

1G H.265 AV over IP System Controller

Matrix Switching, Video Wall with Window Roaming, Mouse Collaboration & Seamless Switching — IP Camera Import, Dual 1G Network Isolation & Web GUI

MPN: AVO-IPCTL-265



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators and IT managers deploying H.264/H.265 AV over IP systems requiring advanced video wall, window roaming, mouse collaboration, or IP camera integration.

THE CHALLENGE

Basic H.265 controllers handle simple matrix routing but lack video wall flexibility, seamless switching, and multi-operator workflows. Integrators building command-and-control rooms, broadcast environments, or collaborative workspaces need more.

THE KANEXPRO ADVANTAGE

The AVO-IPCTL-265 adds window roaming, seamless switching, mouse collaboration, IP camera import, and marquee display on top of standard matrix and video wall — all on a 1G platform with ARM Cortex-A55 processing. The AVO-IPCTL-265HD covers basic needs at lower cost.

2 PRODUCT POSITIONING

AVO-IPCTL-265 is the advanced 1G H.265 system controller for integrators who need flexible video walls, seamless switching, and collaborative operator workflows — without a dedicated video wall processor or separate KVM system.

3 SALES ANALYSIS

CHANNEL FIT

Rep and distribution. Always sold alongside H.265 encoder/decoder pairs. Direct for large enterprise/campus.

DEAL SIZE & SALES CYCLE

\$499 per controller. System deal \$1,500–\$30,000+

COMMON OBJECTIONS

1. 'Can encoders work without it?' Yes for P2P, no for matrix/wall/roaming.
2. 'Why not AVO-IPCTL-265HD?' HD lacks window roaming, seamless switching, mouse collab, IP camera.
3. 'Third-party control?' Yes via TCP/IP API and RS-232.

WIN / LOSS THEMES

Win: any 3+ pair H.265 system with video wall, control room, or collaborative workflow. Loss: simple 1:1 unicast installs.

TOP USE CASES TO CLOSE

- 1 Corporate command center — video wall with window roaming + IP camera feeds + mouse collaboration across operator stations. Controller is mandatory line item.
- 2 Education lecture hall with IP cameras and H.265 encoders — instructor content + remote camera feeds routed to displays with seamless switching.

4 APPLICATIONS



Matrix Switching

Route any H.265 encoder to any decoder via drag-and-drop web GUI. No physical recabling required — instant source switching across unlimited endpoints on the same 1G network.



Video Wall & Window Roaming

Configure multi-display video walls with window roaming — content windows can be moved, resized, and positioned freely across displays. Marquee text overlay supported.



Mouse Collaboration

One operator manages multiple PCs across zones using mouse roaming. Move the cursor seamlessly from one decoder display to the next as if they were a single extended desktop.



Seamless Switching

Zero-interruption source transitions — the next source loads before the switch completes, eliminating black frames or signal dropouts during live presentations or broadcast feeds.



IP Camera Integration

Import IP cameras directly as video sources alongside HDMI encoders. Route camera feeds to any display in the system without a separate VMS or video matrix.



Dual-Network Isolation

VIDEO LAN carries AV multicast on a separate 1G segment from the IT control network. Prevents bandwidth interference and meets enterprise network security requirements.

5 WHO THIS IS FOR

AV Integrators

IT Managers

Corporate AV

Education AV

Broadcast/Production

Hospitality

System Designers

Control Room AV

Ideal User

AV integrator or IT manager deploying a multi-zone H.265 system requiring video wall flexibility or collaborative operator control.

Project Types

Corporate AV, control rooms, broadcast, education, hospitality, digital signage networks

Typical Buyer

AV Director or IT Infrastructure Manager. Controller is system-required for advanced video wall and collaboration.

6 KANEXPRO PRODUCT COMPARISON

AVO-IPCTL-265 is the advanced 1G controller. Use this table to right-size controller selection.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
AVO-IPCTL-265HD	H.265 Entry Controller	Basic matrix, video wall, 100M	No window roaming, no seamless switching, no mouse collab, no IP camera, 1×RS-232
AVO-IPCTL-JP2K	JPEG2000 Controller	Matrix, video wall, KVM, Dante	Different protocol — JPEG2000 endpoints only
Velocity Gateway	Atlona	Web GUI AV over IP controller	Software-based, proprietary ecosystem, no mouse collab
Works With	AVO-IP265-4K, AVO-IP265-HD, AVO-IP265-HDK (H.265 AV over IP endpoints)		

★ AVO-IPCTL-265 required for window roaming, seamless switching, mouse collaboration, and IP camera import in H.265 deployments.

7 FREQUENTLY ASKED QUESTIONS

How does AVO-IPCTL-265 differ from AVO-IPCTL-265HD?

AVO-IPCTL-265 is 1G with window roaming, seamless switching, mouse collaboration, IP camera import, marquee, and 2×RS-232. AVO-IPCTL-265HD is 100M with basic matrix and video wall only. Choose -265 for advanced video wall or collaborative workflows.

Is the controller required for basic H.265 operation?

No — point-to-point unicast works without it. Required for matrix switching, video wall, window roaming, seamless switching, and mouse collaboration.

Can I use a single network switch?

Yes — connect all endpoints and VIDEO LAN to one switch, leave CONTROL LAN to PC. Single-switch mode works but does not maintain AV/IT network isolation.

How does seamless switching work?

The next source is pre-loaded before the switch completes, eliminating black frames or signal dropouts. Requires encoders to be in the system and online before switching.

Can IP cameras be used as sources?

Yes — IP cameras are imported via the web GUI and routed to any decoder display alongside H.265 encoder sources. No separate VMS required.

Does it support third-party control systems?

Yes — TCP/IP API, RS-232, and SSH enable integration with Crestron, AMX, QSC, and other control systems.

How do I access the web GUI?

Navigate to <http://controller.local> or 192.168.6.100 (no DHCP). Default login: admin/admin. Set a new 8-digit alphanumeric password on first login.