

4K/UHD Remote Powered HDMI over 100 M HDBaseT[™]

Transmitter with Ethernet, Control and PoE



Introduction

The Atlona AT-UHD-EX-100CE-TX-PD is an HDBaseT[™] transmitter for HDMI transmission up to 330 feet (100 meters) over category cable with Ethernet pass-through and RS-232 control. It transmits video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling, plus embedded multi-channel audio. The AT-UHD-EX-100CE-TX-PD 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 device is externally powered via Power over Ethernet, and is ideal for use with Atlona switchers with PoE-equipped HDBaseT inputs, including the AT-UHD-CLSO-612ED, AT-UHD-CLSO-824, and AT-UHD-SW-5000ED.

The AT-UHD-EX-100CE-TX-PD transmitter simplifies system design when powered by an Atlona switcher with HDBaseT inputs, reducing cost and complexity by eliminating the need for a power supply. It can also be paired with the AT-UHD-EX-100CE-RX-PSE receiver and AT-HDVS-200-RX scaling receiver, both delivering PoE. Installer-friendly features include a rack-mountable form factor that allows four transmitters to share a single 1U rack tray, and a front mounted USB port for easy firmware updates.

Key Features

4K/UHD capability @ 60 Hz with 4:2:0 chroma subsampling

- Compatible with Ultra High Definition sources and displays.
- Full support of 4K/UHD streaming services and playback devices.

HDCP 2.2 compliant

- Adheres to latest specification for High-bandwidth Digital Content Protection.
- Allows protected content stream to pass between devices.

Remotely powered via PoE (Power over Ethernet)

- IEEE 802.3af PoE Powered Device (PD).
- Power for transmitter is supplied by receiver over HDBaseT.
- Saves time and integration costs.

AV, Ethernet, power, and control over HDBaseT

- Delivers 4K/UHD video, audio, 100Base-T 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 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.

AT-UHD-EX-100CE-TX-PD



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Specifications

Video		
Signal	HDMI w/ARC	
Copy Protection	HDCP 1.4	
UHD/HD/SD	4096x2160@60 ⁽¹⁾ /50 ⁽¹⁾ /30/25/24Hz 3840×2160@60 ⁽¹⁾ /50 ⁽¹⁾ /30/25/24Hz 1080p@60/59.9/50/30/29.97/25/ 24/23.98Hz 1080i@30/29.97/25Hz	720p@60/59.94/50Hz 576p@50Hz 576i@25Hz 480p@60/59.96Hz 480i@30Hz
VESA All resolutions are 60Hz	2560×2048 2560×1600 2048×1536 1920×1200 1680×1050 1600×1200 1400×1050 1440×900	1366×768 1360×768 1280×1024 1280×800 1152×768 1024×768 800×600 640×480
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 / Me	ters	1080p - Feet / Meter	ſS
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	1 - LED, green
Link	1 - LED, yellow
Test	1 - LED, multi-colored



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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		
RS-232	1 - 3-pin captive screw connector	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			
	15.2 W (when paired with RX)		
Consumption	15.2 W (When palled With RA)		
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	
Weight	Pounds	Kilograms	
Unit	0.89	0.39	
Certification			
	05.500		
Device	CE, FCC		

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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