

## CE840

USB True 4K HDMI HDBaseT 3.0 KVM Extender (4K@100m)



Adopting the latest HDBaseT 3.0 technology, CE840 USB True 4K HDMI HDBaseT 3.0 [KVM Extender](#) consists of a local unit and a remote unit, enabling uncompressed True 4K HDMI, audio, RS232, Ethernet, and USB signal transmission across 100m over a single Cat 6A cable (ATEN [2L-29330](#) Cat 6A Cable recommended) or above. Installation is made easy, neat, and cost-efficient with no compromises on high quality distribution of AV content. The CE840 allows for dual console operation via the two USB ports for USB keyboard and mouse connection and the pushbuttons for switching USB control console between the remote and local end. LEDs on the front panel help indicate which USB control mode that is currently on. Moreover, each unit contains an HDMI output port for local control and the other two USB 2.0 ports for USB peripheral connection. Consequently, operators can acquire data and manage equipment in one location, even from a distance.

The CE840 showcases excellent AV performance with no compression and zero latency. In addition to the support for HDR 10+, the extender is also capable of delivering video signals at up to True 4K (3840 x 2160 @ 60 Hz 4:4:4 and 4096 x 2160 @ 60 Hz 4:4:4) over 100 m. The extender also supports individual stereo audio and HDMI audio formats including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio.

CE840 is an ideal solution for medium to large size applications that require uncompressed AV and control signal extension and remote access and control, including factories, warehouses, [data centers](#), as well as medical and healthcare applications where precise visualization and accurate representation are essential.



### Features

- HDBaseT 3.0 – supports True 4K HDMI, audio, RS232, Ethernet, and USB signal transmission across a long distance via a single Cat 6A cable (ATEN [2L-29330](#) Cat 6A Cable recommended) or above with no compression and zero latency
- Superior video quality – supports HDR10+ and video resolutions up to True 4K (3840 x 2160 @ 60 Hz 4:4:4 and 4096 x 2160 @ 60 Hz 4:4:4) over 100 m
- HDBaseT™ long reach mode up to 1080P over 150 m\*
- Long reach mode switch – switches between [HDBaseT™](#) Standard and long reach modes in a snap\*
- Dual console operation – control the system via the USB keyboard, mouse and HDMI monitor consoles installed on both the local and remote ends
- Active console selectable via the pushbutton on the remote unit and local unit - enables USB-based signal control from either the remote or local end, with LEDs indicating the USB control mode
- Flexible 4 x USB 2.0 extension – each of the remote unit and the local unit contains 2 ports for USB keyboard and mouse connection and 2 ports for other USB peripheral connection
- Supports individual stereo audio and HDMI audio formats including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio
- HDCP2.3 and 2.2 compliant
- Supports widescreen formats
- Built-in 8KV/15KV ESD protection
- Firmware upgradable
- No software or driver installation required
- Rack-mountable

#### Note:

1. The long reach mode is only supported by CE840 using firmware version v1.0.064m or later.
2. When the long reach mode switch is switched and turned on, the CE840 will reboot itself to activate the long reach mode.

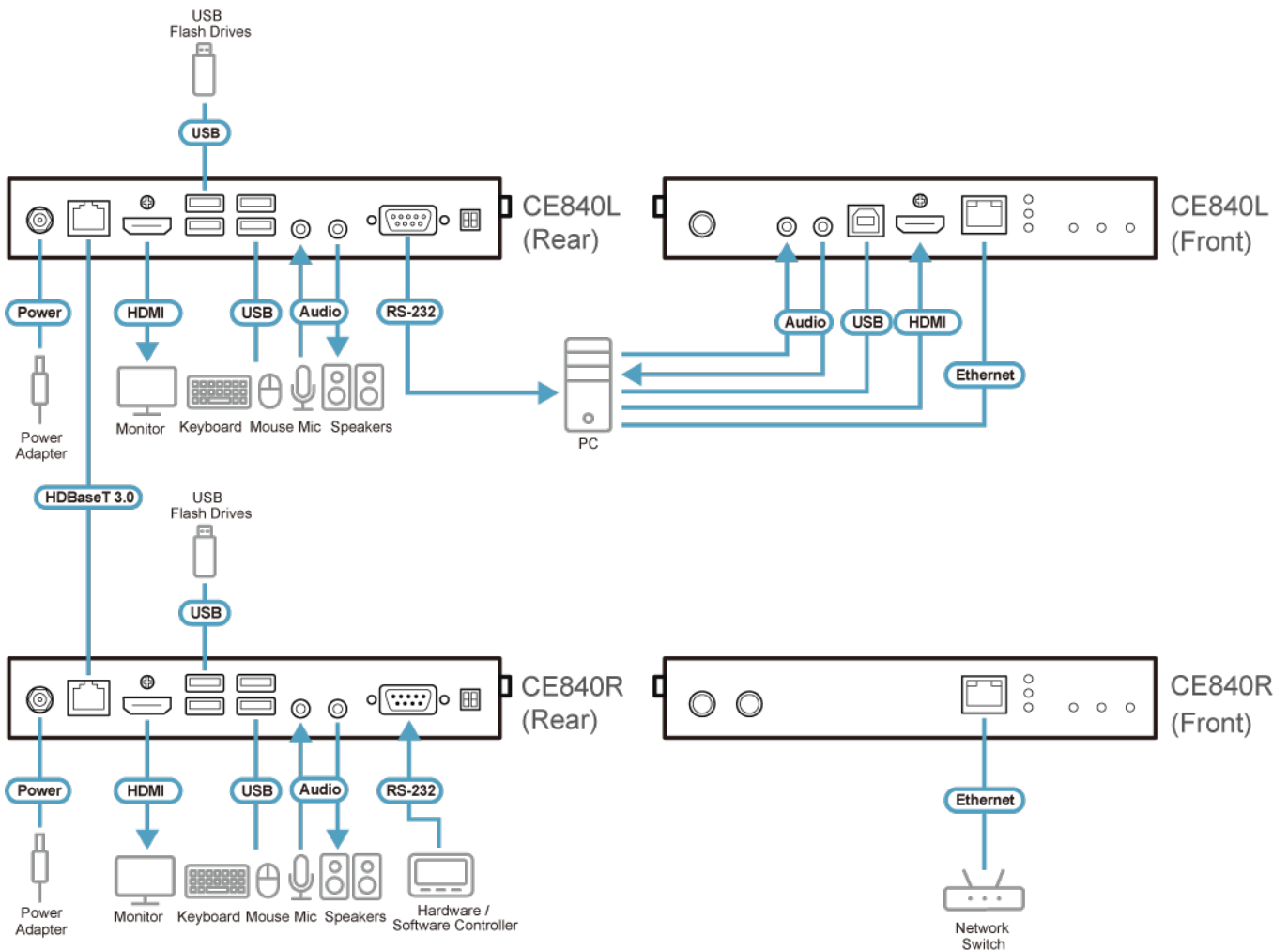
### Specifications

| Function   | CE840L | CE840R |
|------------|--------|--------|
| Connectors |        |        |

|                             |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Console Ports               | 1 x HDMI (Female, Black)<br>4 x USB Type A (Female, White) *<br>1 x Mini Stereo Jack (Female, Green)<br>1 x Mini Stereo Jack (Female, Pink)<br><br>* 2 ports x USB for Keyboard & Mouse use, 2 ports x USB for other USB2.0 peripherals, DO NOT mix and match | 1 x HDMI (Female, Black)<br>4 x USB Type A (Female, White) *<br>1 x Mini Stereo Jack (Female, Green)<br>1 x Mini Stereo Jack (Female, Pink)<br>1 x GbE (RJ-45 Female, Black)<br><br>* 2 ports x USB for Keyboard & Mouse use, 2 ports x USB for other USB2.0 peripherals, DO NOT mix and match |
| KVM Ports                   | 1 x HDMI (Female, Black)<br>1 x USB Type B (Female, White)<br>1 x Mini Stereo Jack (Female, Green)<br>1 x Mini Stereo Jack (Female, Pink)<br>1 x GbE (RJ-45 Female, Black)                                                                                    | N/A                                                                                                                                                                                                                                                                                            |
| RS-232                      | 1 x DB-9 Female (Black)                                                                                                                                                                                                                                       | 1 x DB-9 Male (Black)                                                                                                                                                                                                                                                                          |
| Power                       | 1 x DC Jack (Black)                                                                                                                                                                                                                                           | 1 x DC Jack (Black)                                                                                                                                                                                                                                                                            |
| Unit To Unit                | 1 x RJ-45 Female (Black, HDBaseT)                                                                                                                                                                                                                             | 1 x RJ-45 Female (Black, HDBaseT)                                                                                                                                                                                                                                                              |
| Video                       |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| Max. Data Rate              | 18Gbps (6Gbps per lane)                                                                                                                                                                                                                                       | 18Gbps (6Gbps per lane)                                                                                                                                                                                                                                                                        |
| Max. Pixel Clock            | 600 MHz                                                                                                                                                                                                                                                       | 600 MHz                                                                                                                                                                                                                                                                                        |
| Compliance                  | HDMI (Deep Color, 4K/60Hz); 4K HDR+<br>HDCP2.3 Compatible<br>Consumer Electronics Control (CEC)*<br><br>*The CEC signals are only bypassed from the Local unit to the remote unit and do not support local HDMI console output.                               | HDMI (Deep Color, 4K/60Hz); 4K HDR+<br>HDCP2.3 Compatible<br>Consumer Electronics Control (CEC)                                                                                                                                                                                                |
| Max. Resolution             | 4096 x 2160 @ 60Hz (4:4:4)<br>3840 x 2160 @ 60Hz (4:4:4)                                                                                                                                                                                                      | 4096 x 2160 @ 60Hz (4:4:4)<br>3840 x 2160 @ 60Hz (4:4:4)                                                                                                                                                                                                                                       |
| Max. Resolutions / Distance | 4K x 2K @ 60Hz (4:4:4) up to 100m (HDBaseT 3.0 Certified Cat 6a U/FTP cable or above / ATEN 2L-29330 Cat 6a cable)                                                                                                                                            | 4K x 2K @ 60Hz (4:4:4) up to 100m (HDBaseT 3.0 Certified Cat 6a U/FTP cable or above / ATEN 2L-29330 Cat 6a cable)                                                                                                                                                                             |
| LEDs                        |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| Power                       | 1 (Green)                                                                                                                                                                                                                                                     | 1 (Green)                                                                                                                                                                                                                                                                                      |
| Link                        | 1 (Orange)                                                                                                                                                                                                                                                    | 1 (Orange)                                                                                                                                                                                                                                                                                     |
| Video                       | 1 x HDMI IN (Orange)                                                                                                                                                                                                                                          | 1 x HDMI OUT (Orange)                                                                                                                                                                                                                                                                          |
| Console Status              | 3 x Local USB Keyboard/Mouse Authority Indicator (Green)                                                                                                                                                                                                      | 3 x Remote USB Keyboard/Mouse Authority Indicator (Green)                                                                                                                                                                                                                                      |
| Switches                    |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| Long Reach Mode Switch      | 1 x Slide Switch                                                                                                                                                                                                                                              | 1 x Slide Switch                                                                                                                                                                                                                                                                               |
| Firmware Upgrade            | 1 x Slide Switch                                                                                                                                                                                                                                              | 1 x Slide Switch                                                                                                                                                                                                                                                                               |
| Pushbuttons                 |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| Wakeup button               | N/A                                                                                                                                                                                                                                                           | 1 x Pushbutton                                                                                                                                                                                                                                                                                 |
| Operating Mode Selection    | 1 x Local USB Keyboard/Mouse Authority switch                                                                                                                                                                                                                 | 1 x Remote USB Keyboard/Mouse Authority switch                                                                                                                                                                                                                                                 |
| Power Consumption           | DC12V:7.36W:60BTU/h<br><br>Note:<br>● The measurement in Watts indicates the typical power consumption of the device with no external loading.<br>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.           | DC12V:7.37W:60BTU/h<br><br>Note:<br>● The measurement in Watts indicates the typical power consumption of the device with no external loading.<br>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.                                            |
| Environmental               |                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                |
| Operating Temperature       | 0-40°C                                                                                                                                                                                                                                                        | 0-40°C                                                                                                                                                                                                                                                                                         |
| Storage Temperature         | -20-60°C                                                                                                                                                                                                                                                      | -20-60°C                                                                                                                                                                                                                                                                                       |

|                        |                                                                                                                                 |                                                     |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Humidity               | 0-80% RH, Non-condensing                                                                                                        | 0-80% RH, Non-condensing                            |
| Physical Properties    |                                                                                                                                 |                                                     |
| Housing                | Metal                                                                                                                           | Metal                                               |
| Weight                 | 0.82 kg ( 1.81 lb )                                                                                                             | 0.81 kg ( 1.78 lb )                                 |
| Dimensions (L x W x H) | 17.82 x 15.60 x 2.88 cm<br>(7.02 x 6.14 x 1.13 in.)                                                                             | 17.82 x 15.60 x 2.88 cm<br>(7.02 x 6.14 x 1.13 in.) |
| Note                   | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format. |                                                     |

#### Diagram



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