One Cable, Easier Control
Shape the future of long-distance transmission
Contributor to the Next Generation of Connectivity

ATEN's Full Range of HDBaseT Solutions

HDBaseT Video Extender Series

Meet the New HDBaseT 3.0 Technology
  6  Case Study: Education - University Classroom

Various HDBaseT Extenders to Fit All Your Needs
  8  Case Study: Corporate - Meeting Room

HDBaseT Wall Plate Extender Series
  14  Case Study: Education - Lecture Hall

HDBaseT KVM Extender Series
  22  Case Study: Retail - Self-Service Kiosks and Digital Signage

HDBaseT Matrix with Video Wall Solutions
  26  Case Study: Broadcasting & Media - Artear, Argentina

HDBaseT Media Distribution Solutions
  29  Case Study: Transportation - Train Station

Accessories

Product Comparison
Contributor to the Next Generation of Connectivity

A longtime member of the HDBaseT™ Alliance, ATEN has over 30 qualified HDBaseT trainers and over 20 Pro AV solutions certified by HDBaseT, including video matrix switches and high-definition video / KVM extenders and splitters.

In addition to new Contributor member privileges such as a dedicated company page in the HDBaseT™ Alliance’s Installer Zone, ATEN will also be invited to share the benefits of 40 years of IT management and KVM control experience to define specifications for products that further accelerate the integration of AV and IT technologies, in turn helping both customers and solution partners to stay ahead of the curve.

---

**ATEN HDBaseT™ Profile**

- Since 2013
- Contributor member
- 30+ ATEN-HDBaseT trainers
- 20+ ATEN-HDBaseT products:
  - Modular Matrix Switches
  - Video Matrix Switches
  - Video Splitters
  - Video Extenders
  - KVM Extenders
**ATEN’s Full Range of HDBaseT Solutions**

HDBaseT technology makes the distribution of high-quality multimedia content over a long distance simple and effective without compromising performance or quality. It enables reduction in cable clutter and allows for long-distance signal transmission free from compression and latency.

**Simplified Cabling**
Provides HDBaseT™ extension technology to connect transmitter and receiver units over one single Cat 6 / 6a cable.

**Long-Distance Transmission**
Delivers uncompressed video & audio using one Cat 6 / 6a cable up to 100-150m.

**Flexible Control**
Provides multiple control signals: CEC, RS–232, Ethernet, IR, and USB 2.0.

**Uncompressed UHD and High-Quality Audio**
Supports up to uncompressed UHD*, and 4K x 2K, Dolby True HD and DTS HD Master Audio.

*Uncompressed True 4K @ 60 Hz 4:4:4 HDMI transmission is supported when using HDBaseT 3.0-compatible devices and Cat 6A U / FTP cables.

**Anti-jamming Design**
Resists signal interference during high-quality video transmission.

**PoH (Power over HDBaseT)**
Supplies power from the Power Source Equipment (PSE) to the Power Device (PD) over long distances via one Cat 6 / 6a cable.
HDBaseT Video Extender Series
Meet the New HDBaseT 3.0 Technology

HDBaseT Spec 3.0 enables long-distance distribution up to 100m and convergence of ultra-high speed uncompressed HDMI 2.0 audio & video, 1Gb Ethernet, USB 2.0, control, and power, with zero latency and one cable to transmit it all.

- HDMI 2.0 4K@60 4:4:4 for up to 100m/328ft over a category cable, supporting all resolutions up to 594MHz
- Support for HDCP2.x and 1.x authentication and encryption
- Native support for 4K@60 Dolby Vision
- 1Gb Ethernet
- Audio – I2S-4
- High Speed USB 2.0
HDBaseT 3.0 (True 4K Up to 100M)

VE1843
True 4K HDMI / USB HDBaseT 3.0 Transceiver

Uncompressed True 4K

Multiple Control Signals (AV, RS-232, IR, USB, Ethernet)

Audio Embedding & De-embedding

Improved Heat Dissipation

Easy Installation

Up to 100m Transmission over a Cat 6A U / FTP

* Cat 6A U / FTP is the recommended setting. The skewless nature and inter-pair shielding of FTP provides the better near-end crosstalk (NEXT, source end) and far-end crosstalk (FEXT, receiver end) parameters required to achieve the maximum performance and distance.
Education - University Classroom

Background:
A university in Japan wanted to build a modern classroom where students in the space could easily and clearly focus on the teacher’s lessons, no matter where the students were sitting in the large room.

Customer’s requirements:
1. Need to record lessons and display them on TV monitors in real time for students who sit at the back of this large classroom.
2. Require true 4K video quality.
3. Remote control of the camera via IR or Ethernet.
4. USB connection for various equipment expansion.

ATEN solution:
The VE1843 can transmit IR, USB, Ethernet, and 4K HDMI over one cable up to 100m to deliver true 4K.

ATEN products:
VE1843 - True 4K HDMI / USB HDBaseT 3.0 Transceiver.
Various HDBaseT Extenders to Fit All Your Needs

HDBaseT technology is ideal for professional AV installations and provides a simple and cost-effective solution to transmit 4K ultra-high-definition (UHD) signals up to 100 meters. ATEN provides a variety of HDBaseT extenders for commercial-grade Pro AV installations across small / mid / large sized areas.

<table>
<thead>
<tr>
<th>HDBaseT Link</th>
<th>HDBaseT Link Rate</th>
<th>HDMI Data Rate</th>
<th>HDR Formats Supported</th>
<th>ATEN Models (Example)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 / 2.0 Uncompressed</td>
<td>8 Gbps</td>
<td>10 Gbps</td>
<td>4K UHD 24-30 fps 4:2:0 / 4:2:2</td>
<td>1.0: VE811 / 1812 2.0: CE820/920</td>
</tr>
<tr>
<td>1.0 / 2.0 with DSC Compressed</td>
<td>8 Gbps</td>
<td>11-18 Gbps</td>
<td>4K UHD 24-30 fps 4:4:4 4K UHD 48-60 fps 4:2:0 / 4:2:2</td>
<td>1.0: VE1830</td>
</tr>
<tr>
<td>3.0 Uncompressed</td>
<td>16 Gbps</td>
<td>18 Gbps</td>
<td>4K UHD 24-30 fps 4:4:4 4K UHD 48-60 fps 4:2:0 / 4:2:2</td>
<td>VE1843</td>
</tr>
</tbody>
</table>
HDBaseT Class A (Up to 100M)

**VE3912T**
Display Port / HDMI / VGA Switch with HDBaseT Transmitter

**VE2812AT**
HDMI & VGA HDBaseT Transmitter with PoH

**VE2812R**
HDMI HDBaseT Receiver with Audio De-Embedding

**VE1812**
HDMI HDBaseT Extender with PoH

**VE816R**
4K HDMI HDBaseT Receiver with Scaler
HDBaseT Class A (Up to 100M)

**VE814A**
HDMI HDBaseT Extender with Dual Output
- **HDCP 2.2** Long Reach Mode
- **4K**

**VE812**
HDMI HDBaseT Extender
- **HDCP 2.2**
- **4K**

**VE813A**
HDMI / USB HDBaseT Extender
- **HDCP 2.2**
- **4K**

**VE811**
HDMI HDBaseT Extender
- **HDCP 2.2** Long Reach Mode
- **4K**
HDBaseT Class B (4K Up to 40M)

VE1830
True 4K HDMI HDBaseT-Lite Extender

VE801
HDMI HDBaseT-Lite Extender

VE805R
HDMI HDBaseT-Lite Receiver with Scaler

VE901
DisplayPort HDBaseT-Lite Extender

VE802
HDMI HDBaseT-Lite Extender with PoH

VE802
HDMI HDBaseT-Lite Extender

VE601
DVI HDBaseT-Lite Extender
Corporate - Meeting Room

**Background:**
A company wanted to create a new large meeting room as a space dedicated to more formal meetings, team member brainstorming, and also video conferencing in a hybrid workplace.

**Customer's requirements:**
1. Support diverse video interfaces and flexible switching between members in the large meeting room.
2. Capabilities for remote video conferencing when needed.

**ATEN solution:**
1. Provides convenient connection for DisplayPort, HDMI, and VGA-equipped BYOB devices.
2. The space can be flexibly adjusted for remote video conferencing utilizing the local output for the in-room display.
3. Pairs with ATEN HDBaseT™ receivers to support needed long-distance connections.

**ATEN products:**
1. VE3912T - Display Port / HDMI / VGA Switch with HDBaseT Transmitter
2. VE2812R - HDMI HDBaseT Receiver with Audio De-Embedding
HDBaseT Wall Plate Extender Series
Why Choose ATEN Wall Plate Extenders?

The convenience and elegance that only wall plate extenders provide will enable you to immerse your AV extensions for any application into any environment, such as on walls or tables, to merge with all kinds of room decor while concealing cables and other equipment out of sight.

Why Choose ATEN Wall Plate Extenders?

**Convenient Installation**
Support for US/decora, EU/MK wall plates offers comprehensive options across different regions

**Convenient Placement**
Flexibly place signal input and output connections exactly where they are needed

**Conceal Cabling**
Hide bulky cabling and other installed equipment out of sight

**Complimentary Design**
Mount on any surface while simply blending in with the environment

Get the Most out of a Hybrid 3-in-1 Solution!

**Switch**
Between DP & VGA & HDMI inputs

**Extend**
1080p up to 150m / 4K UP to 100m

**Convert**
From HDMI / VGA / DP to DVI / HDMI / DP
**VE2812AEUT / VE2812AUST**
HDMI & VGA HDBaseT Transmitter with EU / US Wall Plate / PoH

- Extend HDMI or VGA signals with superior video quality:
  - HDMI: 4K / 1080p up to 100m via a Cat 5e / 6 / 6a cable
  - VGA: 1600 x 1200 and 1920 x 1200 up to 100m via a Cat 5e / 6 / 6e or ATEN 2L-2910 Cat6 cable
  - HDMI 1.4 (3D, Deep color, 4K); HDCP 2.2
  - HDBaseT Long Reach Mode up to 1080p @150m
  - Supports Auto Switch
  - IR / RS-232 Channel
  - Supports Power over HDBaseT (PoH)

**VE1801AUST / VE1801AEUT**
HDMI HDBaseT-Lite Transmitter with US / EU Wall Plate / PoH

**VE1901AEUT / VE1901AUST**
DisplayPort HDBaseT-Lite Transmitter with EU / US Wall Plate / PoH
**Education - Lecture Hall**

**Background:**
This lecture hall was designed for training and engaging with students for course discussion in real time to improve the interactivity for corporate or education usage.

**Customer's requirements:**
1. Students can share their content on the main display; requires multiple interfaces for different laptops’ ports.
2. A main display for presentations and a secondary display for teachers’ use, and for the teacher to use both their own laptop or existing computer.

**ATEN solution:**
1. Students can present content easily without any interface limitations via VE2812AUST.
2. Save time and installation costs by using HDBaseT.
3. VP1421 Multi-in-one presentation switch allows for connection of up to 4 sources, including mic input, with smooth switching between sources.
4. Just one click is all it takes to choose a source with VK0100; it’s easy enough for anyone to do.

**ATEN products:**
1. VE2812AUST - HDMI & VGA HDBaseT Transmitter with EU / US Wall Plate / PoH
2. VP1421 - 4 x 2 True 4K Presentation Matrix Switch with Scaling, DSP, and HDBaseT-Lite
3. VK0100 - ATEN Control System - 8-button Control Pad
HDBaseT KVM Extender Series
ATEN HDBaseT KVM extenders provide a simple and efficient solution for transmitting Ultra HD signals, audio, 100Mb Ethernet, power, and control signals over a single cable up to 150m. A wide range of models are available, with video interface support for DisplayPort, HDMI, and DVI.

**Benefits of ATEN HDBaseT KVM Extenders**

**Simplified Cabling**
Implements HDBaseT extension technology to connect transmitter and receiver units over one single Cat 6 / 6a cable

**Long-Distance Transmission**
Delivers uncompressed 4K video & audio using one Cat 6 / 6a cable up to 100 - 150 m

**Flexible Control**
Provides multiple control signals: CEC, RS–232, Ethernet, and USB2.0

**Outstanding USB Compatibility**
Tested compatible with a multitude of USB peripheral devices

**Anti-jamming Design**
Resists signal interference during high–quality video transmission

**Dual View**
Allows dual view DisplayPort access to a computer and KVM control from a remote console
Zero Latency Signal Extension

ATEN HDBaseT KVM Extenders allow you to connect and control keyboard, video, and mouse signals from computers located up to 150m away from your console. USB and RS-232 connectivity enables applications that require touch panel support and the integration of additional devices.

**CE924**
USB DisplayPort Dual View HDBaseT 2.0 KVM Extender

**CE920**
USB DisplayPort HDBaseT 2.0 KVM Extender

**CE820**
USB HDMI HDBaseT 2.0 KVM Extender

**CE624**
USB DVI Dual View HDBaseT 2.0 KVM Extender

**CE620**
USB DVI HDBaseT 2.0 KVM Extender

**CE610A**
DVI HDBaseT KVM Extender with ExtremeUSB®

**CE820**
Mini USB DVI HDBaseT KVM Extender
Retail - Self-Service Kiosks and Digital Signage

Background:
A major retailer with multiple outlets in several locations wanted to enhance its overall service and customer satisfaction by increasing related operational efficiency, reducing customer wait time, and improving the overall in-store experience.

Customer’s requirements:
1. High-quality HDMI and control signal transmission over long distances throughout large stores with multiple floors.
2. Needed to offer interactive advertising, queue management, and order notifications to improve the in-store experience for customers.

ATEN solution:
1. Allows flexible placement of self-service kiosks on the shop floor while extending 4K up to 100 m to computers located in a secure room.
2. With RS232, IR, Ethernet, and USB 2.0 extended over a single cable, solution supports touchscreens and payment interfaces via HDBaseT solution.
3. Enabled distribution of interactive content spread across multiple locations throughout the store for engaging promotion and effective queue management.

ATEN products:
1. CE820 –USB HDMI HDBaseT 2.0 KVM Extender (4K@100m)
2. VS1814T – 4-Port HDMI HDBaseT™ Splitter (HDBaseT Class A)
3. VE811R –HDMI HDBaseT Receiver (4K@100m) (HDBaseT Class A)
HDBaseT Matrix with Video Wall Solutions
Seamless, Tear-free Video Walls

ATEN HDBaseT Matrix switches and HDBaseT receivers with scaler ensure long distance video transmission and provide seamless switching and scaling functionality, giving a flawless video wall experience.

**VM3200 / VM1600A**
32x32 / 16x16 Modular Matrix Switch

**VM7514 / VM8514**
Compatible HDBaseT I/O Boards

**VM3909H / VM3404H**
9x9 / 4x4 HDMI HDBaseT-Lite Matrix Switch

**VE816R**
4K HDMI HDBaseT Receiver with Scaler

**VE805R**
HDMI HDBaseT-Lite Receiver with Scaler
Broadcasting & Media - Artear, Argentina

Background:
Artear, Argentina’s most prolific television network, built a state-of-the-art newsroom to keep setting the pace for news broadcasting and creative, high-quality content.

Customer’s requirements:
1. A flexible and customizable solution with minimal lag when switching.
2. To switch among different video wall layouts and content sources easily and quickly.
3. Power stability and redundancy that is critical for a 24-7 newsroom environment.
4. To control a large 10 x 6 video wall and a smaller 5 x 5 video wall with 16 different SDI input sources.
5. To extend the 5 x 5 video wall content up to 70 meters to account for the design architecture of the newsroom.
**ATEN solution:**

1. Video Matrix Switches integrate different video input and output interfaces and encode the various formats to deliver customized flexibility and video wall configuration options.
2. ATEN’s Seamless Switch™ technology delivers stable and reliable continuous video streams and instant real-time source switching without delays.
3. Two power slots on the VM1600A that can connect to two different power supplies provide the reliable power redundancy that is critical for the 24-7 operations of a newsroom.
4. ATEN’s Control System connects all the hardware devices in the news room to provide centralized control directly and effortlessly via a PC, laptop, or any mobile device.
5. The support for extended HDBaseT transmission over a single Cat 6/6a cable ensures that the solution is easily adaptable to the physical architecture of the newsroom while providing seamless switching and video wall functionality.

**ATEN products:**

1. VM1600A – 16 x 16 Modular Matrix Switch
2. VE805R – HDMI HDBaseT-Lite Receiver with Scaler
3. VK2100 – ATEN Control System - Control Box
4. VS146 – 6-Port 3G-SDI Splitter
HDBaseT Media Distribution
High Quality Media Distribution

ATEN HDBaseT Media Distribution solutions are economical ways to send high-quality HDMI content over a Cat 5 / 6 cable to multiple displays over long distances from a single input source.

**VS1814T / VS1818T**
4-Port / 8-Port HDMI HDBaseT Splitter

**VE801R**
HDMI HDBaseT-Lite Receiver (4K@40m)

**VE812R**
HDMI HDBaseT Receiver (4K@100m)

**VE811R**
HDMI HDBaseT Receiver (Supports Long Reach Mode – up to 150m)
Transportation - Train Station

Background:
One of the biggest transportation hubs in the city of Osaka, Japan wanted to distribute eye-catching advertisements and important scheduling information to as many passengers as possible.

Customer’s requirements:
1. Required 4K content broadcasted to multiple displays mounted vertically on 7 pillars throughout the station.
2. Transmission cloned simultaneously to more than 30 screens that are up to 100 meters apart.
3. Easy to manage and maintain.

ATEN solution:
1. 4K video can be transmitted simultaneously to all 24 displays installed the pillars without delay.
2. Simple wiring to connect the HDMI distribution transmitter (VS1818T) and receiver (VE811R) with a category 6 cable.
3. Video signals can be transmitted from one signage player to up to eight displays to minimize the number of installed devices to be managed.

ATEN products:
1. VS1818T – 8-port HDMI HDBaseT Splitter
2. VE811R – HDMI HDBaseT Receiver
   (4K@100m)
Case Study
Accessories

2L-2910
305M HDBaseT SF/UTP Cat 6 Cable

2L-7D05H / 2L-7D03H
5 m / 3 m High Speed HDMI Cable with Ethernet

2L-7D02H
1.8 m High Speed HDMI Cable with Ethernet

• Designed to reduce cross talk
• Optimized for distributing multiple digital signals – HD video, audio, Ethernet, power and control
• Verified to meet performance requirements set by HDBaseT™ Alliance
• Supports sweep frequency up to 400 MHz
• Supports up to 4K data transmission

HDBaseT Installation Guide
For a problem-free HDBaseT installation experience, be sure to get the Implementation Guide.
<table>
<thead>
<tr>
<th>Connection</th>
<th>HDBaseT 3.0</th>
<th>HDBaseT (Class A)*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video Interface</strong></td>
<td>HDMI</td>
<td>HDMI, HDMI &amp; VGA</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>VE1843</td>
<td>VE3912T</td>
</tr>
<tr>
<td><strong>Inputs to Outputs</strong></td>
<td>1 to 1</td>
<td>3 Inputs, 1 Local Output</td>
</tr>
<tr>
<td><strong>Max. Resolution / Distance</strong></td>
<td>True 4K @100m</td>
<td>4K@100m; 1080p@100m; 1920 x1200@100m</td>
</tr>
<tr>
<td><strong>HDR</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>HDCP</strong></td>
<td>2.3</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Long Reach Mode</strong></td>
<td>N/A</td>
<td>(Active)</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>(HDMI / Stereo)</td>
<td>(HDMI / Stereo / DisplayPort)</td>
</tr>
<tr>
<td><strong>RS-232 Channel</strong></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>IR Channel</strong></td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>USB Channel</strong></td>
<td>•</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Ethernet Channel</strong></td>
<td>•</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>PoH</strong></td>
<td>N/A</td>
<td>(PD)</td>
</tr>
<tr>
<td><strong>Scaler</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Connection</td>
<td>HDBaseT (Class A)*</td>
<td>HDBaseT (Class B)*</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Video Interface</td>
<td>HDMI</td>
<td>HDMI</td>
</tr>
<tr>
<td>Model</td>
<td>VE1812</td>
<td>VE812</td>
</tr>
<tr>
<td>Inputs to Outputs</td>
<td>1 to 1</td>
<td>1 to 1</td>
</tr>
<tr>
<td>Max. Resolution / Distance</td>
<td>4K@100m; 1080p@100m</td>
<td>4K@100m; 1080p@100m</td>
</tr>
<tr>
<td>HDR</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HDCP</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Long Reach Mode**</td>
<td>(Active)</td>
<td>(Passive)</td>
</tr>
<tr>
<td>Audio</td>
<td>(HDMI)</td>
<td>(HDMI)</td>
</tr>
<tr>
<td>RS-232 Channel</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>IR Channel</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>USB Channel</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethernet Control</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PoH</td>
<td>PSE: VE1812T POC: VE1812R</td>
<td>N/A</td>
</tr>
<tr>
<td>Scaler</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
# Product Comparison – wall plate extender series

<table>
<thead>
<tr>
<th>Connection</th>
<th>HDBaseT (Class A)*</th>
<th>HDBaseT (Class B)*</th>
<th>HDBaseT (Class B)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Interface</td>
<td>HDMI + VGA</td>
<td>HDMI</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>Type</td>
<td>EU / MK</td>
<td>US</td>
<td>MK / EU</td>
</tr>
<tr>
<td>Model</td>
<td>VE2812AEUT</td>
<td>VE2812AUST</td>
<td>VE1801AEUT</td>
</tr>
<tr>
<td>Inputs to Outputs</td>
<td>2 inputs</td>
<td>2 inputs</td>
<td>1 input</td>
</tr>
<tr>
<td>Max. Resolution / Distance</td>
<td>4K@100m; 1080p@100m</td>
<td>4K@40m; 1080p@70m</td>
<td>4K@40m; 1080p@70m</td>
</tr>
<tr>
<td>HDCP</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Audio</td>
<td>• (HDMI / Stereo)</td>
<td>• (HDMI / Stereo)</td>
<td>• (HDMI)</td>
</tr>
<tr>
<td>Long Reach Mode**</td>
<td>• (Active)</td>
<td>• (Active)</td>
<td>N/A</td>
</tr>
<tr>
<td>RS-232 Channel</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>IR Channel</td>
<td>•</td>
<td>•</td>
<td>N/A</td>
</tr>
<tr>
<td>PoH</td>
<td>• (PD)</td>
<td>• (PD)</td>
<td>• (PD)</td>
</tr>
</tbody>
</table>

## Suggested ATEN Receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>VE1812R</th>
<th>VE814AR</th>
<th>VE811R</th>
<th>VE801R</th>
<th>VE802R</th>
<th>VE601R</th>
<th>VE901R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Output</td>
<td>HDMI</td>
<td>HDMI Dual Output</td>
<td>HDMI</td>
<td>HDMI</td>
<td>HDMI</td>
<td>DVI</td>
<td>DisplayPort</td>
</tr>
<tr>
<td>IR / RS-232</td>
<td>•</td>
<td>•</td>
<td>N/A</td>
<td>N/A</td>
<td>•</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HDBaseT Class</td>
<td>HDBaseT 1.0 Class A</td>
<td>HDBaseT 1.0 Class B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission Distance</td>
<td>4K up to 100m; 1080p up to 150m (Long Reach mode enable)</td>
<td>4K up to 40m; 1080p up to 70m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Reach Mode</td>
<td>•</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Product Comparison – KVM extender series

<table>
<thead>
<tr>
<th>Model No.</th>
<th>CE924</th>
<th>CE920</th>
<th>CE820</th>
<th>CE624</th>
<th>CE620</th>
<th>CE611</th>
<th>CE610A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distance</strong></td>
<td></td>
<td></td>
<td>Standard: 100 m</td>
<td></td>
<td>Long Reach Mode: 150 m</td>
<td></td>
<td>100 m</td>
</tr>
<tr>
<td><strong>HDBaseT</strong></td>
<td>HDBaseT 2.0</td>
<td>HDBaseT 2.0</td>
<td>HDBaseT 2.0</td>
<td>HDBaseT 2.0</td>
<td>HDBaseT 2.0</td>
<td>HDBaseT</td>
<td>HDBaseT</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>Unit to Unit</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
<td>Cat 6 / 6a / 2L-2910 x 1</td>
</tr>
<tr>
<td>Keyboard, Mouse</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
<td>USB</td>
</tr>
<tr>
<td>Video</td>
<td>DisplayPort</td>
<td>DisplayPort</td>
<td>HDMI</td>
<td>DVI-D (Single Link)</td>
<td>DVI-D (Single Link)</td>
<td>DVI-D (Single Link)</td>
<td>DVI-D (Single Link)</td>
</tr>
<tr>
<td>Dual View</td>
<td>•</td>
<td>N/A</td>
<td>N/A</td>
<td>•</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Audio</td>
<td>• (DisplayPort / Stereo)</td>
<td>• (DisplayPort / Stereo)</td>
<td>• (HDMI / Stereo)</td>
<td>• (Stereo)</td>
<td>• (Stereo)</td>
<td>• (Stereo)</td>
<td>N/A</td>
</tr>
<tr>
<td>USB Channel</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Ethernet Channel</td>
<td>N/A</td>
<td>•</td>
<td>•</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>RS-232 Channel</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>N/A</td>
</tr>
</tbody>
</table>