



# DATA SHEET

# HDMI<sup>®</sup> HDBaseT + RS232 and IR over Cat Extender Box Transmitter to Box Receiver (18Gbps) - 4K 60Hz

Extend 4K HDMI up to 130ft over a single Cat6a network patch cable using HDBaseT technology

## **OVERVIEW**

The HDMI HDBaseT + RS232 and IR over Cat Extender Box Transmitter to Box Receiver (18Gbps) - 4K 60Hz allows a 4K HDMI source to be extended up to 328ft to a 4K display using a single Cat6a Ethernet cable. This is an ideal solution where HDMI video and audio in conference rooms, classrooms, lecture halls, and many other installation needs are far beyond the length limitations of standard HDMI cabling.

Extend 4K HDMI up to 230 feet and 1080p up to 328 feet using a Cat5e or Cat6 cable. For longer 4K distances, extend 4K HDMI or up to 328 feet using a Cat6a cable.

This HDMI HDBaseT receiver supports Visual Lossless Compression (VLC), which means the compressed data will appear identical to the uncompressed data. The receiver is also HDCP 2.2 compliant, making sure that the connection from the source is secure. With bi-directional Power over Cable (PoC) support, one power adapter at either transmitter or receiver side can power both units, so no additional power adapter is required, allowing for greater flexibility in installations. Advanced users can control bi-directional IR and device control through the RS232 port.

Note: Ensure a solid, reliable connection between the 4K HDMI HDBaseT Extender and critical equipment. We suggest using HDMI Cables with gripping connectors that provide greater port retention than standard HDMI connectors.

Note: Stranded Cat5e/6/6a patch cables may be used for HDMI extension applications up to 230ft. Shielded, solid conductor Cat6 or HDBaseT Certified Cat6a network cabling is recommended for applications where the category cable must be coiled, is run near other high-frequency signaling cables, or in high EMI/RFI environments. For best performance use an category/hdbaset/hdbaset-cat6a-cables HDBaseT Certified Cat6a Patch Cable.

## FEATURES

- Extend 4K at 30Hz (4:4:4) up to 328ft with Cat 6a cable
- Extend 4K at 30Hz (4:4:4) up to 230ft and 1080p at 60Hz up to 328ft with Cat 5e/6 cable
- Supports Visual Lossless Compression (VLC) solution through HDBaseT
- HDCP 2.2 compliant, to create a secure connection between the source and display
- Supports multi-channel audio formats, including PCM 2.0/5.1/7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X
- Supports EDID from the HDMI out
- Supports CEC pass-through, allowing central control to all HDMI compatible devices
- Supports bi-directional RS232 pass-through
- Supports bi-directional IR pass-through
- Supports bi-directional Power over Cable (PoC), one power adapter at either transmitter or receiver side can power both units
- HDBaseT Chipset VS100, for simpler HDBaseT installations

## ITEM DESCRIPTION

C2G30026 HDMI HDBaseT + RS232 and IR over Cat Extender Box Transmitter to Box Receiver (18Gbps) - 4K 60Hz



## SIGNAL SPECIFICATIONS

Chipset: VS100TX LBGA-196; VS100RX LBGA-268

#### Transmitter

- Input/Output Ports: 1 x HDMI IN; 1 x HDBT OUT; 1 x RS232;
  1 x IR IN; 1 x IR OUT; 1 x DC 18V IN; 1 x DIP Switch
- Input Video Signal: HDMI 2.0 with 4K @ 60Hz 4:4:4 8bit, HDCP 2.2
- Audio Format: HDMI IN: Fully supports audio formats in HDMI 2.0 specification, including PCM 2.0/5 .1/7.1, Dolby TrueHD, Dolby Atmos, DTS HD Master Audio and DTS:X
- Audio In: Stereo
- Maximum Pixel Clock: 600Mhz
- Maximum Data Rate: 18Gbps

#### Receiver

- Input/Output Ports: 1 x HDBT IN; 1 x HDMI OUT; 1 x RS232;
  1 x IR IN; 1 x IR OUT; 1 x DC 18V IN; 1 x DIP Switch
- Output Signal Type: HDMI 1.4 with 4K @ 60Hz 4:2:0 8bit, HDCP 2.2
- Audio Format: HDMI Out: Fully supports audio formats in HDMI 2.0 specification, including PCM 2.0/5 .1/7.1, Dolby TrueHD, Dolby Atmos, DTS HD Master Audio and DTS:X
- Audio Out: Stereo

#### TRANSMISSION DISTANCE

- Cat 6a/7 cable, extends 4Kx2K@60Hz (4:4:4) signal up to 100m/328ft and 1080P@60Hz signal up to 100m/328ft
- Cat 5e/6 cable, extends 4Kx2K@60Hz (4:4:4) signal up to 70m/230ft and 1080P@60Hz signal up to 100m/328ft

## **ELECTRICAL SPECIFICATIONS**

- Power Supply: Bi-directional Power over Cable (PoC), one power adapter at either transmitter or receiver side can power both units
- Power Supply: DC 18V 1A
- Power Consumption (Max): 13W (Pair, PoC)

## PHYSICAL SPECIFICATIONS

- Operating Temperature: 0°C to 45°C (32°F to 113°F)
- Storage Temperature: -20°C to 70°C (-4°F to 158°F)
- Humidity: 10% to 90%, Non-Condensing
- ESD Protection: Human-body Model: ±8kV (Air-gap discharge) / ±4kV (Contact discharge)

## PHYSICAL CHARACTERISTICS

#### **Transmitter & Receiver**

- Device Dimension (W x H x D): 136.4mm x 15.2mm x 74.2mm
  / 5.37" x 0.60" x 2.92"
- Product Weight: 0.26kg / 0.57lb



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