

AT-HDR-EX-100CEA-TX Specification Sheet

HDR HDBaseT Transmitter

Description

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 @ 60 Hz 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 @ 60 Hz 4:2:0 signals.

Specifications

Video	
Signal	Input: HDMI Output: HDBaseT
Copy Protection	HDCP 2.2
Pixel Clock	600 MHz
UHD / HD / SD	4096 × 2160 @ 24, 25, 30, 50, 60 Hz 3840 × 2160 @ 24, 25, 30, 50, 60 Hz 2048 × 1080p 1920 × 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 Hz 1920 × 1080i @ 50, 59.94, 60 Hz 720p @ 50, 59.94, 60 Hz 720 × 576p; 720 × 576i; 720 × 480p; 720 × 480i
VESA (all @ 60 Hz unless noted)	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
VESA 21:9	2560 × 1080 @ 30 Hz 4:4:4 2560 × 1080 @ 60 Hz 4:4:4 3440 × 1440 @ 30 Hz 4:4:4 3440 × 1440 @ 50 Hz 4:4:4 (1) 3840 × 1600 @ 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 @ 60 Hz, 4K Hybrid-Log Gamma (HLG) @ 60 Hz, and 4K Dolby® Vision™ @ 60 Hz (2)

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, 44.1, 48, 88.2, 96, 176.4, 192 kHz

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

Cable / Resolution	4K/UHD	1080p
HDMI IN	15 ft (5 m)	30 ft (10 m)
Cat 5e	295 ft (90 m)	330 ft (100 m)
Cat 6 / 6a / 7	330 ft (100 m)	330 ft (100 m)

Buttons and Indicators	
TEST (button)	1 × momentary, tact-type
TEST	1 × LED, blue
POWER, LINK	2 × LED, green

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

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

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

Weight	Pounds	Kilograms
Device	0.89	0.40

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

Compliance	
NDAA-889	Yes
TAA	Yes

Warranty	
Device	To view the product warranty, visit: hallresearch.com/warranty

(1) The following UltraWide Quad HD resolutions are NOT supported: 3440 × 1440p @ 50 Hz 10-bit 4:4:4; 3440 × 1440p @ 60 Hz 10-bit 4:4:4; 3840 × 1600p @ 60 Hz 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.

© 2026 Hall Research, Inc. All rights reserved. Pricing, specifications and availability subject to change without notice. Actual products, product images, and online product images may vary from images shown here.
HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. Dolby, Dolby Atmos, Dolby Vision, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation. DTS, the Symbol, DTS and the Symbol together, and Digital Surround are registered trademarks and/or trademarks of DTS, Inc. HDBaseT is a trademark of the HDBaseT Alliance. TOSLINK is a trademark of Toshiba Corporation. All other trademarks are the property of their respective owners.