TP-789Rxr

4K60 4:2:0 HDMI Bidirectional PoE Receiver
with Ethernet, RS-232 & IR over
Extended-Reach HDBaseT

TP-789Rxr is a high-performance, extended-reach HDBaseT receiver for 4K60Hz (4:2:0) HDMI, Ethernet, RS-232 and IR signals and 2-way powering over twisted pair. It extends video signals to up to 100m (330ft) over Kramer copper cables at up to 4K@60Hz (4:2:0) 24bpp video resolution and provides even further reach for lower HD video resolutions. This receiver either provides power over the copper extension cable to a PoE (Power over Ethernet) acceptor device such as a PoE wall-plate, or accepts PoE through the extension cable from a PoE provider remote device, as auto-sensed by the receiver.

FEATURES

High Performance Standard Extender - Professional HDBaseT extender for providing extended-reach signals and powering over twisted-pair copper infrastructures. TP-789Rxr is a standard extender that can be connected to any market-available HDBaseT-compliant extension product. For optimum extension reach and performance, use recommended Kramer cables.

Bidirectional PoE (Power over Ethernet) - Auto-senses the extension line PoE status and either provides power to a remote POE acceptor such as a PoE wall-plate, or accepts power from a remote PoE provider such as a PoE matrix.

HDMI Signal Extension - Supports deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0. EDID and CEC signals are passed through from the source to the display.

I-EDIDPro™ Kramer Intelligent EDID Processing™ - Intelligent EDID pass-through algorithm that ensures Plug and Play operation for HDMI source and display systems.

Multi-channel Audio Extension - Up to 32 channels of digital stereo uncompressed signals for supporting studio-grade surround sound.

Ethernet Extension - Ethernet interface data flows in both directions, allowing extension of up to 100Mbps Ethernet connectivity for LAN communication and device control.

Bidirectional RS-232 Extension - Serial interface data flows in both directions, allowing data transmission and device control.

Bidirectional Infrared Extension - IR interface data flows in both directions, allowing remote control of peripheral devices located at either end of the extended line.

Cost-Effective Maintenance - Status LED indicators for HDMI and HDBT ports and PoE feed status facilitate easy local maintenance and troubleshooting. Local firmware upgrade via RS-232 connection ensures lasting, field-proven deployment.

Easy Installation - Single cable connectivity for both HDBaseT signals and power. Compact DigITOOLS® fan-less enclosure for dropped-ceiling mounting, or side-by-side mounting of 3 units in a 1U rack space with the recommended rack adapter.
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Inputs</th>
<th>1 HDBT On a female RJ−45 connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs</td>
<td>1 HDMI On a female HDMI connector</td>
</tr>
<tr>
<td>Ports</td>
<td>1 IR On a 3.5mm mini jack for IR link extension</td>
</tr>
<tr>
<td></td>
<td>1 RS−232 On a 3−pin terminal block connector for serial link extension and device firmware upgrade</td>
</tr>
<tr>
<td></td>
<td>1 100BaseT Ethernet On an RJ−45 female connector for LAN extension</td>
</tr>
</tbody>
</table>

**Extension Line**
- Up to 100m (330ft) At 4K@60Hz (4:2:0)
- Up to 130m (430ft) At full HD (1080p @60Hz 36bpp)
- Up to 180m (590ft) At HDBaseT ultra mode and full HD (1080p @60Hz 24bpp)

Note: When using Kramer HDBaseT cables

**Standards Compliance**: HDBaseT 1.0

**Video**
- Max. Data Rate 10.2Gbps (3.4Gbps per graphic channel)
- Max. Resolution: 4K@60Hz (4:2:0) 24bpp resolution
- HDMI Support: Deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS−HD, 2K, 4K, and 3D as specified in HDMI 2.0

**Extended Ethernet**
- Up to 100Mbps extended line rate bandwidth

**Extended RS-232**
- 300 to 115200 baud rate

**Extended Bidirectional IR**
- 20kHz to 100kHz frequency

**User Interface**
- Indicators IN, OUT, LINK, PoE FEEDER and ON LED indicators
- Controls DIP−switches

**Power**
- Source 48V DC, 1.36A
- PoE Acceptor and Provider
- Consumption 370mA
- Consumption with PoE 13Watt

**Enclosure**
- Size DigiTOOLS®
- Material Aluminum
- Cooling: Convection ventilation

**Environmental Conditions**
- Operating Temperature: 0° to 40°C (32° to 104°F)
- Storage Temperature: −40° to +70°C (~−40° to 158°F)
- Humidity: 10% to 90%, RHL non−condensing

**STANDARDS COMPLIANCE**
- Safety CE

**Accessories**
- Included Power adapter, bracket set

**Product Dimensions**
- 12.00cm x 7.15cm x 2.44cm (4.72" x 2.81" x 0.96") W, D, H
Product Weight 0.3kg (0.6lbs) approx

Shipping Dimensions 15.70cm x 12.00cm x 8.70cm (6.18" x 4.72" x 3.43") W, D, H

Shipping Weight 0.7kg (1.5lbs) approx