

AT HE-100-W

Wireless HDMI Extender | 4K H.265 100M Wireless TX/RX

Pro-grade 4K@30Hz wireless HDMI extension up to 100 meters with H.265 compression, IR pass-back, and optional KVM control for cable-free AV installations.



4K@30Hz

H.265/H.264

100m Wireless

IR Pass-back

HDMI Loop Out

KVM Ready



The AT HE-100-W is a professional wireless HDMI extender that transmits 4K@30Hz or 1080P@60Hz video up to 100 meters using H.265/H.264 compression over a 2.4GHz wireless link. It features HDMI loop-out on the transmitter, 38KHz IR pass-back, and optional KVM keyboard/mouse extension, making it ideal for conference rooms, classrooms, and auditoriums where cable routing is impractical.

Max Resolution 4K@30Hz	Wireless Range Up to 100m	Codec H.265 / H.264
Latency ≈0.1s	Power Supply DC 5V/2A Type-C	HDMI Standard HDMI 1.4, HDCP 2.2

IDEAL FOR

Conference Rooms

Wireless presentation and display sharing in meeting spaces.

Classrooms

Stream lessons from teacher PC to projector or display wirelessly.

Auditoriums

Extend HDMI signals to distant screens without cable runs.

Digital Signage

Drive remote displays from a central source over wireless link.

PRODUCT DESCRIPTION

The AT HE-100-W is a high-performance wireless HDMI extender system consisting of a transmitter (TX) and receiver (RX). It uses standard H.265/H.264 TCP/IP HD transmission to deliver 4K@30Hz or 1080P@60Hz video up to 100 meters wirelessly in open environments. The system supports both wireless and wired (CAT6 up to 150m) connectivity for maximum deployment flexibility.

The transmitter provides HDMI input with local loop-out, while the receiver offers both HDMI and VGA outputs. Additional features include 38KHz IR pass-back for remote control of source devices, optional 3.5mm stereo audio input/output, and USB KVM support for keyboard and mouse extension. Pairing is simple via network cable — connect TX and RX with a CAT cable for 30 seconds, then switch to wireless automatically.

The H.265 codec enables efficient 4K video compression with approximately 0.1-second latency, ensuring smooth real-time content delivery. The system supports HDMI 1.4 with HDCP 2.2 content protection and offers RGB, YCbCr 4:4:4/4:2:2 color spaces at 8/10/12-bit depth. One transmitter can wirelessly connect up to 2 receivers, enabling multi-display configurations.

	4K@30Hz
	Max Resolution
	100m
	Wireless Range
	≈0.1s
	Latency
	H.265
	Video Codec
	2.4GHz
	WiFi Frequency
	150m
	Max Wired Range

PRODUCT KEY FEATURES



4K Ultra HD Transmission

Supports 4K@30Hz UHD and 1080P@60Hz Full HD video transmission with H.265/H.264 encoding. Upgrade from 1080P to 4K by simply replacing the transmitter unit.



100-Meter Wireless Range

Achieves up to 100 meters of wireless transmission in open environments with line-of-sight. Ideal for large venues where cable installation is difficult or costly.



HDMI Loop-Out on TX

The transmitter includes an HDMI output for local monitoring alongside wireless transmission. Enables simultaneous local and remote display without external splitters.



IR Pass-Back Control

Built-in 38KHz infrared pass-back allows remote control of the source device from the receiver location. Convenient for operating media players, set-top boxes, or PCs from the display end.



Dual Output on Receiver

Receiver provides both HDMI and VGA outputs for compatibility with legacy and modern displays. VGA output supports up to 1080P resolution for older projectors and monitors.



Optional KVM Extension

USB ports on select models enable keyboard and mouse extension for remote PC control. Eliminates the need to physically access the source device during presentations.



Easy Pairing and Setup

Factory-paired TX and RX units work out of the box with no configuration required. Additional receivers can be paired via network cable in under 30 seconds.



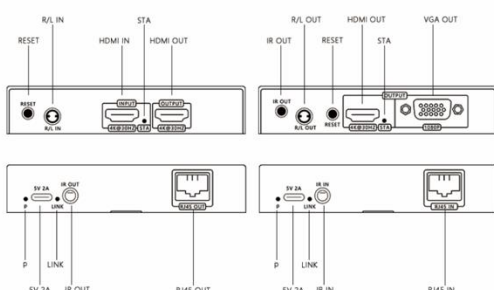
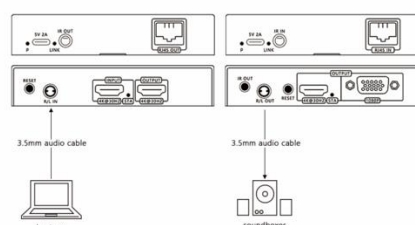
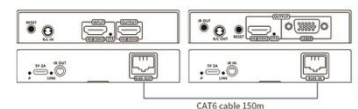
Flexible Power Options

Powered via Type-C USB at DC 5V/2A, compatible with standard chargers and portable power banks. Enables deployment in locations without dedicated power outlets.



Wired + Wireless Connectivity

Supports both wireless (2.4GHz, up to 100m) and wired (CAT5e/CAT6, up to 150m) transmission modes. Automatically switches from wired pairing to wireless operation for seamless setup.

TX
RX

TX
RX

TX
RX


CAT6 cable 150m

TECHNICAL SPECIFICATIONS

VIDEO SPECIFICATIONS

Max Input Resolution (TX)	Pro2: 4K@30Hz Pro1: 1080P@60Hz
Max Output Resolution (RX)	HDMI: 4K@30Hz / 1080P@60Hz VGA: 1080P
HDMI Standard	HDMI 1.4, HDCP 2.2
Video Codec	H.265, H.264
Color Space	RGB, YCbCr 4:4:4 / 4:2:2
Color Depth	8 / 10 / 12 bit
TMDs Signal	0.7 ~ 1.2 Vp-p

AUDIO SPECIFICATIONS

HDMI Audio Input	LPCM 2.0CH, 32/44.1/48/88.2/96/176.4/192 KHz
HDMI Audio Output	LPCM 2.0CH, 48 KHz
Analog Audio (Optional)	3.5mm Stereo; 32 / 44.1 / 48 KHz

WIRELESS & NETWORK

WiFi Frequency	2.4 GHz
Max Wireless Range	100m (1TX to 1RX, open area, no obstacles)
Max Wired Range	150m (CAT5e / CAT6)
Protocol	TCP / IPv4
Default TX IP	192.168.1.166
Default RX IP	192.168.1.167
Max Receivers (Wireless)	2

TRANSMITTER (TX) INTERFACES

Input Ports	HDMI×1, IR×1, USB×1 (select), R/L 3.5mm×1 (select), DC 5V×1
Output Ports	HDMI×1 (Loop Out), RJ45×1

RECEIVER (RX) INTERFACES

Input Ports	RJ45×1, DC 5V×1
Output Ports	HDMI×1, VGA×1, USB×2 (select), IR×1, R/L 3.5mm×1 (select)

CONTROL

IR Control	38 KHz
KVM Support	USB Keyboard / Mouse Extension (Select Models)

GENERAL

Latency	≈0.1s
Max HDMI Cable Length	≤10m
Power Supply	DC 5V / 2A, Type-C
Dimensions	114(L) × 78(W) × 23(H) mm
Material	Iron
Color	Black
Weight (TX)	≈240g
Weight (RX)	≈240g
Operating Temperature	-20°C ~ 60°C
ESD Protection (Contact)	±4KV (Level 2, IEC 61000-4-2)
ESD Protection (Air)	±8KV (Level 3, IEC 61000-4-2)