging: the product has full paper / green packaging

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
v1	2026-07-27	Initial version	Tamas Forgacs