



Introduction

The Atlona **AT-OME-EX-TX** is an HDBaseT transmitter for video up to 4K/60 4:2:0, plus embedded audio, control, Ethernet, and USB over distances up to 330 feet (100 meters). Part of the Omega™ Series of integration products for modern AV communications and collaboration, the OME-EX-TX is HDCP 2.2 compliant and transmits IR, RS-232, and IP 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 includes a USB host 2.0 host interface for a PC, plus two peripheral devices such as a speaker phone, microphone, or keyboard and mouse. This transmitter is ideal for use with Omega Series receivers as well as switchers with HDBaseT inputs. Also available is the OME-EX-KIT which includes the OME-EX-TX and OME-EX-RX⁽¹⁾.

Applications

- Complete system integration**
 The OME-EX-TX 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.
- Larger system applications**
 This transmitter is ideal for extending AV connectivity from a central equipment rack to a meeting table or lectern, where presenters can easily access the system.
- Video conferencing**
 The OME-EX-TX 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

HDBaseT transmitter for HDMI, Ethernet, power, control, and USB up to 330 feet (100 meters)

- Transmits HDMI 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 hub and extension over HDBaseT

- USB type-B interface for connection to a host PC, plus two USB type-A ports for peripheral devices such as a microphone or speakerphone.
- Provides an ideal USB integration solution for software video conferencing and other applications.

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.

Transmitter powered by receiver via PoE (Power over Ethernet)

- Industry standard IEEE 802.3af PoE for transmitter is supplied by receiver over HDBaseT.
- Allows convenient transmitter installation at a table or other remote location, without the need for local AC power.

Low-profile, 1 inch (25 millimeter) high quarter rack-width enclosure

- Easy installation into racks and confined spaces.
- Keeps devices out-of-sight when placed in public spaces.

Specifications

| Video | | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Signal | Input - HDMI Output - HDBaseT | |
| Copy Protection | HDCP 2.2 | |
| Pixel Clock | 300 MHz | |
| UHD/HD/SD | 4096×2160 (DCI) @ 60 ⁽²⁾ /30/24 Hz 3840×2160 (UHD) @ 60 ⁽²⁾ /50/24/25/ 30 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 | |
| VESA All resolutions are 60Hz | 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 | |
| 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 bits | | |
| 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 |

| Resolution / Distance | 4K/UHD - Feet / Meters | | 1080p - Feet / Meters | |
|-----------------------|------------------------|-----|-----------------------|-----|
| HDMI IN/OUT | 15 | 5 | 30 | 10 |
| CAT5e | 295 | 90 | 330 | 100 |
| CAT6/6a/7 | 330 | 100 | 330 | 100 |

| Control | |
|-------------|------------------------------------------------------------------------------------------------------------------------|
| RS-232 | Pass-through from control system to sink device Supported baud rates: 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| IP | Pass-through from TX to RX Supports up to 100 Mbps over HDBaseT |
| IR | Pass-through from control system to sink device |
| CEC Support | Yes |

| Buttons and Indicators | |
|------------------------|-----------------|
| Indicators: | |
| PWR | 1 x LED, green |
| LINK | 1 x LED, yellow |

| Connectors | |
|-------------|-------------------------------------------------|
| HDMI IN | 1 x Type A, 19-pin female |
| HDBaseT OUT | 1 x RJ45 |
| DEVICE | 2 x USB Type A |
| HOST | 1 x USB Type B |
| LAN | 1 x RJ45 |
| RS-232 / IR | 1 x 4-pin captive screw (1 x RS-232, 1 x IR) |
| FW | 1 x Type mini-B, 5-pin female |

| Environmental | Fahrenheit | Celsius |
|-------------------------|----------------------------|------------|
| Operating Temperature | 0 to +122 | -18 to +50 |
| Storage Temperature | -4 to +140 | -20 to +60 |
| Operating Humidity (RH) | 20% to 90%, non-condensing | |

| Power | |
|-----------------------|------------------------------------------------------|
| Consumption | 14.8 W |
| USB Power | 2.5 W per USB device interface |
| BTU/h | 50.5 |
| External Power Supply | 100 - 240 V AC, 50/60 Hz Output: 48 V / 0.83 A DC |

| Dimensions (H x W x D) | Inches | Millimeters |
|------------------------|--------------------|----------------|
| Unit (TX / RX) | 1.02 x 4.29 x 5.00 | 26 x 109 x 127 |

| Weight | Pounds | Kilograms |
|--------|--------|-----------|
| Device | 0.89 | 0.41 |

| Certification | |
|---------------|---------------|
| Device | CE, RoHS, FCC |

| Compliance | |
|------------|-----|
| NDA-899 | Yes |
| TAA | Yes |

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

Footnotes

- (1) Both the AT-OME-EX-TX and AT-OME-EX-RX are not compatible with the AT-UHD-HDVS-300 system for extending USB.
- (2) Only supports 4:2:0.

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