# GTB-UHD600-HBT



GEFEN 4K ULTRA HD 600 MHz HDBaseT™ EXTENDER WITH HDR, RS-232, 2-WAY IR, AND POL



# EXTEND FULL-BANDWIDTH HDMI 2.0 WITH HDR UP TO 80 METERS/264 FEET, OVER A SINGLE CAT-5

The Gefen GTB-UHD600-HBT is a compact and high-performance solution for extending full-bandwidth HDMI 2.0 audio/video with HDR up to 80 meters (264 feet), over a CAT-5e or better cable. It supports 18.2 Gbps of data throughput and 600 MHz TMDS Clock frequency, the highest specified under the HDMI 2.0 standard. This extender uses HDBaseT™ technology along with Gefen's visually lossless proprietary compression algorithms with very high PSNR (Peak Signal to Noise Ratio), to accommodate resolutions up to 4K Cinema-DCI (4096 x 2160 to 60 Hz 4:4:4) and 4K Ultra HD (3860 x 2160

to 60 Hz, 4:4:4) with HDR. High Dynamic Range (HDR) delivers greater contrast between light and dark areas of a video image, resulting in tremendous improvement in picture quality and color depth. HDCP 2.2 and the legacy HDCP 1.4 are both supported. The GTB-UHD600-HBT also supports 1080p Full HD, WUXGA (1920 x 1200). 3DTV, and Deep Color (up to 1080p resolution). Highest performance multichannel digital audio including 7.1 channels of LPCM and HBR (High Bit Rate) digital audio formats, such as Dolby Atmos®, Dolby® TrueHD, DTS:X™, and DTS-HD Master Audio™ are passed through to the HDMI outputs. The GTB-UHD600-HBT provides RS-232 and 2-way IR extension between the Sender and the Receiver units, facilitating the control of A/V sources placed near the Sender unit and sending automation commands to the display or another device placed near the Receiver unit. Gefen's Bi-Directional POL (Power Over Line) technology powers the

Sender or the Receiver unit using the same cable that extends the HDMI signal. Only one of the two units will need a power supply. This feature simplifies installation in cases when an electrical outlet may not be available near the source or the display. Small, low profile enclosures can be securely surface-mounted and conveniently hidden away from sight, and accommodate Gefen locking HDMI cables for secure connections.

#### Note:

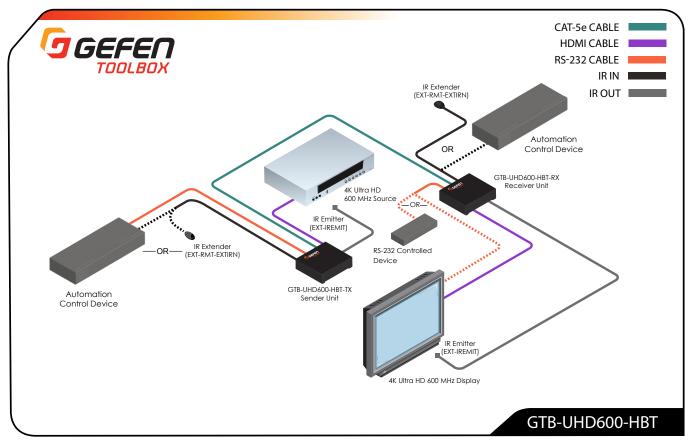
Shielded (STP) CAT-6A is recommended. Shielded (STP) CAT-5e or unshielded (UTP) CAT-5e or CAT-6A may be acceptable depending on cable quality but is not the preferred choice. Care should always be given to keep these cables away from power lines and other sources of electromagnetic interference.

## FEATURES\*

- Supports 18.2 Gbps bandwidth and 600 MHz TMDS clock
- Extends HDMI, RS-232, & Bi-Directional IR over a single CAT-5e/CAT-6A:
  - 4K Ultra HD (3840 x 2160 to 60 Hz, 4:4:4), up to 264 feet/80 meters (8-bit color)
  - 4K Cinema (DCI) (4096 x 2160 to 60 Hz 4:4:4), up to 264 feet/80 meters (8-bit color)
  - 1080p Full HD (60 Hz) and WUXGA (1920 x 1200 to 60 Hz), up to 330 feet/100 meters (up to 12-bit Deep Color)
- HDMI Features Supported:
  - HDMI 2.0 (full bandwidth to 18 Gbps/600 MHz)
  - HDR (High Dynamic Range) 10-bit color at 4K 60 Hz 4:2:0 and 4K 24 Hz 4:4:4
  - HDCP 2.2 and 1.4
  - 12-bit Deep Color (at 1080p)
  - Uncompressed LPCM digital audio up to 7.1 channels
  - HBR (High Bit Rate) digital audio up to 7.1 channels, including Dolby Atmos®, Dolby® TrueHD, DTS:X<sup>TM</sup>, and DTS-HD Master Audio<sup>™</sup>
  - 3DTV pass-through
  - CEC pass-through
  - Lip Sync pass-through
- Supports the use of DVI sources and DVI displays up to 1080p Full HD and WUXGA (1920x1200), with Gefen CAB-DVI2HDMI-LCK DVI-to-HDMI cables (not included)
- RS-232 2-way link between Sender and Receiver
- IR extension from Sender to Receiver and from Receiver to Sender
- Gefen's Bi-Directional POL provides power to the Sender or the Receiver unit over the link cable only one side will need
  external power
- Uses Gefen's implementation of HDBaseT™ technology with proprietary algorithms and enhanced features
- Advanced EDID Management
- Firmware updatable via RS-232
- Locking power connector
- Surface mountable
- Plug & Play no configuration or set-up required for most applications
- Compact enclosures are easy to install and can be hidden away

## SPECIFICATIONS\*

- Maximum TMDS Clock: 600 MHz
- Total Signal Bandwidth/Data Rate: 18.2 Gbps
- Video Input Connector (Sender): (1) HDMI Type A 19-pin, female, locking
- Video Output Connector (Receiver): (1) HDMI Type A 19-pin, female, locking
- Link Connector (Sender/Receiver): (1) RJ-45, shielded
- RS-232 port (Sender): (1) 3-pin Phoenix
- RS-232 port (Receiver): (1) 3-pin Phoenix
- IR In/Ext port (Sender/Receiver): (1) 3.5mm mini-stereo jack
- IR Extender type: EXT-RMT-EXTIRN
- IR Out port (Sender/Receiver): (1) 3.5mm mini-mono jack
- Power Indicator LED (Sender/Receiver): (1) Blue
- Link Indicator LED (Sender/Receiver): (1) Green
- HDMI-Active Indicator LED (Sender/Receiver): (1) Green
- Power Supply: (1) 12V DC, locking, 5.5mm barrel/2.1mm pin
- Power Consumption (Sender and Receiver combined): 14W maximum
- Operating Temperature: +32 to +113 °F (0 to +45 °C)
- Operating Humidity: 5% to 90% RH, non-condensing
- Storage Temperature: -4 to +185 °F (-20 to +85 °C)
- Storage Humidity: 0% to 95% RH, non-condensing
- MTBF: 50000 hours
- Dimensions (W x H x D, Sender/Receiver): 4.7" x 1" x 2.9" (119mm x 26mm x 73mm)
- Net Weight (Sender/Receiver): 0.31 lbs. (0.14 kg) each
- Shipping Weight: 2.1 lbs (0.95 kg)



<sup>\*</sup> Features and specifications are subject to change without notice.

