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™ 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)[1]

- 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	
Pixel Clock	300 MHz	
UHD/HD/SD	4096×2160 (DCI) @ 60[2]/30/24 Hz 3840×2160 (UHD) @ 60[2]/50/24/25/ 30 Hz	1920x1080p @ 23.98/24/25/29.97/ 30/50/59.94/60 Hz 1920x1080i @ 25/29.97/30 Hz, 1280x720p @ 30/50/59.94/60 Hz
VESA All resolutions are 60Hz	2560×2048 2560×1600 2048×1536 1920×1200 1680×1050 1600×1200 1600×900 1440×900 1400×1050	1366×768 1360×768 1280×1024 1280×800 1280×768 1152×768 1024×768 800×600 640×480
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	

Audio			
HDMI / HDBaseT Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Depth	Up to 24 bits		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e	115	35	200	60
CAT6/6a/7	130	40	230	70

USB				
Signal[1]	2.0			
Maximum Data Rate	120 Mbps			

Control				
RS-232	Pass-through from control system to sink device Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 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 -20° to +60° C
Operating Humidity (RH)	+20 to +90%, non-condensing

Power		
Consumption	11.18 W (includes 2.5 W for USB, powered by RX)	
USB Power	2.5 W USB device interface	

Dimensions		
Unit (H x W x D)	4.07 in x 1.80 in x 2.63 in 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	
NDAA-899	Yes

Warranty	
Device	To view the product warranty, use the following link: https://atlona.com/warranty

AT-OME-EX-RX-LT Specifications

Video	
Signal	Input - HDBaseT Output - HDMIT
Copy Protection	HDCP 2.2
Pixel Clock	300 MHz
UHD/HD/SD	4096×2160 (DCI) @ 60[2]/30/24 Hz 3840×2160 (UHD) @ 60[2]/50/24/25/ 30 Hz 1920x1080p @ 23.98/24/25/29.97/ 30/50/59.94/60 Hz 1920x1080i @ 25/29.97/30 Hz, 1280x720p @ 30/50/59.94/60 Hz
VESA All resolutions are 60Hz	2560×2048 1366×768 2560×1600 1360×768 2048×1536 1280×1024 1920×1200 1280×800 1680×1050 1280×768 1600×1200 1152×768 1600×900 1024×768 1440×900 800×600 1400×1050 640×480
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit

Audio			
HDMI / HDBaseT Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Depth	Up to 24 bits		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
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			

Control				
RS-232	Pass-through from control system to sink device Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200			
IR	Pass-through from control system to sink device			
CEC Support	Yes			

Buttons and Indicators	
Indicators:	
PWR	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 (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	
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 (AT-PS-48083-D3)	1.42 x 1.81 x 4.41	36 x 46 x 112

Weight	Pounds	Kilograms
Device	0.89	0.41

Certification		
Device	CE, RoHS, FCC	
Power Supply	CE, FCC, cULus	

Compliance	
NDAA-899	Yes

Warranty	
Device	To view the product warranty, use the following link: https://atlona.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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