

AT HE-100

HDMI Extender | 4K 120M CAT6 TX/RX

Reliable 4K HDMI extension over a single CAT6/6e cable up to 120 meters with local loop-out, IR pass-back, and 3.5mm audio output on the receiver.



4K@30Hz

120m Range

HDMI 1.4

IR Pass-back

Loop Out

3.5mm Audio



The AT HE-100 is a wired HDMI extender that transmits 4K and 1080P video up to 120 meters over a single CAT6/6e cable. The transmitter features HDMI local loop-out for simultaneous local monitoring, while the receiver provides HDMI output along with 3.5mm stereo audio extraction and IR pass-back control — all at low power consumption with a compact, reliable design.

Max Resolution 4K@30Hz	Max Distance 120m (CAT6)	Bandwidth 340 MHz
Baud Rate 3×3.4 Gbps	Power Supply DC 5V/1A	HDMI Standard HDMI 1.4, HDCP 1.4

IDEAL FOR

Conference Rooms

Extend HDMI from source to display over a single network cable.

Classrooms

Deliver 4K content from teacher PC to projector up to 120m away.

Digital Signage

Drive remote displays from a central media player over CAT6 cable.

Auditoriums

Long-distance HDMI runs without signal loss for large venues.

PRODUCT DESCRIPTION

The AT HE-100 is a professional HDMI extender system consisting of a transmitter (TX) and receiver (RX) that uses a single CAT6 or CAT6e cable to transmit high-definition 4K and 1080P video signals up to 120 meters. It replaces costly long HDMI cable runs with affordable and reliable network cabling infrastructure.

The transmitter features HDMI input with a local loop-out for simultaneous monitoring on a nearby display. The receiver provides HDMI output along with 3.5mm L/R stereo audio extraction, enabling connection to external speakers or amplifiers. IR pass-back functionality allows control of the source device from the receiver end.

Supporting HDMI 1.4 with HDCP 1.4 content protection, the extender handles a maximum bandwidth of 340MHz at 3×3.4Gbps baud rate. The system operates with low power consumption and maintains stable performance across -15°C to +55°C operating temperatures. Its compact 98×78×28mm form factor and lightweight 300g design per unit allow easy installation in any environment.

■ **4K**
Max Resolution

■ **120m**
CAT6 Range

■ **340MHz**
Max Bandwidth

■ **HDMI 1.4**
HDMI Standard

■ **IR**
Pass-back Control

■ **3.5mm**
RX Audio Output

PRODUCT KEY FEATURES



4K HDMI Extension

Extends 4K and 1080P HDMI signals up to 120 meters using a single CAT6/6e cable. Eliminates the need for expensive long HDMI cable runs.



HDMI Local Loop-Out

Transmitter features an HDMI output for local display monitoring alongside the long-distance transmission. View content locally and remotely at the same time.



3.5mm Audio Extraction

Receiver includes 3.5mm L/R stereo audio output for connecting external speakers or an amplifier. Enables audio distribution independent of the display.



IR Pass-Back Control

Infrared pass-back allows control of the source device from the receiver location. Operate set-top boxes, media players, or PCs from up to 120 meters away.



Low Power Consumption

TX draws only 350mA and RX only 200mA, ensuring cool and reliable operation. Low heat output extends product lifespan and reduces maintenance.



Wide Resolution Support

Supports 4K, 1080p, 720p, 576p/i, and 480p/i input and output resolutions. Compatible with a wide range of source devices and displays.



Plug and Play Setup

Simply connect HDMI cables to source and display, link TX and RX with CAT6, and power on. No configuration or software required.



Compact Form Factor

Each unit measures just 98×78×28mm and weighs 300g, allowing discreet mounting behind displays or under desks.



HDCP 1.4 Compliance

Supports HDCP 1.4 content protection for secure transmission of protected content. Compatible with Blu-ray players, set-top boxes, and media devices.



TECHNICAL SPECIFICATIONS

VIDEO SPECIFICATIONS

HDMI Input Resolution	4K / 1080p / 720p / 576p / 576i / 480p / 480i
HDMI Output Resolution	4K / 1080p / 720p / 576p / 576i / 480p / 480i
HDMI Standard	HDMI 1.4, HDCP 1.4
Max Bandwidth	340 MHz
Max Baud Rate	3 × 3.4 Gbps
Local Loop-Out (TX)	Supported

AUDIO

RX Audio Output	3.5mm L/R Stereo
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TRANSMISSION

Max CAT6/6e Distance	120m
Input HDMI Cable Length	≤10m (AWG26 Standard)
Output HDMI Cable Length	≤10m (AWG26 Standard)

CONTROL

IR Control	Supported
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GENERAL

TX Max Working Current	350 mA
RX Max Working Current	200 mA
Power Adapter Input	AC 100-240V, 50/60Hz
Power Adapter Output	DC 5V / 1A
Dimensions	98(L) × 78(W) × 28(H) mm
TX Weight	300g
RX Weight	300g
Operating Temperature	-15°C ~ +55°C
Operating Humidity	5 ~ 90% RH (No Condensation)

