

Omega[™] 4K/UHD HDMI Over HDBaseT TX/RX with USB





Introduction

The Atlona **AT-OME-EX-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. Part of the Omega[™] Series of integration products for modern AV communications and collaboration, the OME-EX-KIT-LT is HDCP 2.2 compliant and extends IR and 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 two peripheral devices such as a speakerphone, microphone, or keyboard and mouse. The receiver provides two USB interfaces for devices such as a camera, soundbar, or display⁽¹⁾.

Applications

• Video conferencing

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

• Interactive displays

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



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)

- Transmitter features USB type B interface for connection to a host PC, plus two USB type A ports for peripheral devices 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.

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 via PoE (Power over Ethernet)

- 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. Test button and status LED also available on the transmitter.
- Provides real-time link status, with 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.



Specifications

Video						
Signal	Input - HDMI / HDBaseT Output - HDMI / 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					1	
HDMI / HDBaseT Pass-Through Formats	PCM 2.0Dolby® DigitLPCM 5.1Dolby DigitaLPCM 7.1Dolby TrueHDolby Atmost		I Plus™ DTS- D DTS:		Digital Surround™ HD Master Audio™ ®	
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 / Met	oro		1080p - Feet	/ Moto	~
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					
	1					
Control						
Control RS-232	Pass-through from c Supported baud rate				, 57600), 115200
		es: 240	0, 4800, 9600,	19200, 38400	, 57600), 115200



Buttons and Indicators							
Buttons: TEST	1 x momentany tast type	d					
TEST	1 x momentary, tact-type						
Indicators:							
PWR		1 x LED, green					
LINK TEST		1 x LED, yellow					
TEST	1 x LED, blue						
Connectors	Transmitter	Receiver					
HDMI IN	1 x Type A, 19-pin female	N/A					
HDMI OUT	N/A	1 x Type A, 19-pin female					
HDBaseT IN	N/A	1 x RJ45					
HDBaseT OUT	1 x RJ45	N/A					
DEVICE	2 x USB Type A	2 x USB Type A					
HOST	1 x USB Type B	N/A					
RS-232 / IR	1 x 4-pin captive screw	1 x 4-pin captive screw					
	(1 x RS-232, 1 x IR)	(1 x RS-232, 1 x IR)					
FW	1 x Type micro-USB	1 x Type micro-USB					
DC 48V	N/A	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	30.5 W (TX/RX), 13.5 W (TX), 17.0 W (RX)						
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 (TX / RX)	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					
Transmitter	0.88	0.40					
Receiver	0.94	0.43					
	0.01	0.10					



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

Footnotes

(1) Both the AT-OME-EX-TX-LT and AT-OME-EX-RX-LT and not compatible with the AT-UHD-HDVS-300 system for extending USB.

(2) Only supports 4:2:0.



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