KRAMER

TP-780Txr

4K60 4:2:0 HDMI HDCP 2.2 PoE Transmitter with Ethernet, RS−232 & IR over Extended−Reach HDBaseT

TP−780Txr is a high−performance, extended−reach HDBaseT transmitter for 4K60Hz (4:2:0) HDMI, Ethernet, RS−232 and IR signals over twisted pair. The TP−780Txr converts all input signals into the transmitted HDBaseT signal. It extends video signals to up to 100m (330ft) over CAT copper cables at up to 4K@60Hz (4:2:0) 24bpp video resolution and provides even further reach for lower HD video resolutions.

FEATURES

- **High Performance Standard Extender** - Professional HDBaseT extender for providing extended−reach signals over twisted−pair copper infrastructures. TP−780Txr 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.

- **HDMI Signal Extension** - 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 handling, processing and 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 facilitate easy local maintenance and troubleshooting. Local firmware upgrade via RS−232 connection and the K−Upload tool ensures lasting, field−proven deployment.

- **Easy and Elegant Installation** - Single cable connectivity for both HDBaseT signals and power. Compact MegaTOOLS™ fan−less enclosure for dropped−ceiling mounting, or side−by−side mounting of 2 units in a 1U rack space with the optional RK−T2B rack adapter.

TECHNICAL SPECIFICATIONS

INPUTS:	1 HDMI on an HDMI connector.
OUTPUTS:	1 HDBT on an RJ−45 female connector.
PORTS:	1 IR on a 3.5mm mini jack for IR link extension,
	1 RS−232 on a 9−pin D−sub connector for serial link extension and device firmware upgrade,
	1 10Base−T/100BaseTx Ethernet on an RJ−45 female connector for LAN extension.
EXTENSION LINE:	HDBaseT 1.0 compliant;
	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.
VIDEO:	Up to 10.2Gbps bandwidth (3.4Gbps per graphic channel)
	Up to 4K UHD @60Hz (4:2:0) 24bpp resolution
	HDMI 2.0 and HDCP 2.2 signal compliance
EXTENDED ETHERNET:	Up to 100Mbps extended line rate bandwidth.
EXTENDED RS-232:	300 to 115200 baud rate.
CONTROL RS-232:	115200 baud rate.
POWER SOURCE:	48V DC, 1.36A.
POWER CONSUMPTION:	48V DC, 280mA.
ENCLOSURE:	Mega Tools size, Aluminium type.
COOLING:	Convection ventilation.
OPERATING TEMPERATURE:	0° to 40°C (32° to 104°F).
STORAGE TEMPERATURE:	−40° to +70°C (−40° to 158°F).
PRODUCT DIMENSIONS:	18.75cm x 11.50cm x 2.54cm (7.38" x 4.53" x 1.00") W, D, H
PRODUCT WEIGHT:	0.4kg (0.9lbs) approx.
SHIPPING DIMENSIONS:	34.50cm x 16.50cm x 5.20cm (13.58" x 6.50" x 2.05") W, D, H
SHIPPING WEIGHT:	1.0kg (2.2lbs) approx.
HUMIDITY:	10% to 90%, RHL non−condensing.
INCLUDED ACCESSORIES:	Power supply 48V/1.36A, bracket installation kit.