Introduction

The Atlona AT-UHD-EX-100CE-TX is an HDBaseT™ transmitter for HDMI transmission up to 328 feet (100 meters) over category cable with Ethernet pass through, plus RS-232 and IR control. Designed to work with HDBaseT inputs on switchers and projectors, this extender transmits video signals up to 4K/UHD @ 60Hz with embedded multi-channel audio. Additionally, the transmitter extends Ethernet, RS-232, and 12 volt-based IR control commands. The AT-UHD-EX-100CE-TX is HDCP 2.2 compliant and supports EDID communication. The transmitter features a quarter rack width metal enclosure for easy rack mounting with rear panel I/O ports for uncluttered wire management. This PSE (Power Sourcing Equipment) device is externally powered, includes a desktop power supply and provides Power over Ethernet for compatible receiving devices. The AT-UHD-EX-100CE-TX is certified by the HDBaseT Alliance.

This HDBaseT Class A transmitter is designed to support the growing number of displays and video projectors in the commercial market with HDBaseT inputs. The AT-UHD-EX-100CE-TX provides extended distance, transmission of uncompressed, 4K/UHD HDMI signals from switchers and matrixes. Other applications include remote input signal transmission for the AT-UHD-CLSO-824 matrix switcher. Built-in Ethernet and bi-directional control signal extension eliminates the need for additional cabling from switcher to the display or remote input device. Installer-friendly features include: a rack-mountable form factor that allows four transmitters to share a single, 1U rack tray; power chaining to allow multiple sets to be powered from one power supply; and a front mounted USB port for easy firmware updates.

The AT-UHD-EX-100CE-TX is ideal for use in commercial point to point applications that require extended distance HDMI signal transmission to HDBaseT-equipped displays. The transmitter can be used with any 4K/UHD switcher, matrix switcher, or distribution amplifier. Support for multiple control signals allows the transmitter to work with a variety of third-party control systems to cost-effectively extend control signals within a system.

Key Features

4K/UHD capability

- Compatible with Ultra High Definition sources and displays.

- Future proofs AV systems in preparation for technology improvements, 4K/UHD streaming services and playback devices.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.

- Allows protected content to pass between devices.

PSE – Power Sourcing Equipment

- Uses external power supply (included).

- Eliminates the need for remote power or power-injection devices.

AV, Ethernet, power, and control over HDBaseT

- Delivers 4K/UHD video, audio, 100BaseT Ethernet, power, and control through a single cable.

- Eliminates multiple cable runs between source, control system, router, and display.

Extended distance HDMI extension

- Transmits HDMI signals up to 328 ft (100m) @ 1080P and 328 ft (100m) @ 4K/UHD using CAT6a/7 cable.

- Uses easy-to-integrate category cable for low-cost, reliable system installation.

Specifications

Video	
Signal	HDMI w/ARC
Copy Protection	HDCP 1.4
UHD/HD/SD	4096x2160@60[1]/50[1]/30/25/24Hz 720p@60/59.94/50Hz 3840×2160@60[1]/50[1]/30/25/24Hz 576p@50Hz 1080p@60/59.9/50/30/29.97/25/ 576i@25Hz 24/23.98Hz 480p@60/59.96Hz 1080i@30/29.97/25Hz 480i@30Hz
VESA All resolutions are 60Hz	2560×2048 1366×768 2560×1600 1360×768 2048×1536 1280×1024 1920×1200 1280×800 1680×1050 1152×768 1600×1200 1024×768 1400×1050 800×600 1440×900 640×480
Color Space	YUV, YCbCr, 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 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e/6	70	230	100	330
CAT6a/7	330	100	230	70

Control	
RS-232	Pass through, up to 115200 baud
CEC	Pass through

Buttons and Indicators	
Function Indicators: Power Link Test	 1 - LED, green 1 - LED, yellow 1 - LED, multi-colored

Connectors	
HDMI IN	1 - Type A, 19-pin female
HDBaseT OUT	1 - RJ45, female
LAN	1 - RJ45, 10/100/1000 Mbps
FW - Firmware	1 - Micro-A USB
PWR	1 - 2-pin 48V captive screw connector
RS-232	1 - 3-pin captive screw 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	15.2 W (when paired with RX)	
Supply	Input: AC100~240V 50/60Hz Output: DC 48V/0.83A	

Dimensions (H x W x D)	Inches	Millimeters
Unit	0.98 x 4.29 x 5	25 x 109 x 127
Unit w/Ears	1.06 x 4.69 x 5	27 x 119 x 127
Power Supply	1.06 x 4.69 x 5	27 x 119 x 127

Weight	Pounds	Kilograms
Unit	0.86	0.39

Certification		
Device	CE, FCC	
Power 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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