Introduction

The Atlona **AT-OME-EX-TX-WPC** is an HDBaseT transmitter with USB-C input. It sends 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-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 @ 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 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	
HDMI Specification	HDMI 2.0, HDCP 2.2
Pixel Clock	300 MHz
UHD/HD	4096×2160(DCI)@60[4]/30/24 Hz, 3840×2160(UHD)@60[4]/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
USB-C	Up to 4K/UHD @ 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	
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	
RS-232	Pass-through from control system to sink device; supports baud rates from 2400 to 115200

Connectors	
USB-C	1 - USB Type-C v3.1, 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 / Meters		1080p - Feet / Meters	
USB-C	6	2	6	2
CAT5e	295	90	330	100
CAT6/6a/7	330	100	330	100

Power	
Consumption	11.18 W (includes 2.5 W for USB, powered by RX)
USB Power	2.5 W USB device interface

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

Chassis		
Dimensions (H x W x D)	4.07 in x 1.80 in x 2.63 in 103.50 mm x 45.80 mm x 67.00 mm	
Weight	0.40 lb, 180 g	
Safety	CE, RoHS, FCC	

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.
(4) Only supports 4:2:0.