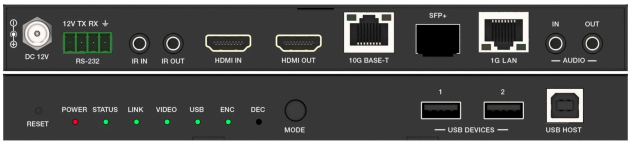
4K60 SDVoE AV over IP Transceiver — Switchable ENC/DEC

Zero-Frame Latency, Full Dolby/DTS Audio, Copper & Fiber, USB KVM & 9×9 Video Wall over 10G

MPN: AVO-IPSDV-4K



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators specifying uncompressed 4K60 distribution for broadcast, live production, premium AV, government command/control, and any application where latency, audio quality, or image fidelity cannot be compromised.

THE CHALLENGE

H.265 compression introduces latency and artifacts. JPEG2000 adds cost. Integrators need a true uncompressed 4K60 platform with full Dolby/DTS audio, zero-frame latency, and both copper and fiber connectivity.

THE KANEXPRO ADVANTAGE

SDVoE uncompressed 4K60, zero-frame latency, full Dolby Atmos/DTS:X passthrough, switchable ENC/DEC, dual 10G copper+fiber — the premium AV over IP platform in the AVO lineup.

2 PRODUCT POSITIONING

> ***The AVO-IPSDV-4K is the top tier of the AVO AV over IP family — for integrators who need uncompressed 4K60, zero-frame latency, and full professional audio on a 10G network.***

3 SALES ANALYSIS

CHANNEL FIT

Rep and distribution. Best fit: broadcast integrators, premium AV specialists, government/enterprise AV.

DEAL SIZE & SALES CYCLE

$5,000–$100,000+ per system. Sales cycle: 6–16 weeks.

COMMON OBJECTIONS

1. '10G is expensive' — SDVoE requires 10G; budget the switch accordingly. 2. 'Why not H.265?' — Zero-frame latency and uncompressed quality justify the premium for broadcast and critical applications.

WIN / LOSS THEMES

Win: broadcast, live production, premium AV, command/control. Loss: cost-sensitive 1G deployments (→ H.265 or JPEG2000).

TOP USE CASES TO CLOSE

1. Broadcast studio: multiple 4K60 sources distributed to production monitors and video wall with zero-frame latency and full Dolby Atmos passthrough. Zero compression artifacts on air.
2. Government command center: zero-frame latency matrix switching across a 9×9 video wall with USB KVM seat management. Mission-critical display with no latency or visual artifacts.

4 APPLICATIONS

Broadcast & Live Production
Zero-frame latency and uncompressed 4K60 for live environments.

Video Wall & Multiview
Up to 9×9 wall and 25-window multiview via AVO-IPCTL-SDV.

Premium AV Distribution
Dolby TrueHD, Atmos, DTS:X, DSD — full passthrough.

KVM Seat Management
USB 2.0 KVM over 10G for centralized PC management.

Command & Control
Zero-frame latency + CEC for government and enterprise ops centers.

Fiber Deployments
10G SFP+ + 10G BASE-T copper in one unit for hybrid topology.

5 WHO THIS IS FOR

Broadcast Integrator | Premium AV | Government AV | Enterprise AV | Live Production

Ideal User	Broadcast engineer, premium AV integrator, or government AV specialist specifying uncompressed 4K60 with zero-frame latency.
Project Types	Broadcast studios, live production venues, government operations centers, corporate boardrooms, premium screening rooms, trading floors.
Typical Buyer	Broadcast Engineer, AV Director, Systems Integrator

6 KANEXPRO PRODUCT COMPARISON

AVO-IPSDV-4K is the uncompressed SDVoE premium tier. Choose based on network infrastructure and latency requirements.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
AVO-IPSDV-4K	SDVoE uncompressed, zero-frame	Full Dolby/DTS, 10G, 25-window multiview, CEC	**Premium tier**
AVO-IP265-4K	H.265 4K60, 16ms latency	Fiber+copper, IPC integration, KVM roaming, text overlay	Lower cost — H.265 compression
AVO-IPJP2K	JPEG2000 4K60	Visually lossless, Dante, ARC/eARC	JPEG2000 platform — pro AV audio

Recommend AVO-IPSDV-4K for any deployment requiring uncompressed 4K60, zero-frame latency, or full Dolby/DTS audio passthrough.

7 FREQUENTLY ASKED QUESTIONS

What makes SDVoE different from H.265 AV over IP?
SDVoE transmits completely uncompressed video — no codec, no compression artifacts, zero-frame latency. H.265 AV over IP compresses video (16–33ms latency). SDVoE requires a 10G switch; H.265 runs on 1G. Choose SDVoE for broadcast, live production, and critical latency applications; choose H.265 for cost-sensitive 1G deployments.

Why does it need a 10G switch?
Uncompressed 4K60 4:4:4 requires approximately 18Gbps of video bandwidth. A 10G managed switch is the minimum infrastructure requirement. Standard 1G switches cannot carry SDVoE streams. Contact KanexPro for recommended 10G switch models.

How does mode switching work?
Hold the front-panel MODE button for 5 seconds. The ENC/DEC LED flashes for approximately 30 seconds during the switch, then stays on to confirm the new mode. Mode can also be set via API or the AVO-IPCTL-SDV controller without touching the unit.

What is the 1G LAN port used for?
The 1G LAN port is a dedicated secondary stream port — it carries an H.264/H.265 compressed preview stream for portable devices and secondary data. It is separate from the 10G SDVoE network and connects to a standard 1G network or switch. Do not connect it to the 10G SDVoE switch port.

Can copper and fiber be used simultaneously?
Yes — both 10G BASE-T copper and 10G SFP+ fiber ports are active simultaneously. Priority between them is configurable via the AVO-IPCTL-SDV controller or web GUI. Mix copper and fiber endpoints in the same SDVoE system on the same switch.

What audio formats are supported?
Full HDMI audio passthrough: LPCM, Dolby Digital, Dolby Digital Plus, Dolby EX, Dolby TrueHD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD, and DTS:X. Bidirectional analog audio (3.5mm) is also supported between encoder and decoder.

Is Dante supported?
Dante audio can be added as a factory-configured option. Contact KanexPro sales for Dante-enabled AVO-IPSDV-4K configuration and pricing.

What controller is required?
The AVO-IPCTL-SDV (CTL100D) manages matrix routing, video wall configuration, multiview layout, USB KVM management, ENC/DEC mode assignment, SHOW ME device location, and full system control. Basic point-to-point operation works without the controller.