

AT-OME-EX-TX-WP
Specification Sheet

Omega™ HDBaseT Transmitter + USB Wall Plate

Description

The 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®-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 AT-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 AT-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.

Applications

Complete System Integration

- The AT-OME-EX-TX-WP and AT-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 Halls and Training Rooms

- Extend AV connectivity from an AT-OME-PS62 in a central equipment rack to lecterns as well as wall and floor box locations, where presenters can easily access the system.

Video Conferencing

- With a compatible Omega Series receiver or switcher, ideal for soft codec and web-based conferencing with PCs, cameras, speakerphones, and microphones.

Key Features

US one-gang enclosure for Decora®-style wallplate openings, with 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 using HDBaseT technology

- Transmits up to 330 feet (100 meters) at 1080p with Cat 5e/6 or at 4K/UHD with Cat 6a/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 a host PC, plus a USB Type-A port for a peripheral device such as a microphone, speakerphone, or keyboard and mouse.
- Provides an ideal USB integration solution for software video conferencing and interactive collaboration.

4K/UHD capability at 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 the latest specification for High-bandwidth Digital Content Protection.
- Allows protected content to pass between authenticated devices.

Remote PoE powering

- IEEE 802.3af PoE is supplied by a compatible receiver or switcher over HDBaseT.
- Allows convenient wall, floor box, or furniture installation without 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) @ 24, 30, 60 Hz 3840 × 2160 (UHD) @ 24, 25, 30, 50, 60 Hz 1920 × 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 Hz 1920 × 1080i @ 25, 29.97, 30 Hz 1280 × 720p @ 30, 50, 59.94, 60 Hz 4K/UHD @ 50/60 Hz is output over HDBaseT as 4:2:0 (see note)
VESA	2560 × 1600 (RB), 2048 × 1536, 2048 × 1200, 2048 × 1080, 1920 × 1200 (RB), 1920 × 1080 (RB), 1680 × 1050, 1600 × 1200, 1600 × 900, 1440 × 900, 1400 × 1050, 1366 × 768, 1360 × 768, 1280 × 1024, 1280 × 800, 1280 × 768, 1280 × 720, 1024 × 768, 848 × 480, 800 × 600, 640 × 480 — @ 60 Hz; 1152 × 870 @ 75 Hz
VESA 21:9	2560 × 1080 @ 30 Hz 4:4:4 2560 × 1080 @ 60 Hz 4:4:4 3440 × 1440 @ 30 Hz 4:4:4 3440 × 1440 @ 50 Hz 4:4:4 3840 × 1600 @ 30 Hz 4:4:4
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-bit
Sample Rate	32, 44.1, 48, 88.2, 96, 176.4, 192 kHz

Cable / Resolution	4K/UHD	1080p
HDMI IN / OUT	15 ft (5 m)	30 ft (10 m)
Cat 5e / 6	295 ft (90 m)	330 ft (100 m)
Cat 6a / 7	330 ft (100 m)	330 ft (100 m)

USB	
Signal	USB 2.0
Maximum Data Rate	120 Mbps
Internal Hubs	1 USB hub

CEC	
Port	HDMI, Type A, 19-pin female
Triggering	Through IP, RS-232, and built-in web server

RS-232	
Port	1× 3-pin captive screw
Use	Pass-through from control system to sink device
Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200
Data Flow	Bi-directional

Indicators	
POWER	1× LED, green
LINK	1× LED, yellow

Connectors	
HDMI	1× HDMI Type A, 19-pin female
HDBaseT OUT	1× RJ45
HOST	1× USB Type-B
DEVICE	1× USB Type-A
RS-232	1× 3-pin captive screw

Environmental	Fahrenheit	Celsius
Operating Temperature	+32 to +104 °F	0 to +40 °C
Storage Temperature	-4 to +140 °F	-20 to +60 °C
Operating Humidity (RH)	20% to 90%, non-condensing	

Power	
Consumption	11.18 W (includes 2.5 W for USB; powered by the receiver)
USB Power	2.5 W, USB device interface
BTU/h	38.1

Dimensions (H × W × D)	Inches	Millimeters
Unit	4.07 × 1.80 × 2.63 in	103 × 45 × 67 mm

Weight	Pounds	Kilograms
Device	0.40 lb	0.18 kg

Certifications	
Device	FCC, CE

Compliance	
NDAA-889	Yes
TAA	Yes

Warranty	
Device	To view the product warranty, visit: hallresearch.com/warranty

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

The HDMI input supports up to 4K/UHD @ 60 Hz YUV 4:4:4 8-bit. The HDBaseT output supports 4K/UHD @ 60 Hz YUV 4:2:0 only; a 4K/UHD @ 60 Hz 4:4:4 input is converted to 4:2:0 at the output.

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