



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: UMX-TPS-TX120

FUNCTIONAL OVERVIEW

UMX-TPS-TX120 is a universal transmitter that accepts HDMI and VGA sources and extends audio, video, and control over a single twisted-pair (TPS/HDBaseT) link. It supports HDCP-protected content, provides EDID management, and transports Ethernet, RS-232, and IR alongside the AV signal for integrated room connectivity and control. The unit is intended for standalone installation and can be powered locally or via PoE through the TPS output.

VIDEO INPUT AND OUTPUT

- Video inputs: 1x HDMI input; 1x VGA input
- Video output: 1x TPS output on RJ45 (HDBaseT compliant)
- HDCP compliance (TPS output): HDCP 1.4
- Transferred signals over TPS: Video, Audio, RS-232, Infrared, Ethernet
- Color spaces: RGB, YCbCr
- Video delay: 0 frame
- Supported resolutions (TPS output): up to 4096x2160@30Hz (4:4:4) or 4096x2160@60Hz (4:2:0); up to 3840x2160@30Hz (4:4:4) or 3840x2160@60Hz (4:2:0); 1920x1080@60Hz (4:4:4) up to 12 bits/color

AUDIO CAPABILITIES

- Audio over TPS output: 8 channel PCM; Dolby TrueHD; DTS-HD Master Audio 7.1
- Analog audio input (3.5 mm TRS): 2-ch PCM, 48 kHz sampling, unbalanced; maximum input level +0 dBu (0.77 Vrms)
- Analog audio input (Phoenix): not available on UMX-TPS-TX120 model

POWERING

- Local powering: supplied 12V DC power adaptor (12V DC, 1 A)
- PoE powering: Power over Ethernet (IEEE 802.3af) via TPS output
- Power supply option listed for UMX-TPS-TX100 series: Power adaptor / PoE

CONTROL

- Ethernet (LAN): RJ45; 10/100Base-T, full duplex with autodetect
- RS-232: 3-pole Phoenix; baud rates 4800–115200; 8 or 9 data bits; parity None/Odd/Even; stop bits 1/1.5/2
- Infrared: IR input on 3.5 mm TRS and IR output on 3.5 mm TS; 38 kHz carrier

GENERAL

- Dimensions: 221W x 100.4D x 26H mm (8.7W x 3.95D x 1.02H inch)
- Weight: 629 g
- Mounting options: standalone; rack shelf mounting; under-desk mounting; fixing screws for mounting (4 pcs.)
- LVD compatibility: Electrical safety standard EN 62368-1:2020 (CE, UKCA compliance listed)
- 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