





## Introduction

The Atlona **AT-OME-EX-WP-KIT-LT** is an HDBaseT extender for video up to 4K/60 4:2:0, plus embedded audio, control, and USB over distances up to 130 feet (40 meters) for 4K/UHD, and up to 230 feet (70 meters) for 1080p/60 video. The transmitter features a US one-gang, wallplate form factor, and includes interchangeable black and white wallplates and faceplates. Part of the Omega<sup>™</sup> Series of integration products for modern AV communications and collaboration, the OME-EX-WP-KIT-LT is HDCP 2.2 compliant and extends RS-232 control signals. The integrated USB extension addresses the challenge of connecting between USB devices at remote locations, and is ideal for software video conferencing and touch or interactive displays. The transmitter includes a USB 2.0 host interface for a PC, plus a peripheral device such as a speakerphone, microphone, or keyboard and mouse. The receiver provides two USB interfaces for devices such as a camera, soundbar, or display.

## **Applications**

#### • Video conferencing

The OME-EX-WP-KIT-LT is ideal for soft codec and web-based conferencing applications, with the ability to integrate with a PC and speakerphone or microphone near presenters, and a camera or soundbar at the wall-mounted display.

#### • Interactive displays

The OME-EX-WP-KIT-LT can provide AV and USB extension for a touch-enabled display, allowing remote PC control at a wall, lectern, or other location.

#### Classrooms

This extender kit is also ideal for classroom applications such as distance learning, with the wallplate transmitter installed on a desk or lectern for easy instructor access.



# **Key Features**

#### Video, audio, power, and data over category cable utilizing HDBaseT technology

- Extends up to 230 feet (70 meters) @ 1080p, or up to 130 feet (40 meters) @ 4K/UHD using CAT6a/7 cable.
- Uses easy-to-integrate category cable for low-cost, reliable system installation.

#### USB 2.0 interfacing and extension up to 230 feet (70 meters)<sup>(1)</sup>

- Transmitter features USB type B interface for connection to a host PC, plus a USB type A port for a peripheral device such as a microphone or speakerphone. Receiver features two USB type A ports for peripheral devices such as a camera or display.
- Provides an ideal USB integration solution for software video conferencing and other applications.

#### US one-gang enclosure for wallplate openings -interchangeable black or white trim kits

- Allows inconspicuous installation on a wall, in furniture, or in a table or floor box. Includes black and white wallplates and faceplates.
- Meets end user requirements for conveniently accessible yet discreet AV connectivity.

#### 4K/UHD capability @ 60 Hz with 4:2:0 chroma subsampling

- Compatible with sources up to 4K/60 4:2:0 and 4K/30 4:4:4.
- Supports HDMI data rates up to 10 Gbps from PCs, media players, and Ultra HD Blu-ray players.

#### **HDCP 2.2 compliant**

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between authenticated devices.

#### Transmitter powered by receiver over HDBaseT

- Industry standard IEEE 802.3af PoE for transmitter is supplied by receiver over HDBaseT.
- Allows convenient transmitter installation at a table or other remote location, without the need for local AC power.

#### HDBaseT link status testing

- Free software utility available for testing integrity of the HDBaseT cable link between the transmitter and the receiver.
- Provides real-time link status, plus detailed HDBaseT and HDMI signal information. Quick, easy verification or troubleshooting of RJ-45 termination or twisted pair cable quality.

#### Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.



# AT-OME-EX-TX-WP-LT Specifications

| Video                                  |   |                     |   |   |                  |           |
|--|---|---------------------|---|---|------------------|-----------|
| Signal                                 | Input - HDMI  |                     |   |   |                  |           |
|  | Output - HDBaseT  |                     |   |   |                  |           |
| Copy Protection                        | HDCP 2.2  | HDCP 2.2            |   |   |                  |           |
| Pixel Clock                            | 300 MHz   | 300 MHz             |   |   |                  |           |
| UHD/HD/SD                              | 4096×2160 (DCI) @ 60 <sup>(2)</sup> /30/24 Hz<br>3840×2160 (UHD) @ 60 <sup>(2)</sup> /50/24/25/<br>30 Hz        |                     |   | 1920x1080p @ 23.98/24/25/29.97/<br>30/50/59.94/60 Hz<br>1920x1080i @ 25/29.97/30 Hz,<br>1280x720p @ 30/50/59.94/60 Hz |                  |           |
| VESA<br>All resolutions are 60 Hz      | 2560×2048<br>2560×1600<br>2048×1536<br>1920×1200<br>1680×1050<br>1600×1200<br>1600×900<br>1440×900<br>1400×1050 |                     | 1366×768<br>1360×768<br>1280×1024<br>1280×800<br>1280×768<br>1152×768<br>1024×768<br>800×600<br>640×480 |   |                  |           |
| VESA 21:9                              | 2560x1080 @ 30 Hz 4:4:4<br>2560x1080 @ 60 Hz 4:4:4<br>3440x1440 @ 30 Hz 4:4:4                                   |                     | 3440x1440 @ 50 Hz 4:4:4<br>3840x1600 @ 30 Hz 4:4:4  |   |                  |           |
| Color Space                            | YUV, RGB  |                     |   |   |                  |           |
| Chroma Subsampling                     | 4:4:4, 4:2:2, 4:2:0   | 4:4:4, 4:2:2, 4:2:0 |   |   |                  |           |
| Color Depth                            | 8-bit, 10-bit, 12-bit   |                     |   |   |                  |           |
| Audio                                  |   |                     |   |   |                  |           |
| HDMI / HDBaseT<br>Pass-Through Formats | PCM 2.0Dolby® DigitLPCM 5.1Dolby DigitalLPCM 7.1Dolby TrueHDolby Atmost   |                     | Plus™ DTS-HD Master Auc<br>D DTS:X®   |   | HD Master Audio™ |           |
| Bit Depth                              | Up to 24 bits   |                     |   |   |                  |           |
| Sample Rate                            | 32 kHz, 44.1 kHz, 48  | 3 kHz,              | 88.2 kHz, 96 k  | Hz, 176.4 kHz,  | , 192 kł         | Ηz        |
| Resolution / Distance                  | 4K/UHD - Feet / Me  | ters                |   | 1080p - Feet  | / Mete           | rs        |
| HDMI IN/OUT                            | 15  | 5                   |   | 30  | / 111010         | 10        |
| CAT5e                                  | 115   | 35                  |   | 200   |                  | 60        |
| CAT6/6a/7                              | 130   | 40                  |   | 230   |                  | 70        |
|  | 100   |                     |   | 200   |                  |           |
| USB                                    |   |                     |   |   |                  |           |
| Signal <sup>(1)</sup>                  | 2.0   |                     |   |   |                  |           |
| Maximum Data Rate                      | 120 Mbps  |                     |   |   |                  |           |
| Control                                |   |                     |   |   |                  |           |
| RS-232                                 | Pass-through from of Supported baud rate  |                     |   |   | ), 57600         | 0, 115200 |
| CEC Support                            | Yes   |                     | ,   | . ,   |                  | ·         |
|  |   |                     |   |   |                  |           |



| Buttons and Indicators  |  |           |  |
|-------------------------|--|-----------|--|
| Indicators:             |  |           |  |
| PWR                     | 1 x LED, green   |           |  |
| LINK                    | 1 x LED, yellow  |           |  |
| Connectors              |  |           |  |
| HDMI IN                 | 1 x Type A, 19-pin female  |           |  |
| HDBaseT OUT             | 1 x RJ45   |           |  |
| HOST                    | 1 x USB Type A   |           |  |
| DEVICE                  | 1 USB Type B   |           |  |
| RS-232                  | 1 x 3-pin captive screw  |           |  |
| FW                      | 1 x Type micro-USB   |           |  |
| Environmental           |  |           |  |
| Operating Temperature   | +32° to +122° F  |           |  |
|                         | 0° to +50° C   |           |  |
| Storage Temperature     | -4° to +140° F<br>-20° to +60° C   |           |  |
| Operating Humidity (RH) | +20 to +90%, non-condensing  |           |  |
| Power                   |  |           |  |
| Consumption             | 11.18 W (includes 2.5 W for USB, powered   | ed by BX) |  |
| BTU/h                   | 38.12  |           |  |
| USB Power               | 2.5 W USB device interface   |           |  |
| Dimonstan               |  |           |  |
| Dimensions              | 4.07 in x 1.80 in x 2.63 in  |           |  |
| Unit (H x W x D)        | 103.50 mm x 45.80 mm x 67.00 mm  |           |  |
|                         |  |           |  |
| Weight                  | Pounds   | Kilograms |  |
| Device                  | 0.40   | 0.18      |  |
| Certification           |  |           |  |
| Device                  | CE, RoHS, FCC  |           |  |
|                         |  |           |  |
| Compliance<br>NDAA-899  | Yes  |           |  |
| TAA                     | Yes  |           |  |
|                         | 100  |           |  |
| Warranty                |  |           |  |
| 3 years                 | To view the product warranty, use the following link:<br>https://atlona.com/warranty |           |  |



# AT-OME-EX-RX-LT Specifications

| Video                                  |   |                     |   |   |         |   |
|--|---|---------------------|---|---|---------|---|
| Signal                                 | Input - HDBaseT<br>Output - HDMIT   |                     |   |   |         |   |
| Copy Protection                        | HDCP 2.2  |                     |   |   |         |   |
| Pixel Clock                            | 300 MHz   |                     |   |   |         |   |
| UHD/HD/SD                              | 4096×2160 (DCI) @ 60 <sup>(2)</sup> /30/24 Hz<br>3840×2160 (UHD) @ 60 <sup>(2)</sup> /50/24/25/<br>30 Hz        |                     | 1920x1080p @ 23.98/24/25/29.97/<br>30/50/59.94/60 Hz<br>1920x1080i @ 25/29.97/30 Hz,<br>1280x720p @ 30/50/59.94/60 Hz |   |         |   |
| VESA<br>All resolutions are 60 Hz      | 2560×2048<br>2560×1600<br>2048×1536<br>1920×1200<br>1680×1050<br>1600×1200<br>1600×900<br>1440×900<br>1400×1050 |                     |   | 1366×768<br>1360×768<br>1280×1024<br>1280×800<br>1280×768<br>1152×768<br>1024×768<br>800×600<br>640×480 |         |   |
| VESA 21:9                              | 2560x1080 @ 30 Hz<br>2560x1080 @ 60 Hz<br>3440x1440 @ 30 Hz   | 4:4:4               |   | 3440x1440 @<br>3840x1600 @  |         |   |
| Color Space                            | YUV, RGB  |                     |   |   |         |   |
| Chroma Subsampling                     | 4:4:4, 4:2:2, 4:2:0   | 4:4:4, 4:2:2, 4:2:0 |   |   |         |   |
| Color Depth                            | 8-bit, 10-bit, 12-bit   |                     |   |   |         |   |
| Audio                                  |   |                     |   |   |         |   |
| HDMI / HDBaseT<br>Pass-Through Formats | PCM 2.0<br>LPCM 5.1<br>LPCM 7.1   |                     | Dolby® Digit<br>Dolby Digital<br>Dolby TrueHI<br>Dolby Atmos  | Plus™<br>⊃  |         | ) Digital Surround™<br>HD Master Audio™<br>(® |
| Bit Depth                              | Up to 24 bits   |                     |   |   | 1       |   |
| Sample Rate                            | 32 kHz, 44.1 kHz, 48  | 8 kHz, 8            | 88.2 kHz, 96 k  | Hz, 176.4 kHz,  | 192 kŀ  | Ηz  |
| Resolution / Distance                  | 4K/UHD - Feet / Me  | ters                |   | 1080p - Feet  | / Meter | rs  |
| HDMI IN/OUT                            | 15  | 5                   |   | 30  |         | 10  |
| CAT5e                                  | 115   | 35                  |   | 200   |         | 60  |
| CAT6/6a/7                              | 130   | 40                  |   | 230   |         | 70  |
| USB                                    |   |                     |   |   |         |   |
| Signal                                 | 2.0   |                     |   |   |         |   |
| Maximum Data Rate                      | 120 Mbps  |                     |   |   |         |   |
|  | 120 101003  |                     |   |   |         |   |
| Control                                |   |                     |   |   |         |   |
| RS-232                                 | Pass-through from of Supported baud rate  | es: 240             | 0, 4800, 9600,  | 19200, 38400  | , 57600 | ), 115200                                     |
| IR                                     | Pass-through from o   | control             | system to sink  | device  |         |   |
| CEC Support                            | Yes   |                     |   |   |         |   |



| Buttons and Indicators  |  |                   |  |  |
|-------------------------|--|-------------------|--|--|
| Indicators:             |  |                   |  |  |
| PWR                     | 1 x LED, green   | 1 x LED, green    |  |  |
| LINK                    | 1 x LED, yellow  |                   |  |  |
| Connectors              |  |                   |  |  |
| HDMI IN                 | N/A  |                   |  |  |
| HDMI OUT                | 1 x Type A, 19-pin female  |                   |  |  |
| HDBaseT IN              | 1 x RJ45   |                   |  |  |
| HDBaseT OUT             | N/A  |                   |  |  |
| DEVICE                  | 2 x USB Type A   |                   |  |  |
| HOST                    | N/A  |                   |  |  |
| RS-232 / IR             | 1 x 4-pin captive screw<br>(1 x RS-232, 1 x IR)                      |                   |  |  |
| FW                      | 1 x Type micro-USB   |                   |  |  |
| DC 48V                  | 1 x 2-pin captive screw  |                   |  |  |
|                         |  |                   |  |  |
| Environmental           | Fahrenheit   | Celsius           |  |  |
| Operating Temperature   | 0 to +122  | -18 to +50        |  |  |
| Storage Temperature     | -4 to +140   | -20 to +60        |  |  |
| Operating Humidity (RH) | 20% to 90%, non-condensing   |                   |  |  |
| Power                   |  |                   |  |  |
| Consumption             | 18.67 W  |                   |  |  |
| BTU/h                   | 63.66  |                   |  |  |
| USB Power               | 2.5 W per USB device interface                                       |                   |  |  |
| External Power Supply   | 100 - 240 V AC, 50/60 Hz   |                   |  |  |
|                         | Output: 48 V / 0.83 A DC   |                   |  |  |
| Dimensions (H x W x D)  | Inches   | Millimeters       |  |  |
| Unit                    | 1.02 x 4.29 x 5.00   | 26 x 109 x 127    |  |  |
| Power Supply            | 1.42 x 1.81 x 4.41   | 36 x 46 x 112     |  |  |
| (AT-PS-48083-D3)        |  |                   |  |  |
| Weight                  | Pounds   | Kilograms         |  |  |
| Device                  | 0.89   | 0.41              |  |  |
|                         |  |                   |  |  |
| Certification           |  |                   |  |  |
| Device                  | CE, RoHS, FCC  |                   |  |  |
| Power Supply            | CE, FCC, cULus   |                   |  |  |
| Compliance              |  |                   |  |  |
| NDAA-899                | Yes  |                   |  |  |
| TAA                     | Yes  |                   |  |  |
|                         |  |                   |  |  |
| Warranty                | <b>T 1 1 1 1 1 1 1</b>   | 6. H              |  |  |
| 3 years                 | To view the product warranty, use the<br>https://atlona.com/warranty | e tollowing link: |  |  |
|                         | mups.//auona.com/warranty  |                   |  |  |



### Accessories

| SKU          | Description                            |
|--------------|--|
| AT-LC-H2H-1M | LinkConnect HDMI to HDMI 1 Meter Cable |
| AT-LC-H2H-2M | LinkConnect HDMI to HDMI 2 Meter Cable |
| AT-LC-H2H-3M | LinkConnect HDMI to HDMI 3 Meter Cable |

### Footnotes

- (1) Maximum 120 Mbps data rate supported over HDBaseT.
- (2) Only supports 4:2:0.



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