TP-583Txr is a high-performance, extended-reach HDBaseT transmitter for 4K HDR HDMI, RS-232 and IR signals over twisted pair. TP-583Txr converts all input signals into the transmitted HDBaseT signal. It enables extending video signal up to 100m (330ft) at 4K@60Hz (4:4:4) video resolution, up to 180m (590ft) at 4K@30Hz (4:4:4), and up to 200m (650ft) at HD video resolution over Kramer copper cables. It is compatible with standard HDBaseT-compliant extenders at 4K@30Hz and HD video resolutions.

**FEATURES**

**High Performance Standard Extender** - Professional HDBaseT extender for providing long-reach signals over twisted-pair copper infrastructures. It employs low-level video compression technology that delivers visually lossless performance for 4K@60 (4:4:4) and HDR signals with near-zero latency. This high-quality compressed signal is extended to almost double the extension reach of the uncompressed signal.

**Future-proof, Standard Extender** - TP-583Txr is a standard HDBaseT extender, backwards compatible with other standard HDBT extenders. It extends either compressed or uncompressed HDBaseT signal, by auto-adapting to the compression capabilities of its connected extender. This enables it to be connected to any market-available HDBaseT-compliant extension product.

**Intelligent Compression Handling** - Automatically detects a standard HDBaseT extender without compression and disables the compression to extend the signal in compliance with the detected extender.

**HDMI Signal Extension** - HDR HDCP 2.2 compliant. 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.

**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 facilitate easy local maintenance and troubleshooting. Local firmware upgrade via RS-232 connection ensures lasting, field-proven deployment.

**Easy Installation** - 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

### Inputs
- 1 HDMI: On a female HDMI connector

### Outputs
- 1 HDBT: On an RJ−45 connector

### Ports
- 1 RS-232: On a 3−pin terminal block connector for serial link extension
- 1 IR: On a 3.5mm mini jack connector

### Extension Line
- Standard Compression: Up to 100m (330ft) at 4K@60Hz (4:4:4), 4K@60Hz (4:2:0) or 4K@30Hz (4:4:4)
  - Up to 180m (590ft) at full HD (1080p @60Hz 24bpp)
- High Compression: Up to 100m (330ft) at 4K@60Hz (4:4:4), or 4K@60Hz (4:2:0)
  - Up to 180m (590ft) at 4K@30Hz (4:4:4)
  - Up to 200m (650ft) at full HD (1080p @60Hz 24bpp)
- No Compression: Up to 100m (330ft) at 4K@60Hz (4:2:0)
  - Up to 180m (590ft) at full HD (1080p @60Hz 24bpp)
- Standards Compliance: HDBaseT 1.0
  - Note: When using recommended Kramer cables

### Video
- Max Data Rate: Up to 18Gbps (6Gbps per graphic channel)
- Standard Compression: Max Resolution 4096x2160@60Hz (4:4:4) 24bpp
- High Compression: Max Resolution 3840x2160@60Hz (4:4:4) 24bpp
- No-Compression: Max Resolution 4096x2160@60Hz (4:2:0) 24bpp
- Compliance: HDCP 2.2, HDR 10

### Extended Bidirectional RS-232
- 300 to 115200 baud rate

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

### User Interface
- Indicators: IN, OUT, LINK and ON LEDs
- Controls: DIP−switches

### Power
- Source: 12V DC, 2A
- Consumption: 400mA

### 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

### Regulatory Compliance (Standards Compliance)
- Safety: CE, UL
- Environmental: RoHs, WEEE

### Enclosure
- Size: DigiTOOLS®
Type: Aluminum

Cooling: Convection ventilation

Accessories Included: Power adapter, power cord, 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 (1.4lbs) approx