

TP-583T

4K HDR HDMI Transmitter with RS-232 & IR over Long-Reach HDBaseT

| HDMI | HDBaseT | 4K/60 UHD (4:4:4)



TP-583T is a high-performance, long-reach HDBaseT transmitter for 4K HDR HDMI, RS-232 and IR signals over twisted pair. TP-583T converts all input signals into the transmitted HDBaseT signal. It extends video signals to up to 70m (230ft) over Kramer copper cables at up to 4K@60Hz (4:4:4) video resolutions. 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-583T 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 40m (130ft) at 4K@60Hz (4:4:4) or 4K@60Hz (4:2:0)

Up to 70m (230ft) at 4K@30Hz (4:4:4) or full HD (1080p @60Hz 36bpp)

High Compression Up to 70m (230ft) at 4K@60Hz (4:4:4), 4K@60Hz (4:2:0), or full

HD (1080p @60Hz 36bpp)

No Compression Up to 40m (130ft) at 4K@60Hz (4:2:0)

Up to 70m (230ft) at full HD (1080p @60Hz 36bpp)

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

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
BIDIRECTIONAL RS-

300 to 115200 baud rate

EXTENDED

232:

BIDIRECTIONAL IR:

20kHz to 100kHz frequency

User Interface Indicators: IN, OUT, LINK and ON LEDs

Controls: DIP-switches

Power Source: 12V DC, 2A

Consumption: 480mA

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 $12.00cm \times 7.15cm \times 2.44cm (4.72" \times 2.81" \times 0.96") W, D, H$

Product Weight 0.3kg (0.6lbs) approx

Shipping Dimensions $15.70 \, \text{cm} \times 12.00 \, \text{cm} \times 8.70 \, \text{cm} (6.18" \times 4.72" \times 3.43") \, \text{W, D, H}$

Shipping Weight 0.7kg (1.4lbs) approx



