Introduction

The Atlona **AT-OME-EX-TX** is an HDBaseT transmitter 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-TX is HDCP 2.2 compliant and transmits IR, RS-232, and IP control signals. With a matching HDBaseT receiver, 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 includes a USB host 2.0 host interface for a PC, plus two peripheral devices such as a speaker phone, microphone, or keyboard and mouse. This transmitter is ideal for use with Omega Series receivers as well as switchers with HDBaseT inputs. Also available is the OME-EX-KIT which includes the OME-EX-TX and OME-EX-RX[1].

Applications

- **Complete system integration**
  The OME-EX-TX and OME-SR21 together provide a compact, yet comprehensive and cost-effective integration solution, with 4K scaling, display control, HDBaseT link testing, and audio system interfacing provided by the receiver.

- **Larger system applications**
  This transmitter is ideal for extending AV connectivity from a central equipment rack to a meeting table or lectern, where presenters can easily access the system.

- **Video conferencing**
  The OME-EX-TX and a compatible Omega Series receiver or switcher are ideal for soft codec and web-based conferencing applications, with the ability to integrate with PCs, cameras, speakerphones, and microphones.

Key Features

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

- Transmits 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

- 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.
- 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		
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		

USB				
Signal	2.0			
Maximum Data Rate	120 Mbps			

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

Control				
RS-232	Pass-through from control system to sink device Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200			
IP	Pass-through from control system to sink device Supports up to 100 Mbps over HDBaseT			
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	1 x Type A, 19-pin female
HDBaseT OUT	1 x RJ45
DEVICE	2 x USB Type A
HOST	1 x USB Type B
LAN	1 x RJ45
RS-232 / IR	1 x 4-pin captive screw (1 x RS-232, 1 x IR)
FW	1 x Type mini-B, 5-pin female

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	13.68 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 (TX / RX)	1.02 x 4.29 x 5.00	26 x 109 x 127

Weight	Pounds	Kilograms
Device	0.89	0.41

Certification		
Device	CE, RoHS, FCC	

Compliance	
NDAA-899	Yes

Footnotes

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

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