

Avance<sup>™</sup> **4K/UHD HDMI Over HDBaseT** TX/RX Kit





## Introduction

The Atlona AT-AVA-EX70-2PS-KIT is an HDBaseT transmitter/receiver kit in the Avance<sup>™</sup> Series, for video up to 4K/ UHD 60Hz 4:2:0 and HDMI data rates up to 10 Gbps. The AVA-EX70-2PS-KIT is HDCP 2.2 compliant and provides HDMI transmission up to 230 feet (70 meters) for 1080p video, and up to 130 feet (40 meters) for 4K/UHD over CAT6a/7 cable. This extender kit features integrated HDBaseT link status testing for quick verification of twisted pair cabling integrity, as well as HDMI clock stretching, EDID filtering, and HDMI signal regeneration for legacy HDMI source devices. The AVA-EX70-2PS-KIT delivers a cost-effective solution for HDMI extension, with locally powered transmitter and receiver endpoints as well as surface mounting hardware for discreet installation.

## **Applications**

- **Conference room** Transmit 4K/UHD content from a laptop or room PC to the flat panel display at the front of the room.
- Classroom Transmit 4K/UHD content from an instructor computer to a projector or flat panel display.
- **Residential** Advanced integration features ensure transmission of content to a remote TV at resolutions up to 4K/UHD



# **Key Features**

#### Long distance HDMI extension

- Transmitting 4K/UHD video up to 130 feet (40 meters) or 1080P video up to 230 feet (70 meters).
- Reliably send HDMI signals further using cost effective CAT-type twisted pair cable.

#### 4K/UHD capable

- Transmits high resolution video up to and including 4K/UHD @ 30Hz 4:4:4 8 bit, 4K/UHD @ 60Hz 4:2:0 8 bit, and 4K/UHD @ 30Hz 4:2:2 10bit.
- Ensures compatibility with common high resolutions source and display devices.

#### Integrated HDBaseT Link Testing

- Verifies cable, termination, and link quality.
- Quickly diagnose cable related issues and ensure reliable performance for all installations.

#### **HDMI clock stretching**

- Prevents loss of video due to source clock impairments.
- Improve interoperability with legacy HDMI sources and low quality HDMI video sources.

#### **EDID** filtering

- Prevents transmission of unsupported resolutions with large bandwidths.
- Increases integrity of video transmission.

#### Multi-channel audio compliant

- Supports PCM, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS-HD Master Audio, DTS:X.
- Allows any multi-channel audio stream to be used within a professional audio system.

#### **Compact enclosure**

- One inch high, quarter rack-width enclosures can be surface mounted in furniture, on a wall behind a display, or installed in a rack.
- Allows devices to be hidden from view.

#### Compatible with locking HDMI connectors for secure cable connections



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# **Specifications**

| Video                                  |  |  |  |
|--|--|--|--|
| Signal                                 | HDMI   |  |  |
| Copy Protection                        | HDCP 1.4/2.2   |  |  |
| Pixel Clock                            | 300MHz   |  |  |
| UHD/HD/SD                              | 4096x2160@60 <sup>(1)</sup> /50 <sup>(1)</sup> /30/25<br>3840×2160@60 <sup>(1)</sup> /50 <sup>(1)</sup> /30/25<br>1080p@60/59.9/50/30/29.97<br>24/23.98Hz<br>1080i@30/29.97/25Hz | 5/24Hz 576p@50Hz   |  |
| VESA<br>All resolutions are 60Hz       | 2560×1600<br>2048×1536<br>1920×1200<br>1680×1050<br>1600×1200<br>1440×900<br>1400×1050<br>1280×1024  | 1280×800<br>1366×768<br>1360×768<br>1152×864<br>1024×768<br>800×600<br>640×480 |  |
| 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<br>Pass-Through Formats | PCM 2.0<br>L PCM 5.1   | Dolby <sup>®</sup> Digital<br>Dolby Digital Plus™                              | DTS <sup>®</sup> Digital Surround™<br>DTS-HD Master Audio™ |

| Pass-Through Formats | LPCM 5.1<br>LPCM 7.1   | Dolby Digital Plus™<br>Dolby TrueHD<br>Dolby Atmos® | DTS-HD Master Audio™<br>DTS:X <sup>®</sup> |
|----------------------|--|---|--|
| Bit Depth            | up to 24-bit   |   |  |
| Sample Rate          | 32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz |   | 192 kHz                                    |

| Resolution / Distance | 4K/UHD - Feet / Me | ters | 1080p - Feet / Meter | rs |
|-----------------------|--------------------|------|----------------------|----|
| HDMI IN/OUT           | 15                 | 5    | 30                   | 10 |
| CAT5e/6               | 115                | 35   | 200                  | 60 |
| CAT6a/7               | 130                | 40   | 230                  | 70 |

| Control |              |
|---------|--------------|
| CEC     | Pass through |

| Buttons and Indicators |                          |
|------------------------|--------------------------|
| TEST button            | 1 - momentary, tact-type |
| Function Indicators:   |                          |
| Power                  | 1 - LED, green           |
| Link                   | 1 - LED, yellow          |
| Test                   | 1 - LED, multi-colored   |



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| Connectors                |   |                   |
|---------------------------|---|-------------------|
| HDMI IN (TX)              | 1 - Type A, 19-pin female                       |                   |
| HDBaseT OUT (TX)          | 1 - RJ45, female                                |                   |
| HDMI OUT (RX)             | 1 - Type A, 19-pin female                       |                   |
| HDBaseT IN (RX)           | 1 - RJ45, female                                |                   |
| FW - Firmware (RX and TX) | 1 - Micro-A USB                                 |                   |
| PWR                       | 1 - DC 5V locking connector                     |                   |
|                           |   |                   |
| Environmental             | Fahrenheit                                      | Celsius           |
| Operating                 | 32 to 122                                       | 0 to 50           |
| Storage                   | -4 to 140                                       | -20 to 60         |
| Humidity (RH)             | 20% to 60%, non-condensing                      |                   |
|                           |   |                   |
| Power                     |   |                   |
| Consumption (TX + RX)     | 7.71 W  |                   |
| Supply                    | Input: AC100~240V 50/60Hz<br>Output: DC 5V/3.0A |                   |
|                           |   |                   |
| Dimensions                | Inches  | Millimeters       |
| H x W x D                 | 0.93 x 4.2 x 2.95                               | 23.7 x 106.8 x 75 |
|                           | ·   |                   |
| Weight                    | Pounds  | Kilograms         |
| ТХ                        | 0.45  | 0.20              |
| RX                        | 0.50  | 0.23              |
|                           |   |                   |
| Certification             |   |                   |
| Device                    | CE, FCC   |                   |
| Supply                    | CE, FCC, cULus, RoHS                            |                   |
|                           |   |                   |

## **Accessories**

| SKU          | Description                            |
|--------------|--|
| AT-LC-H2H-1M | LinkConnect HDMI to HDMI 1 Meter Cable |
| AT-LC-H2H-2M | LinkConnect HDMI to HDMI 2 Meter Cable |
| AT-LC-H2H-3M | LinkConnect HDMI to HDMI 3 Meter Cable |

# **Footnotes**

(1) 4K/UHD @ 50/60Hz only supports 4:2:0 over HDBaseT.

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