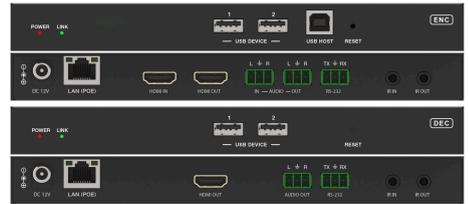# 1080P60 H.265/H.264 AV over IP Encoder/Decoder — KVM & IR

USB KVM, Bidirectional IR, HDMI Loop Out, Matrix & Video Wall up to 9×9 over 1G

MPN: AVO-IP265-HDK

The AVO-IP265-HDK adds USB KVM control and bidirectional IR to the H.265/H.264 AV over IP platform — delivering 1080P60 video distribution with full keyboard, mouse, and IR remote control over the same 1G managed network. The encoder includes a dedicated HDMI loop output for local monitoring, and both encoder and decoder carry IR IN/OUT ports for complete bidirectional IR distribution.

Supports matrix switching, video wall up to 9×9, unicast and multicast, analog audio embedding and extracting, RS-232 pass-through, and web GUI configuration. Managed by the AVO-IPCTL-265HD controller. Encoder and decoder sold separately.

1080P60	USB KVM	Bi-dir IR	HDMI Loop	9×9 Wall	PoE 802.3af
H.265/H.264	1:1 & 1:N	IN + OUT	Encoder Out	81 Displays	3.48W ENC

KEY FEATURES

- H.265/H.264 codec — 1080P@60Hz 4:4:4, up to 1920×1200@60Hz, HDMI 1.3, HDCP 1.4
- USB KVM — USB HOST (encoder) + 2× USB DEVICE (encoder & decoder) for keyboard/mouse control
- Bidirectional IR — IR IN + IR OUT on both encoder and decoder (3.5mm, 12Vp-p, wideband 20K–60KHz)
- HDMI loop out on encoder — local display without splitting
- Matrix switching, video wall up to 9×9, unicast and multicast over 1G
- Seamless switching — no black screen, jitter, or tearing
- Analog audio IN/OUT on encoder, audio OUT on decoder — LPCM 2.0CH
- RS-232 pass-through and guest mode control
- RTSP main stream and sub stream for VLC/third-party preview
- PoE 802.3af Class 3 or DC 12V/1A — Encoder 3.48W / Decoder 2.77W
- Works with AVO-IPCTL-265HD (CTL100H) controller

SPECIFICATIONS

Video / Codec	H.265/H.264 — 1080P@60Hz 4:4:4, HDMI 1.3, HDCP 1.4, 4.95Gbps
Audio	LPCM 2.0CH (32/44.1/48kHz) | Audio IN/OUT (encoder) / Audio OUT (decoder)
USB KVM	Encoder: USB HOST (Type B) + 2× USB DEVICE (Type A) | Decoder: 2× USB DEVICE (Type A)
IR	IR IN + IR OUT on both encoder and decoder (3.5mm, 12Vp-p, 20K–60KHz wideband)
Encoder Connections	HDMI IN | HDMI OUT (loop) | Audio IN/OUT | LAN/PoE | USB HOST | 2× USB DEV | RS-232 | IR IN/OUT
Decoder Connections	HDMI OUT | Audio OUT | LAN/PoE | 2× USB DEV | RS-232 | IR IN/OUT
Power	PoE 802.3af Class 3 or DC 12V/1A | Encoder: 3.48W / Decoder: 2.77W
Dimensions (W×D×H)	8.03″ × 3.74″ × 0.85″ (204 × 95 × 21.5mm) per unit
Weight	Encoder: 1.04 lbs (470g) | Decoder: 1.03 lbs (467g)
Rack Mounting	6U rack: up to 10 units | 1U rack: up to 4 units

PACKAGE CONTENTS

Each unit includes: 2× 3-pin Phoenix connectors \| 2× Mounting ears \| 4× Screws \| 1× DC 12V/1A locking PSU \| User manual. *Encoder and decoder sold separately.*