TP-583R
4K HDR HDMI Receiver with RS-232 & IR
over Long-Reach HDBaseT

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

TP-583R is a high-performance, long-reach HDBaseT receiver for 4K HDR HDMI, RS-232 and IR signals over twisted pair. TP-583R converts the HDBaseT signal and outputs it to its HDMI and control ports. It enables extending 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-583R 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 HDMI 2.0 and HDCP 2.2 compliant. Supports deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D. 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 HDBT: On an RJ–45 connector
Outputs	1 HDMI: On a female HDMI 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 Extension 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: HDMI 2.0, 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: 680mA
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 DIMENSION:	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 DIMENSION:	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