

4K60 H.265/H.264 AV over IP Transceiver — Switchable ENC/DEC

Copper & Fiber SFP, 36-Stream Multiview, KVM Seat Roaming, Text Overlay & Seamless Switching over 1G

MPN: AVO-IP265-4K



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators specifying command and control centers, enterprise AV distribution, surveillance integration, and broadcast/media environments requiring 4K60 H.265 over 1G with KVM seat management and fiber connectivity.

THE CHALLENGE

Separate encoder/decoder SKUs double inventory and complicate spares management. Copper-only H.265 endpoints fail on long runs and large venues. Standard AV over IP lacks IPC camera integration and KVM seat management.

THE KANEXPRO ADVANTAGE

Only H.265 4K60 AV over IP transceiver with switchable ENC/DEC in a single unit, copper + fiber SFP, 36-stream multiview decoder, native IPC camera integration, KVM seat roaming, text overlay, and multi-level user rights.

2 PRODUCT POSITIONING

The AVO-IP265-4K is the premium H.265 transceiver for integrators who need 4K60, fiber flexibility, 36-stream multiview, and IPC camera integration in a single inventory-efficient unit.

3 SALES ANALYSIS

CHANNEL FIT

Rep and distribution. Strongest fit: command/control specialists, enterprise AV integrators, broadcast integrators, and security/surveillance system integrators.

DEAL SIZE & SALES CYCLE

\$3,000–\$50,000+ per system. Sales cycle: 4–12 weeks for enterprise; 8–20 weeks for government/broadcast.

COMMON OBJECTIONS

1. 'We use JPEG2000' — H.265 adds IPC camera integration and lower cost per port. 2. 'Do we need fiber?' — Copper works to 100m; add fiber SFP modules only where runs exceed copper limits.

WIN / LOSS THEMES

Win: command/control, surveillance integration, broadcast, large-venue fiber deployments. Loss: pure professional AV with Dolby/DTS audio requirements — steer to AVO-IPJP2K.

TOP USE CASES TO CLOSE

- 1 Government operations center: 20 transceivers (10 ENC + 10 DEC), each stocked identically — MODE switch determines role at install. KVM seat roaming across all operator positions.
- 2 Unified AV+security: existing Hikvision IPC deployment + new AV distribution. Single AVO-IP265-4K system decodes both camera streams and HDMI sources on the same 1G switch.

4 APPLICATIONS



Command & Control

Switchable ENC/DEC + 36-stream multiview + KVM roaming.



Video Wall

Seamless switching, text overlay, scrolling subtitles.



KVM Seat Management

One person, multiple PCs. Man-machine separation.



IPC Camera Integration

Decode Hikvision, Dahua, Yushi cameras + PTZ.



Enterprise Security

Multi-level user rights, hierarchical access control.



Broadcast & Media

16ms latency, fiber SFP, RTSP sub-streams.

5 WHO THIS IS FOR

AV Integrator

Command/Control

Security Integrator

Broadcast Engineer

Enterprise IT

Government AV

Ideal User

AV integrator or systems engineer specifying command and control, enterprise visualization, or surveillance integration projects — familiar with 1G managed networks, KVM infrastructure, and IP camera protocols.

Project Types

Government/military operations centers, corporate NOCs, trading floors, broadcast studios, university control rooms, transportation management, physical security integration.

Typical Buyer

AV Director, IT/Network Manager, Systems Integrator PM, Security Systems Manager

6 KANEXPRO PRODUCT COMPARISON

AVO-IP265-4K is the premium H.265 tier. Choose based on resolution, connectivity, and feature requirements.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
AVO-IP265-4K	Command/Control, Visualization, Enterprise AV	4K60, switchable ENC/DEC, fiber+copper, 36-stream multiview, KVM roaming, IPC integration	This product — H.265 premium tier
AVO-IP265-HDK	1080P rooms with KVM	1080P60, H.265, ENC/DEC pair, KVM + IR, HDMI loop out, 802.3af	No fiber, no 4K, no multiview — simpler deployment
AVO-IP265-HD	1080P basic distribution	1080P60, H.265, ENC/DEC pair, no KVM, no IR	Entry-level, no KVM, no fiber, no 4K
AVO-IPJP2K	Professional AV distribution	4K60, JPEG2000, Dolby/DTS, ARC/eARC, Dante	No IPC integration, higher cost, JPEG2000 ecosystem

Recommend AVO-IP265-4K for any deployment requiring 4K60 H.265, fiber connectivity, 36-stream multiview, or IPC camera integration.

7 FREQUENTLY ASKED QUESTIONS

How does ENC/DEC switching work?

A physical MODE switch on the rear panel toggles between encoder (down) and decoder (up) modes. After switching, the device must be restarted. One unit serves both roles — simplifying stock management and installation.

Can copper and fiber be used simultaneously?

Both ports are active and the unit auto-selects based on connection. Copper LAN/PoE has priority. Connect fiber SFP for long-distance runs — the system switches automatically when fiber is connected and copper is absent.

What does 36-stream decoder mean?

A single unit in decoder mode can subscribe to and display up to 36 simultaneous RTSP/H.265 streams — with arbitrary windowing, roaming, overlaying, and splicing on one screen. Ideal for video walls, multiview operator stations, and KVM seat management.

How does IPC camera integration work?

The AVO-IP265-4K decodes H.264/H.265 streams directly from IP cameras (Hikvision, Dahua, Yushi, and standard ONVIF) on the same network — no separate decoder required. PTZ control passes through the network for unified AV and security management.

Does it require the AVO-IPCTL-265 controller?

Point-to-point operation works without the controller. The AVO-IPCTL-265 (CTL500H) is required for matrix switching, video wall configuration, KVM seat management, multiview, text overlay, multi-user rights management, and full system control.

How does it compare to AVO-IPJP2K?

The AVO-IP265-4K uses H.265/H.264 codec — standard RTSP-compatible, IPC-integration capable, with multiview and text overlay. AVO-IPJP2K uses JPEG2000 for visually lossless quality with Dolby/DTS audio, ARC/eARC, and Dante. Choose H.265 for command/control and surveillance integration; choose JPEG2000 for professional AV distribution requiring high-fidelity audio.

What audio formats are supported?

LPCM 2.0CH, 16-bit, 48kHz — balanced stereo analog audio IN/OUT via 6-pin 3.81mm Phoenix connectors on both encoder and decoder sides. Note: Dolby and DTS formats are not supported on this platform.