

Introduction

The Atlona **AT-UHD-EX-100CE-RX-PSE** is a 4K/UHD HDMI over 100M HDBaseT receiver for AV signals up to 330 feet (100 meters) over category cable with Ethernet pass-through, RS-232, CEC, and Power over Ethernet. It receives video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling, plus embedded multi-channel audio. The AT-UHD-EX-100CE-RX-PSE is HDCP 2.2 compliant and supports EDID communication. It is ideal for use with the AT-UHD-EX-100CE-TX-PD HDBaseT transmitter, or an HDVS-200 Series HDBaseT switcher for extending 4K signals to a display. This receiver features a quarter rack width metal enclosure, with rear panel I/O ports for uncluttered wire management. The AT-UHD-EX-100CE-RX-PSE is externally powered by the included power supply, and provides Power over Ethernet for the AT-UHD-EX-100CE-TX-PD, an HDVS-200 HDBaseT switcher, or other PoE-compatible HDBaseT transmitter.

Applications

- 4K/UHD signal capability is required as part of the system design
- The HDBaseT transmitter will be at a lectern, conference table, or wall location where AC power may be unavailable or expensive to provide

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.

Supports 4K HDR10 @ 24 Hz

- Extends 4K HDR10 @ 24 Hz (4:2:0 chroma subsampling, 10-bit color).

PoE power source – remotely powers a PoE-compatible transmitter

- IEEE 802.3af PoE Power Sourcing Equipment (PSE).
- Uses external power supply (included) to power a PoE-compatible transmitter over HDBaseT.
- Eliminates the need for the receiver to be powered remotely or by a power-injection device.

AV, Ethernet, power, and control over HDBaseT⁽¹⁾

- Receives 4K/UHD video, embedded 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

- Receives 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.

Extends RS-232, CEC, and Ethernet control signals⁽²⁾

- Control signals travel over HDBaseT link to device for maximum control system flexibility.
- Simplifies integration of source, control system, and display.

Rear panel I/O connectors

- Placement of ports on rear panel simplifies wire management.
- Saves installation time and eliminates clutter.

Multi-channel audio compliant

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

Field-updatable firmware

- Front panel USB port provides an easy means for device updates.
- Ensures long-term system return on investment.

Front panel Power and Link status LEDs

- LED indicators provide power and HDBaseT link status information.
- Provides easy setup and troubleshooting.

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

- Easy installation into confined spaces behind displays and above projectors.
- Keeps devices out-of-sight when placed in public spaces.

Included accessories

- User guide, surface mounting brackets, and external universal power supply.

Award-winning 10 year limited product warranty

- Ensures long-term product reliability and performance in residential and commercial systems.
- Specify, purchase, and install with confidence.

Specifications

Video			
HDMI Specification	HDMI 2.0, HDCP 1.4 / 2.2		
UHD/HD/SD	4096×2160 (DCI) @ 24/25/30/50/60 Hz ⁽³⁾ 3840×2160 (UHD) @ 24/25/30/50/60 Hz ⁽³⁾ 2048×1080p 1080p @ 23.98/24/25/29.97/30/50/59.94/60 Hz 1080i @ 50/59.94/60 Hz		720p @ 50/59.94/60 Hz 576p 576i 480p 480i
VESA	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
Color Space	YCbCr, RGB		
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0		
Color Depth	8-bit, 10-bit, 12-bit		
HDR ⁽⁴⁾	4K HDR10 @ 24Hz, 4:2:0 chroma subsampling, 10-bit color		

Audio	
Formats	PCM 2Ch, LPCM 5.1, LPCM 7.1, Dolby® Digital, DTS® 5.1, Dolby Digital Plus, Dolby TrueHD, DTS-HD Master Audio™, Dolby Atmos®, DTS:X
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Bit Depth	Up to 24-bit

Control	
RS-232	Device control and configuration; supports baud rates from 2400 to 115200
IP	Device control and configuration
CEC	Device control and configuration

Connectors	
HDMI OUT	1 - Type A, 19-pin female, locking
HDBaseT IN	1 - RJ45
LAN ⁽³⁾	2 - RJ45, 10/100/1000 Mbps
RS-232	1 - 3-pin captive screw
FW	1 - Type mini-B, 5-pin female
DC 48V	1 - 3-pin DIN connector, locking

Controls and Indicators	
Indicators: POWER LINK	1 - LED, green 1 - LED, amber

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

Signal	
Maximum TMDS Clock	300 MHz
HDBaseT	10.2 Gbps
CEC	2.0

Power	
Consumption	15.2 W (when paired with TX)
External Power Supply	Input: 100 - 240 V AC 50/60 Hz Output: 48 V DC / 0.83 A
Safety	CE, FCC, RoHS, cULus, RCM, CCC

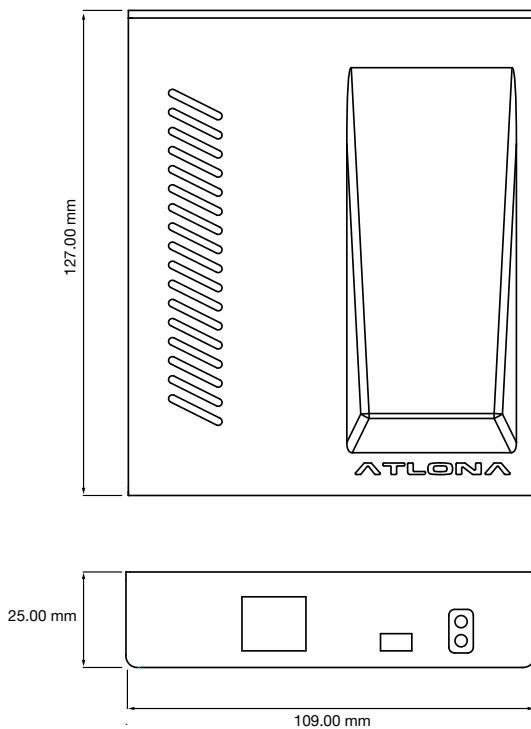
Environmental	
Operating Temperature	32 to +122 °F 0 to +50 °C
Storage Temperature	-4 to +140 °F -20 to +60 °C
Operating Humidity (RH)	+20 to +90%, non-condensing

Chassis	
Dimensions (H x W x D)	25 mm x 109 mm x 127 mm 0.98 in x 4.29 in x 5 in
with ears	27 mm x 119 mm x 127 mm 1.06 in x 4.69 in x 5.00 in
Weight	0.86 lb, 0.39 kg
Safety	CE, FCC

Accessories

Description	SKU
LinkConnect HDMI to HDMI Cable	AT-LC-H2H-1M / 2M / 3M
LinkConnect Mini DisplayPort to HDMI Cable	AT-LC-MDP2H-1M / 2M / 3M

Drawings



- (1) Ethernet pass-through is not available on the AT-UHD-EX-100CE-RX-PSE receiver when used with the UHD-PRO3 Series matrix switchers.
- (2) The AT-UHD-EX-100CE-RX-PSE does not include I/O ports for IR control signals extended over HDBaseT. If IR control over HDBaseT is required, please refer to the AT-UHD-EX-100CE-RX.
- (3) 4096×2160 @ 50/60 Hz & 3840×2160 @ 50/60 Hz is restricted to 4:2:0 8-bit chroma subsampling.