Introduction

The Atlona **AT-OME-EX-KIT** is an HDBaseT extender for video up to 4K/60 4:2:0, plus embedded audio, control, Ethernet, and USB over distances up to 330 feet (100 meters). Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-EX-KIT is HDCP 2.2 compliant and extends IR, RS-232, and IP 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 OME-EX-TX 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 OME-EX-RX receiver provides two USB interfaces for devices such as a camera or display. The transmitter and receiver are available separately, for use with other Omega Series integration products[1].

Applications

- **Video Conferencing**
  The OME-EX-KIT 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 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

HDBaseT extender kit for HDMI, Ethernet, power, control, and USB up to 330 feet (100 meters)

- Extends HDMI up to 330 feet (100 meters) @ 1080p with CAT5e/6 or 4K/UHD using CAT6a/7 cable.
- Uses easy-to-integrate category cable for low-cost, reliable system installation.

USB 2.0 hub and extension over HDBaseT

- 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.

Low-profile, 1 inch (25 millimeter) high quarter rack-width enclosure

- Easy installation into racks and confined spaces.
- Keeps devices out-of-sight when placed in public spaces.

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 2.0, HDCP 2.2
TMDS Clock	300 MHz
UHD/HD	4096×2160(DCI)@60[2]/30/24 Hz, 3840×2160(UHD)@60[2]/50/24/25/30 Hz, 1080p@23.98/24/25/29.97/30/50/59.94/60 Hz, 1080i@25/29.97/30 Hz, 720p@30/50/59.94/60 Hz
VESA	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	
Pass-through	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS 5.1, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos®, DTS®, DTS-HD Master Audio™, DTS:X
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Depth	Up to 24-bit

USB	
Signal	2.0
Maximum Data Rate	120 Mbps

Control		
CEC	Pass-through	
RS-232	Pass-through from control system to sink device; supports baud rates from 2400 to 115200	
IR	Pass-through from control system to sink device	
IP	Pass-through from control system to sink device up to 100 Mbps over HDBaseT	

Connectors	
HDMI IN	1 - Type A, 19-pin female (transmitter)
HDMI OUT	1 - Type A, 19-pin female (receiver)
FW	1 - mini-USB (transmitter / receiver)
HDBaseT IN	1 - RJ45 (transmitter)
HDBaseT OUT	1 - RJ45 (receiver)
HOST	1 - USB Type-B (transmitter)
DEVICE	2 - USB Type-A (transmitter / receiver)
LAN	1 - RJ45, 10/100 Mbps (transmitter / receiver)
RS-232 / IR	1 - captive screw, 4-pin (transmitter / receiver)
DC 48V	1 - 3-pin DIN (receiver)

Indicators and Controls	
PWR LED indicator	1 - LED, green
LINK LED indicator	1 - LED, yellow

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e	295	90	330	100
CAT6/6a/7	330	100	330	100

Power	
Consumption	32.35 W
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

Environmental	
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

Dimensions (H x W x D)	Inches	Millimeters
Unit (TX / RX)	1.02 x 4.29 x 3.50	25 x 109 x 89
Power Supply (AT-PS-48083-D3)	1.42 x 1.81 x 4.41	36 x 46 x 112

Weight	Pounds	Kilograms
Device (TX / RX)	0.89	0.41

Certification	
Device	CE, RoHS, FCC

(1) Both the AT-OME-EX-TX and AT-OME-EX-RX and not compatible with the AT-UHD-HDVS-300 system for extending USB.
(2) Only supports 4:2:0.