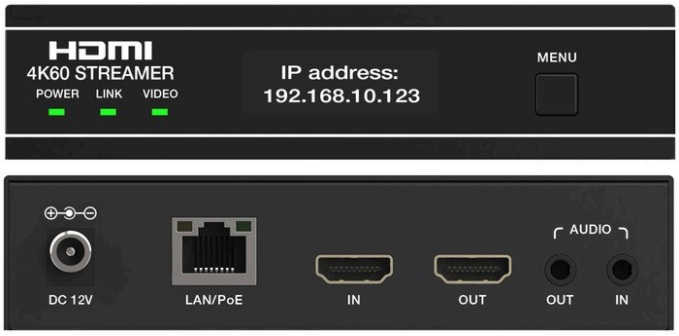
4K60 H.265/H.264 HDMI Streaming Encoder — RTMP Push & RTSP

Stream Live Without a Capture PC — Direct RTMP Push, Multicast RTSP & TS/UDP, Audio-Only Stream, 802.3af PoE over 1G

MPN: AVO-IP265-STREAM



Streams a 4K60 HDMI source live to a streaming platform, the local network and a preview monitor at once, without a capture PC. The AVO-IP265-STREAM encodes the full 3840x2160 signal at up to 60Hz in H.265 or H.264, rather than taking 4K in and encoding only 1080p. It also runs a 1080p30 second stream and a 1280x720 JPEG preview stream at the same time. The compact 5.12 x 6.30 x 1.18 in metal unit draws 7.2W and runs on 802.3af PoE from the network switch, or on the included 12V locking adapter. It fits 1U or 6U V2 rack installations, so a full rack of streamers takes very little space. It is the right choice for lecture halls, houses of worship, town-hall rooms and IPTV venues where a true 4K60 encode and direct platform push matter more than a PC, capture card and software encoder at every source.

Every stream uses a standard protocol: RTSP/UDP, RTSP/TCP, RTP/UDP, TS/UDP and RTMP, in unicast or multicast. That means VMS and recording systems, IPTV players, media players and live platforms can all receive it directly. A separate audio-only multicast stream feeds overflow and paging zones. The 3.5mm input embeds a mixer or microphone feed into the stream, and the 3.5mm output extracts program audio for local speakers. The HDMI loop output keeps the room display live while the unit encodes. Setup runs in an HTTP/HTTPS web GUI, and third-party control systems can manage the unit over Telnet, SSH or a TCP socket. 802.1X port authentication lets it join locked-down enterprise and campus networks, and the front-panel OLED speeds up commissioning. The single strongest differentiator is the full 4K60 encode with RTMP push and two more simultaneous streams from one PoE-powered box, so one source covers the recorder, the online audience and the room.

1 PRODUCT OVERVIEW

DESIGNED FOR

Lecture halls and overflow rooms, houses of worship, corporate town-hall and all-hands spaces, courtrooms and council chambers, sports bars and hospitality IPTV systems, and control rooms that record HDMI sources into a VMS or NVR. Anywhere one HDMI source has to reach a live platform, an on-network audience and a local display at the same time, it sits beside the source and does all three.

THE CHALLENGE

Getting an HDMI source onto the network as a standard stream usually means a PC running a software encoder, a capture card, a splitter for the room display and someone to keep it all running. All of that adds hardware, power and a point of failure at every source. Many dedicated encoders that accept 4K only encode at 1080p or cap out at 4K30. Closed encoder/decoder extension systems do not push standard streams to platforms, recorders and IPTV players at all.

THE KANEXPRO ADVANTAGE

- Encodes the full 3840x2160 signal at up to 60Hz in H.265 or H.264.
- Runs a 4K60 main stream, a 1080p30 second stream and a 720p JPEG preview at once, so one source can feed the recorder, the audience and a confidence monitor.
- Pushes RTMP directly to live platforms, and also serves RTSP, RTP and TS in unicast or multicast, with a separate audio-only stream for overflow and paging zones.
- One 802.3af PoE cable carries power and the network, and the HDMI loop output keeps the room display live with no separate splitter.
- 802.1X, HTTPS and SSH meet campus and enterprise IT policy, and the OLED display speeds up commissioning.

2 PRODUCT POSITIONING

> ***The AVO-IP265-STREAM is the 4K60 HDMI streaming encoder for AV integrators who need one source pushed to a platform, the local network and a preview at the same time. It replaces a capture PC and software encoder, or an encoder that drops the stream to 1080p.***

3 APPLICATIONS



Lecture capture and overflow:
A lecturer's laptop feeds the HDMI input, and the loop-out keeps the room projector live. The 4K60 main stream goes to the lecture-capture or VMS recorder over RTSP. The 1080p30 second stream goes multicast to overflow-room decoders or set-tops. Power comes over PoE from the classroom switch, so nothing is added at the lectern.



Worship live streaming:
The production switcher's program output feeds the encoder. RTMP pushes the service straight to the church's streaming platform. The audio-only stream, with delay adjustment to line up with video elsewhere, feeds the nursery and lobby speakers. The analog audio input embeds the soundboard mix in place of camera audio.



Corporate town-halls:
The presenter feed is pushed by RTMP to the enterprise video platform. A multicast TS feed goes to digital-signage players across the campus. 802.1X lets the encoder sit on a locked-down corporate network, and HTTPS and SSH satisfy IT review.



Courtrooms and council chambers:
The proceedings feed is encoded to RTSP for the recording and archive system, and the second stream goes to the public broadcast or webcast. The JPEG preview stream gives clerks and the AV office a light confidence monitor without decoding a full stream. The control system manages it over TCP or Telnet.



Hospitality and sports-bar IPTV:
A satellite or cable box feeds the encoder, which multicasts over the venue's 1G network to IPTV players at each display. That replaces a coax head-end or long HDMI runs. The loop-out keeps the main bar display direct. It fits a 6U V2 rack (sold separately) using the included ears, or a 1U V2 rack with rack panels and brackets that are not included.



Control room and VMS ingest:
HDMI outputs from a PC, camera or presentation system go into the VMS or NVR as RTSP. The OLED display shows the address at commissioning.

4 WHO THIS IS FOR

Higher education | Worship | Corporate | Government and courts | Hospitality | Venues

Ideal User	
Project Types	higher education, worship, corporate, government and courts, hospitality, venues.
Typical Buyer	

5 FREQUENTLY ASKED QUESTIONS

Q: Does it actually stream in 4K, or does it only accept a 4K input?
It encodes and streams at 4K60. The main stream carries up to 3840x2160 at up to 60Hz in H.264 or H.265. At the same time, it runs a 1080p30 second stream and a 1280x720 JPEG preview stream, so one source can feed a high-resolution recorder, a lower-bandwidth audience and a monitoring view.

Q: Which platforms and players can receive the stream?
It sends standard protocols: RTSP over UDP or TCP, RTP/UDP, TS/UDP and RTMP. Anything that accepts these can take it in, including streaming platforms that support RTMP push, video management and recording systems, IPTV players and standard media players. It also supports unicast and multicast for distribution on the local network.

Q: Can I keep a local display connected while streaming?
Yes. The HDMI loop output passes the source through to a local display or projector while the unit encodes, so no separate splitter is needed.

Q: How is it powered, and how is it mounted?
It takes 802.3af PoE through its Gigabit LAN port, so one CAT6/6A/7 cable carries both network and power. It also ships with a 12V locking power adapter for networks without PoE. Mounting ears and screws are included for 6U V2 rack installation (rack sold separately).

Q: What do I need from the network?
Use a 1G network switch. The unit supports 802.1X port authentication, and it can be managed over HTTPS and SSH, which suits enterprise and campus networks under IT security policy.

Q: How does it handle audio?
It carries 2-channel LPCM audio at 48kHz. A 3.5mm analog input can embed a mixer or microphone feed into the stream, and a 3.5mm output extracts audio for local speakers. A separate audio-only stream can feed overflow rooms or paging that need sound but no picture.

Q: Can a control system manage it, and what comes in the box?
Yes. Third-party control systems can manage it over a Telnet/SSH login or a TCP socket connection, and an HTTP/HTTPS web interface handles setup. An OLED display on the unit shows its name and IP address. The box contains the AV streamer, a 12V/1A locking power adapter, two mounting ears and four machine screws. The manual is digital; scan the QR code on the box.