

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						
HDMI Specification	HDMI 2.0b, HDCP 2.2					
TMDS Clock	300 MHz					
UHD/HD/SD	4096×2160 (DCI)@ 60 ⁽²⁾ / 3840×2160 (UHD) @ 60 ⁽²⁾		1920x1080i @ 25/29.97/30 Hz 1280x720p @ 30/50/59.94/60 Hz			
VESA ⁽³⁾	2560×2048 2560×1600 2048×1536 1920×1200 1680×1050 1600×1200 1600×900 1440×900 1400×1050	136 128 128 128 128 118 102 800	66×768 60×768 80×1024 80×800 80×768 52×768 24×768 0×600 0×480			
Color Space	YUV, RGB	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	8-bit, 10-bit, 12-bit				
Audio						
Pass-through	LPCM 2.0 LPCM 5.1 LPCM 7.1	Dolby [®] Digital Dolby Digital Plus Dolby TrueHD Dolby Atmos [®]	DTS® DTS-HD Master Audio™ DTS:X			
Sample Rate	32 kHz, 44.1 kHz, 48 kH	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz				
Bit Depth	Up to 24-bit	Up to 24-bit				
USB						
Signal		2.0				
Maximum Data Rate	120 Mbps	120 Mbps				
Control						
CEC	Pass-through	Pass-through				
RS-232	Ŭ	Pass-through from control system to sink device; supports baud rates from 2400 to 115200				
IR		Pass-through from control system to sink device				
Connectors						
HDMI IN		1 - Type A, 19-pin female (transmitter)				
HDMI OUT		1 - Type A, 19-pin female (receiver)				
FW	1 - mini-USB (transmitte	1 - mini-USB (transmitter / receiver)				
HDBaseT OUT	1 - RJ45 (transmitter)					
HDBaseT IN	1 - RJ45 (receiver)					
HOST	1 - USB Type-B (transmi	1 - USB Type-B (transmitter)				
DEVICE	2 - USB Type-A (transmi	2 - USB Type-A (transmitter / receiver)				
RS-232 / IR	1 - captive screw, 4-pin	1 - captive screw, 4-pin (transmitter / receiver)				
DC 48V	1 - 3-pin DIN (receiver)	1 - 3-pin DIN (receiver)				



Indicators and Controls						
PWR LED indicator	1 - LED, green					
LINK LED indicator	1 - LED, yellow					
TEST LED indicator	1 - LED, yellow					
TEST button	1 - momentary, tact-type					
Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters			
HDMI IN/OUT	15	5	30	10		
CAT5e	130	40	230	70		
CAT6/6a/7	130	40	230	70		
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 (Receiver)	Input: 100 - 240 V AC, 50/60 Hz Output: 48 V, 0.83 A DC					
Safety	CE, FCC, cULus					
To have add						
Operating Temperature	0° to 122° F 0° - 50° C					
Storage Temperature	-4° to +140° F -20° to +60° C					
Operating Humidity (RH)	+20 to +90%, non-condensing					
Chassis						
Dimensions (H x W x D)	TX: 1.02 in x 4.29 in x 5.00 in 26 mm x 109 mm x 127 mm RX: 1.02 in x 4.29 in x 5.00 in 26 mm x 109 mm x 89 mm					
Weight	TX: 0.88 lb, 400 g RX: 0.88 lb, 400 g					
Safety	CE, RoHS, FCC					

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

(2) Only supports 4:2:0.

(3) All VESA resolutions are 60 Hz.

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