

Omega[™] 4K/UHD Wallplate Transmitter for USB-C with HDBaseT[™] Output and USB





Introduction

The Atlona **AT-OME-EX-TX-WPC** is an HDBaseT transmitter with USB-C input. It sends video up to 4K/30 4:4:4, plus embedded audio, control, and USB over distances up to 330 feet (100 meters). It features a US one-gang, Decora-style wallplate form factor, and includes interchangeable black and white wallplates and faceplates. Part of the Omega[™] Series of integration products for modern AV communications and collaboration, the OME-EX-TX-WPC is HDCP 2.2 compliant and extends RS-232 control signals. The USB-C input is ideal for AV interfacing with newer Mac®, Chromebook[™], and Windows® PCs, as well as smartphones and tablets. 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-WPC includes a PC host interface over USB-C, plus a USB 2.0 interface for 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.⁽¹⁾

Applications

• Complete system integration

The OME-EX-TX-WPC 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-WPC 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.



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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.

USB-C input for AV and data

- Immediate compatibility with laptops and tablets with USB-C ports supporting AV⁽²⁾.
- No need to provide USB-C to HDMI adapters.

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

- Transmits 4K/UHD video up to 330 feet (100 meters) with CAT6/6a/7 cable, or up to 295 feet (90 meters) using CAT5e 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-C 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⁽³⁾.

4K/UHD capability @ 30 Hz with 4:4:4 chroma subsampling

- Transmits high resolution video up to and including 4K/UHD @ 30Hz 4:4:4 8 bit.
- Supports video 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 powering over HDBaseT

- 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.

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 Type	Input - DisplayPort Alternate Mode (USB-C)				
	Output - HDBaseT				
Copy Protection	HDCP 1.4/2.2				
Pixel Clock	300MHz				
UHD/HD/SD	4096×2160(DCI)@30/24 Hz 3840×2160(UHD)@30/25/24 Hz 2560x1440@30 Hz 1920x1080p@60/59.94/50/30/29.97/25 /24/23.98 Hz		1920x1080i@30/29.97/25 Hz 1280x720p@60/59.94/50/30 Hz 720x576i/p@50 Hz 720x480i/p@60 Hz		
VESA All resolutions are 60Hz	2560×1600 1920×1200 1680×1050 1600×1200 1440×900 1400×1050 1280×1024		1280×800 1366×768 1360×768 1152×864 1024×768 800×600 640×480		
Color Space	YUV, RGB				
Chroma Subsampling	4:4:4				
Color Depth	8-bit, 10-bit, 12-bit				
Audio					
Pass-Through	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 Rate	24 Mbits/s max				
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

RS-232					
Default Parameters	115200, 8-bit, None, 1				
Use	Connected display or source control				
Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200				
Data flow	Bidirectional				



Connectors							
USB-C	1 - USB Type-C v3.1, 24-pin female						
HDBaseT OUT	1 - RJ45	1, 2 1 pin tomaio					
DEVICE	1 - USB Type-A						
RS-232	1 - captive screw, 3	-pin					
110 202							
Indicators and Controls							
PWR LED indicator	1 - LED, green	1 - LED, green					
LINK LED indicator	1 - LED, yellow	1 - LED, yellow					
Resolution / Distance	4K/UHD - Feet / Me	4K/UHD - Feet / Meters 1080p - Feet / Meters					
USB-C	6	2	6	2			
CAT5e	295	90	330	100			
CAT6/6a/7	330	100	330	100			
0/10/00/1	000	100	000	100			
Power							
Consumption	Unit only: 8.68W Full load: 11.18W (v	Unit only: 8.68W Full load: 11.18W (while powering a USB type A device up to 2.5W)					
Supply	PoE via connected	PoE via connected receiver					
Temperature	Fabranbait		Celsius				
Operating		Fahrenheit		0 to 50			
Storage	-4 to 140	32 to 122					
Humidity (RH)		-4 to 140 -20 to 60 20% to 60%, non-condensing					
	2070 10 0070, 11011-0	ondensing					
Dimensions (H x W x D)	Inches	Inches		Millimeters			
Unit	4.07 x 1.80 x 2.63	4.07 x 1.80 x 2.63		103.50 x 45.80 x 67.00			
Weight	Pounds	Pounds		Kilograms			
Device	0.40			0.18			
Certification							
Device	CE, RoHS, FCC						
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Footnotes

- 1 The OME-EX-TX-WPC is not compatible with the Atlona HDVS-300 system for USB extension.
- 2 USB-C port does not support device powering.
- 3 Maximum 120 Mbps data rate supported over HDBaseT.



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