





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.



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.



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	
VESA 21:9	2560x1080 @ 30 Hz 4:4:4 2560x1080 @ 60 Hz 4:4:4 3440x1440 @ 30 Hz 4:4:4	3440x1440 @ 50 Hz 4:4:4 3840x1600 @ 30 Hz 4:4:4	
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
Internal Hubs	1 USB hub

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, 24-pin female
HDBaseT OUT	1 - RJ45
DEVICE	1 - USB Type-A
RS-232	1 - captive screw, 3-pin

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

Resolution / Distance	4K/UHD - Feet / Me	ters	1080p - Feet / Meter	rs
USB-C	6	2	6	2
CAT5e	295	90	330	100
CAT6/6a/7	330	100	330	100

Power	
Consumption	Unit only: 12.5 W
	Full load: 15.07 W (while powering a USB type A device up to 2.5 W)
Supply	PoE via connected receiver
BTU/h	Unit only: 42.6
	Full load: 51.4 (while powering a USB type A device up to 2.5 W)

Temperature	Fahrenheit	Celsius
Operating	+32 to +104	0 to +40
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 60%, non-condensing	

Dimensions (H x W x D)	Inches	Millimeters
Unit	4.07 x 1.80 x 2.63	103.50 x 45.80 x 67.00

Weight	Pounds	Kilograms
Device	0.40	0.18

Certification		
Device	CE, RoHS, FCC	

Compliance	
NDAA-899	Yes
TAA	Yes

Warranty	
Device	To view the product warranty, use the following link:
	https://atlona.com/warranty

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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