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Introduction

The Atlona **AT-OPUS-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. HDCP 2.2 compliance ensures compatibility with the latest copy protection requirements and EDID communication is supported. Included brackets allow the devices to be surface mounted on furniture or behind a display. For higher density applications, the transmitter's compact enclosure allows four to be mounted in a single 1U rack tray, and they support power chaining for powering multiple units from one power supply. The AT-OPUS-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.

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**
  Transmit 4K/UHD content from central AV rack/closet to a remote TV.

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 transmitters.
- 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.

Specifications

Video	
Signal	HDMI
Copy Protection	HDCP 1.4, 2.2
Pixel Clock	300 MHz
UHD/HD/SD	4096x2160 (DCI) @ 24/25/30/60[1] Hz 720x576p @ 50 Hz 3840x2160 (UHD) @ 24/25/30/60[1] 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 640x480i @ 30 Hz 1280x720p @ 50/59.94/60 Hz
VESA	2560×2048 @ 60 Hz 1366×768 @ 60 Hz 2560×1600 @ 60 Hz 1360×768 @ 60 Hz 2048×1536 @ 60 Hz 1280×1024 @ 60 Hz 1920×1200 @ 60 Hz 1280×800 @ 60 Hz 1680×1050 @ 60 Hz 1280×768 @ 60 Hz 1600×1200 @ 60 Hz 1152×768 @ 60 Hz 1600×900 @ 60 Hz 1024×768 @ 60 Hz 1440×900 @ 60 Hz 800×600 @ 60 Hz 1400×1050 @ 60 Hz 640×480 @ 60 Hz
Color Space	YUV, RGB
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0
Color Depth	8-bit, 10-bit, 12-bit
HDR	4K HDR10 @ 24Hz, 4:2:0 chroma subsampling, 10-bit color

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®
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		
Bit Depth	Up to 24 bits		

Control	
RS-232	Pass-through, up to 115200 baud
IR	Pass-through, 30 kHz to 60 kHz
CEC	Pass-through

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

Indicators AT-UHD-70C-TX	
Indicators:	
POWER	1 x LED, green
LINK	1 x LED, amber
AT-OPUS-RX	
Indicators:	
PWR	1 x LED, green
LINK	1 x LED, amber
LINK	1 x LED, red
PoE	1 x LED, green

Connectors AT-UHD-70C-TX	
HDMI IN	1 x Type A, 19-pin female
HDBaseT OUT	1 x RJ45
IR IN / IR OUT	1 x 5-pin, captive screw
RS-232	1 x 3-pin, captive screw
FW	1 x Mini USB Type-B, 5-pin, female
DC 48V	1 x 2-pin captive screw
AT-OPUS-RX	
HDMI OUT	1 x Type A, 19-pin female
HDBaseT IN	1 x RJ45
ETHERNET[2]	1 x RJ45
IR IN / IR OUT	1 x 5-pin, captive screw
RS-232	1 x 3-pin, captive screw
AUDIO IN[3]	1 x TOSLINK™
DEBUG	1 x Mini USB Type-B, 5-pin, female

Environmental	Fahrenheit	Celsius
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	

Power AT-UHD-70C-TX	Watts	BTU/h
Consumption	3.7	12.6
AT-OPUS-RX		
Consumption	6.6	22.5
External Power Supply	100 - 240 V AC, 50/60 Hz Output: 48 V / 0.83 A DC	

Dimensions (H x W x D) AT-UHD-70C-TX	Inches	Millimeters
Unit	0.93 x 4.2 x 2.95	23.7 x 106.8 x 75
AT-OPUS-RX		
Unit	1.02 x 6.86 x 3.51	26 x 174.2 x 89.16

Weight AT-UHD-70C-TX	Pounds	Kilograms
Device	0.59	0.27
AT-OPUS-RX		
Device	0.99	0.45

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

Compliance	
NDAA-889	Yes
TAA	Yes

Warranty	
Device	To view the product warranty, use the following link: https://atlona.com/warranty

Footnotes

(1) 4096×2160 @ 50/60 Hz and 3840×2160 @ 50/60 Hz supports 4:2:0 8-bit chroma subsampling only.
(2) RX Ethernet port is not supported and is not functional for this kit.
(3) RX Optical input / Toslink is not supported and is not functional for this kit.

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