



Introduction

The Atлона AT-UHD-EX-70C-KIT is an HDBaseT™ transmitter/receiver kit for HDMI transmission up to 230 feet (70 meters) over category cable with RS-232 and IR control plus Power over Ethernet capability. The kit transmits video signals up to 4K/UHD @ 60Hz with embedded multi-channel audio and remote 48V power for the receiver. The kit provides bidirectional extension of both 12 volt IR and RS-232 commands. The kit is HDCP 2.2 compliant and supports EDID communication. Both transmitter and receiver feature quarter rack width metal enclosures for easy rack mounting with rear panel I/O ports for uncluttered wire management.

The AT-UHD-EX-70C-KIT provides integrator-friendly features including: IEEE standards-based PoE transmission for safety and compatibility; HDCP 2.2 compliant for meeting the latest copy protection requirements; rack-mountable form factor for accommodating four transmitters in a single 1U rack tray; power chaining for powering multiple devices from one power supply; and front mounted USB port for easy firmware updates.

The AT-UHD-EX-70C-KIT is ideal for use in residential or commercial point to point applications that require HDBaseT signal transmission over greater distances than HDMI can support. As a transmitter/receiver pair, the kit can be used with the H2H matrix switcher series and third party control systems for long distance AV signal and control extension with PoE capability. On its own, the AT-UHD-EX-70C-RX receiver is designed to take advantage of the powerful UHD-PRO3 series matrices to receive AV, remote power, and control signals.

Key Features

4K/UHD capability

- 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 authenticated devices.

Remote-powered receiver

- Industry standard IEEE 802.3af PoE for receiver is supplied by transmitter over HDBaseT.
- Saves time and integration costs.

Long distance HDMI extension

- Transmits HDMI signals up to 230 ft (70m) @ 1080P and 130 ft (40m) @ 4K/UHD using CAT6a/7 cable.
- Uses easy-to-integrate category cable for low-cost, reliable system installation.

AV, power, and control over HDBaseT

- Delivers 4K/UHD video, audio, power, and control through a single cable.
- Eliminates multiple cable runs between source, control system, router, and display.

Multi-channel audio compliant

- Supports PCM, Dolby Digital, Dolby Digital Plus™, Dolby TrueHD, Dolby Atmos®, DTS Digital Surround™, DTS-HD Master Audio™, 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 kit upgrades.
- 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.

Power chaining

- Included power supply provides ample power for up to three Atlona HDBaseT extenders.
- Four Atlona HDBaseT extenders can be powered using the optional AT-PS-483125-C power supply.
- Reduces clutter from multiple power supplies in equipment racks.

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 ⁽¹⁾
HDCP	1.4, 2.2
UHD/HD/SD	4096x2160 (DCI) @ 24/25/30/60 ⁽²⁾ Hz 720x576p @ 50 Hz 3840x2160 (UHD) @ 24/25/30/60 ⁽²⁾ Hz 720x576i @ 50 Hz 1920x1080p @ 23.98/24/25/29.97/30/50 720x480p @ 60 Hz /59.94/60 Hz 640x480p @ 60 Hz 1920x1080i @ 50/59.94/60 Hz 1280x720p @ 50/59.94/60 Hz
VESA	2560x2048 @ 60 Hz 1366x768 @ 60 Hz 2560x1600 @ 60 Hz 1360x768 @ 60 Hz 2048x1536 @ 60 Hz 1280x1024 @ 60 Hz 1920x1200 @ 60 Hz 1280x800 @ 60 Hz 1680x1050 @ 60 Hz 1280x768 @ 60 Hz 1600x1200 @ 60 Hz 1152x768 @ 60 Hz 1600x900 @ 60 Hz 1024x768 @ 60 Hz 1440x900 @ 60 Hz 800x600 @ 60 Hz 1400x1050 @ 60 Hz 640x480 @ 60 Hz
Color Space	YCbCr, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR ⁽³⁾	4K HDR10 @ 24Hz, 4:2:0 chroma subsampling, 10-bit color

Audio			
Pass-Through Formats	PCM 2Ch LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		
Bit Rate	24 Mbits/s max		

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

Connectors and Indicators	
HDMI IN (TX)	1 - Type A, 19-pin female
HDMI OUT (RX)	1 - Type A, 19-pin female
HDBaseT IN (RX)	1 - RJ45 (8P8C), 568-B termination
HDBaseT OUT (TX)	1 - RJ45 (8P8C), 568-B termination
RS-232	1 - 3-pin captive screw
IR IN / IR OUT (TX/RX)	1 - 4-pin captive screw
FW (TX/RX)	1 - Mini USB Type-B, 5-pin female
DC 48V (TX)	1 - 2-pin captive screw
LED (TX/RX)	1 - PWR, green 1 - LINK, amber

Resolution / Distance	4K/UHD - Feet	4K/UHD - Meters	1080p - Feet	1080p - Meters
CAT5e/6	115	35	197	60
CAT6a/7	130	40	230	70
HDMI IN/OUT	15	5	30	10

Signal	
Maximum TMDS Clock	300 MHz
HDBaseT	10.2 Gbps
CEC	2.0

Power	
Total Power Consumption	10.89 W
External Power (optional)	Input: 100 - 220 V AC, 50/60 Hz Output: DC 48V / 0.83A

Environmental	Fahrenheit	Celsius
Operating	32 to 122	0 to 50
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 60%, non-condensing	

Dimensions (H x W x D)	Inches	Millimeters
Unit	0.98 x 4.29 x 3.5	25 x 109 x 89
Unit w/Ears	1.06 x 4.69 x 3.5	27 x 119 x 89
Power Supply	1.42 x 1.81 x 4.41	36 x 46 x 112

Weight	Pounds	Kilograms
TX	0.59	0.27
RX	0.73	0.33

Certification	
Device	CE, FCC
Power Supply	CE, FCC, RoHS, cULus, RCM, CCC

Accessories

Description	SKU
48 V / 0.3 A DC Power Supply	AT-PS-483125-C
LinkConnect HDMI to HDMI Cable	AT-LC-H2H-1M / 2M / 3M
LinkConnect Mini DisplayPort to HDMI Cable	AT-LC-MDP2H-1M / 2M / 3M
Architectural Cable Access Enclosure	AT-PKT-3H

Footnotes

- (1) UHDp60 only supports 4:2:0.
- (2) 4096x2160 @ 50/60 Hz and 3840x2160 @ 50/60 Hz supports 4:2:0 8-bit chroma subsampling only.