





## Introduction

The Atlona **AT-OME-EX-TX-WP** is an HDBaseT transmitter for video up to 4K/60 4:2:0, plus embedded audio, control, and USB over distances up to 330 feet (100 meters). It features a US one-gang, Decora<sup>®</sup>-style wallplate form factor, and includes interchangeable black and white wallplates and faceplates. Part of the Omega<sup>™</sup> Series of integration products for modern AV communications and collaboration, the OME-EX-TX-WP is HDCP 2.2 compliant and transmits RS-232 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-WP includes a USB 2.0 host interface for a PC, plus a peripheral device such as a speakerphone, microphone, or keyboard and mouse. This transmitter is ideal for use with Omega Series receivers as well as switchers with HDBaseT inputs.<sup>(1)</sup>

## Applications

• Complete system integration

The OME-EX-TX-WP 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.

Lecture hall and training room applications
 This transmitter is ideal for extending AV connectivity from an OME-PS62 in a central equipment rack to lecterns
 as well as remote wall and floor box locations, where presenters can easily access the system.

#### Video conferencing

The OME-EX-TX-WP 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**

#### US one-gang enclosure for Decora-style wallplate openings - interchangeable black or white trim kits

- Allows inconspicuous installation on a wall, in furniture, or in a floor box. Includes black and white wallplates and faceplates.
- Meets end user requirements for conveniently accessible yet discreet AV connectivity.

#### Video, audio, power, and data over category cable utilizing HDBaseT technology

- Transmits 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 interfacing and extension up to 330 feet (100 meters)

- USB type B interface for connection to a host PC, plus a USB type A port for a peripheral device such as a microphone, speakerphone, or a keyboard and mouse.
- Provides an ideal USB integration solution for software video conferencing, and applications with interactive collaboration.

#### 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.

#### Remote PoE (Power over Ethernet) powering

- Industry standard IEEE 802.3af PoE is supplied by an Atlona receiver or switcher over HDBaseT.
- Allows convenient wall, floor box, or furniture installation without the need for local AC power.



## **Specifications**

Video					
Signal	Input - HDMI				
	Output - HDBaseT				
Copy Protection	HDCP 2.2				
Pixel Clock	300 MHz				
UHD/HD/SD	4096×2160(DCI)@60 <sup>(2)</sup> /30/24 Hz       1920x1080i@25/29.97/30 Hz         3840×2160(UHD)@60 <sup>(2)</sup> /50 <sup>(2)</sup> /24/25/30 Hz       720p@30/50/59.94/60 Hz         1920x1080p@23.98/24/25/29.97       /30/50/59.94/60 Hz				
VESA All resolutions are 60Hz	2560×1600 @ 60 Hz 2048×1536 @ 60 Hz 2048×1200 @ 60 Hz 2048×1080 @ 60 Hz 1920×1200 @ 60 Hz 1920×1080 @ 60 Hz 1680×1050 @ 60 Hz 1600×900 @ 60 Hz 1440×900 @ 60 Hz 1400×1050 @ 60 Hz	(RB) (RB)	1366×768 1360×768 1280×1024 1280×800 1280×768 1280×720 1152×870 1024×768 848×480 @ 800×600 @ 640×480 @	@ 60 Hz @ 60 Hz @ 60 Hz @ 60 Hz @ 60 Hz @ 75 Hz @ 60 Hz @ 60 Hz @ 60 Hz	
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	LPCM 7.1 Dolby T		gital Plus™		Digital Surround™ HD Master Audio™ ⊄®
		Dolby At		010.7	
Bit Depth	Up to 24 bits			010.7	
Bit Depth Sample Rate		Dolby At	mos®		
	Up to 24 bits	Dolby At 8 kHz, 88.2 kHz, 9	mos®	lz, 192 kł	Ηz
Sample Rate Resolution / Distance	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met	Dolby At 8 kHz, 88.2 kHz, 9	mos® 96 kHz, 176.4 k⊦ 1080p - Fe	lz, 192 kł	Iz
Sample Rate Resolution / Distance HDMI IN/OUT	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met 15	Dolby At 8 kHz, 88.2 kHz, 9 ers 5	mos® 96 kHz, 176.4 k⊦ 1080p - Fe 30	lz, 192 kł	Hz rs 10
Sample Rate Resolution / Distance	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met	Dolby At kHz, 88.2 kHz, s	mos® 96 kHz, 176.4 k⊦ 1080p - Fe	lz, 192 kł	Iz
Sample Rate Resolution / Distance HDMI IN/OUT CAT5e/6 CAT6a/7	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met 15 295	Dolby At 8 kHz, 88.2 kHz, 9 ers 5 90	mos® 96 kHz, 176.4 kH 1080p - Fe 30 330	lz, 192 kł	-Iz rs 10 100
Sample Rate Resolution / Distance HDMI IN/OUT CAT5e/6 CAT6a/7 USB	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met 15 295 330	Dolby At 8 kHz, 88.2 kHz, 9 ers 5 90	mos® 96 kHz, 176.4 kH 1080p - Fe 30 330	lz, 192 kł	-Iz rs 10 100
Sample Rate Resolution / Distance HDMI IN/OUT CAT5e/6 CAT6a/7 USB Signal	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met 15 295 330	Dolby At 8 kHz, 88.2 kHz, 9 ers 5 90	mos® 96 kHz, 176.4 kH 1080p - Fe 30 330	lz, 192 kł	-Iz rs 10 100
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Sample Rate Resolution / Distance HDMI IN/OUT CAT5e/6 CAT6a/7 USB Signal Maximum Data Rate	Up to 24 bits 32 kHz, 44.1 kHz, 48 4K/UHD - Feet / Met 15 295 330	Dolby At 8 kHz, 88.2 kHz, 9 eers 5 90 100	mos® 96 kHz, 176.4 kH 1080p - Fe 30 330	lz, 192 kł	-Iz rs 10 100



DC 000				
RS-232				
Port	1 x 3-pin captive screw	device		
Use Baud Rates	Pass-through from control system to sink device 2400, 4800, 9600, 19200, 38400, 57600, 115200			
	Bi-directional			
Data flow	BI-directional			
Indicators				
Indicators:				
POWER	1 x LED, green			
LINK	1 x LED, yellow			
Connectors				
HDMI	1 x Type A, 19-pin female			
HDBaseT OUT	1 x RJ45			
HOST	1 x USB Type B			
DEVICE	1 x USB Type A			
RS-232	1 x 3-pin captive screw			
Environmental	Fahrenheit	Celsius		
Operating Temperature	+32 to +104	0 to +40		
Operating Temperature	+32 to +104	0 to +40		
Operating Temperature Storage Temperature Operating Humidity (RH)	+32 to +104 -4 to +140	0 to +40		
Operating Temperature Storage Temperature Operating Humidity (RH) Power	+32 to +104 -4 to +140 20% to 90%, non-condensing	0 to +40 -20 to +60		
Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powere	0 to +40 -20 to +60		
Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powere 2.5 W USB device interface	0 to +40 -20 to +60		
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Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power BTU/h	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powere 2.5 W USB device interface 38.1	0 to +40 -20 to +60 d by RX)		
Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power BTU/h Dimensions (H x W x D) Unit	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powere 2.5 W USB device interface 38.1 Inches 4.07 x 1.80 x 2.63	0 to +40 -20 to +60 ed by RX) Millimeters 103 x 45 x 67		
Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power BTU/h Dimensions (H x W x D) Unit Weight	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powered 2.5 W USB device interface 38.1 Inches 4.07 x 1.80 x 2.63 Pounds	0 to +40 -20 to +60 d by RX) Millimeters 103 x 45 x 67 Kilograms		
Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power BTU/h Dimensions (H x W x D) Unit	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powere 2.5 W USB device interface 38.1 Inches 4.07 x 1.80 x 2.63	0 to +40 -20 to +60 ed by RX) Millimeters 103 x 45 x 67		
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Operating Temperature Storage Temperature Operating Humidity (RH) Power Consumption USB Power BTU/h Dimensions (H x W x D) Unit Weight Device	+32 to +104 -4 to +140 20% to 90%, non-condensing 11.18 W (includes 2.5 W for USB, powered 2.5 W USB device interface 38.1 Inches 4.07 x 1.80 x 2.63 Pounds	0 to +40 -20 to +60 d by RX) Millimeters 103 x 45 x 67 Kilograms		
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### Footnotes

(1) The AT-OME-EX-TX-WP is not compatible with the AT-UHD-HDVS-300 system for extending USB.

(2) HDMI input supports up to 4K/UHD @ 60 Hz YUV 4:4:4 8-bit. HDBaseT output supports 4K/UHD @ 60 Hz YUV 4:2:0 only. An input of 4K/UHD @ 60 Hz YUV 4:4:4 will be converted to output 4K/UHD @ 60 Hz YUV 4:2:0.



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