



Introduction

The Atlona **AT-HDR-EX-100CEA-TX** is a HDBaseT™ transmitter for 4K and high dynamic range (HDR) content. It supports extension of 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling plus HDR data, multi-channel audio, Ethernet, control signals, and power up to 330 ft (100 m) over Category 6/6A cable.

The HDR-EX-100CEA-TX is ideal for use with the AT-HDR-EX-100CEA-RX receiver for transmitting 4K HDR in point-to-point applications. It can also be used with the AT-UHD-CLSO-824 and AT-UHD-SW-5000ED for transmitting 4K/UHD @ 60 Hz 4:2:0 signals to the switchers from a remote source.

Key Features

- HDBaseT transmitter for use with the AT-HDR-EX-100CEA-RX receiver.
- 4K/UHD capability @ 60Hz with 4:4:4 chroma sampling
- Supports HDR10, HLG, and Dolby® Vision™ HDR formats.
- Features visually lossless compression with no latency to enable HDR and 4K/60 4:4:4 video signal extension over HDBaseT.
- HDBaseT output transmits AV, Ethernet, control signals, and power up to 330 feet (100 meters) for both 4K HDR and 1080p with Category 6/6A.
- Extends bidirectional RS-232 and IR control signals over HDBaseT.
- Provides remote power over HDBaseT to compatible receivers such as the AT-HDR-EX-100CEA-RX.
- Compliant with HDCP 2.2, the latest specification for passing protected content between devices.
- HDBaseT link status testing allows verification of cable, termination, and link quality for more reliable installations.
- Provides a TOSLINK return audio pathway from a display over HDBaseT when used with a compatible receiver such as the AT-HDR-EX-100CEA-RX.
- Front panel Power and Link status LEDs.
- Front panel USB port for firmware updates.
- Rear panel connections simplify wire management and save installation time.
- Compact enclosure can be mounted in furniture, a lectern, or an equipment rack.
- Compatible with AT-UHD-CLSO-824 and AT-UHD-SW-5000ED switchers for transmission of 4K/UHD @ 60Hz 4:2:0 signals.

Specifications

Video		
Signal	Input - HDMI Output - HDBaseT	
Copy Protection	HDCP 2.2	
Pixel Clock	600 MHz	
HD/SD	4096×2160 @ 24/25/30/50/60Hz 720p@50/59.94/60Hz 3840×2160 @ 24/25/30/50/60Hz 720x576p 2048×1080p 720x576i 1920×1080p @ 23.98/24/25/ 29.97/30/50/59.94/60Hz 720x480p 1920×1080i @ 50/59.94/60Hz 720x480i	
VESA All resolutions are 60 Hz	2560×2048 1366×768 2560×1600 1360×768 2048×1536 1280×1024 1920×1200 1280×800 1680×1050 1280×768 1600×1200 1152×768 1600×900 1024×768 1440×900 800×600 1400×1050 640×480	
VESA 21:9 ⁽¹⁾	2560x1080 @ 30 Hz 4:4:4 3440x1440 @ 50 Hz 4:4:4 2560x1080 @ 60 Hz 4:4:4 3840x1600 @ 30 Hz 4:4:4 3440x1440 @ 30 Hz 4:4:4	
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	
HDR	Up to 4K HDR10 @ 60Hz, 4K Hybrid-Log Gamma (HLG) @ 60Hz, and 4K Dolby® Vision™ @ 60Hz ⁽²⁾	

Audio			
HDMI 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 bits		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

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

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e	295	90	330	100
CAT6/6a/7	330	100	330	100

Buttons and Indicators	Transmitter
Buttons: TEST	1 x momentary, tact-type
Indicators: TEST POWER, LINK	1 x LED, blue 2 x LED, green

Connectors	Transmitter
HDMI IN	1 x Type A, 19-pin female
HDBaseT OUT	1 x RJ45
OPTICAL OUT	1 x TOSLINK™
RS-232 / IR	1 x 5-pin captive screw
UTILITY	1 x Mini-USB
LAN	1 x RJ45
DC 48V	1 - 2-pin captive screw

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

Power	Transmitter
Consumption	6.9 W
BTU/h	23.6
External Power Supply	100 - 240 V AC, 50/60 Hz Output: 48 V / 0.83 A DC

Dimensions (H x W x D)	Inches	Millimeters
Device	1.02 x 5.74 x 3.74	26 x 146 x 95
Power Supply (AT-PS-48083-C)	1.42 x 1.81 x 4.41	36 x 46 x 112

Weight	Pounds	Kilograms
Device	0.89	0.40

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

Compliance	
NDAA-889	Yes
TAA	Yes
Warranty	
3 years	View the full warranty information here: https://atlona.com/warranty

Footnotes

(1) The following UltraWide Quad HD resolutions are NOT supported:

3440x1440P@50 10 bit 4:4:4
3440x1440P@60 10 bit 4:4:4
3840x1600P@60 8 bit 4:4:4.

(2) 4K Dolby® Vision™ @ 60 Hz is supported on systems capable of Low Latency Dolby Vision (LLDV) mode.
All other 4K modes limited to 30 Hz.

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