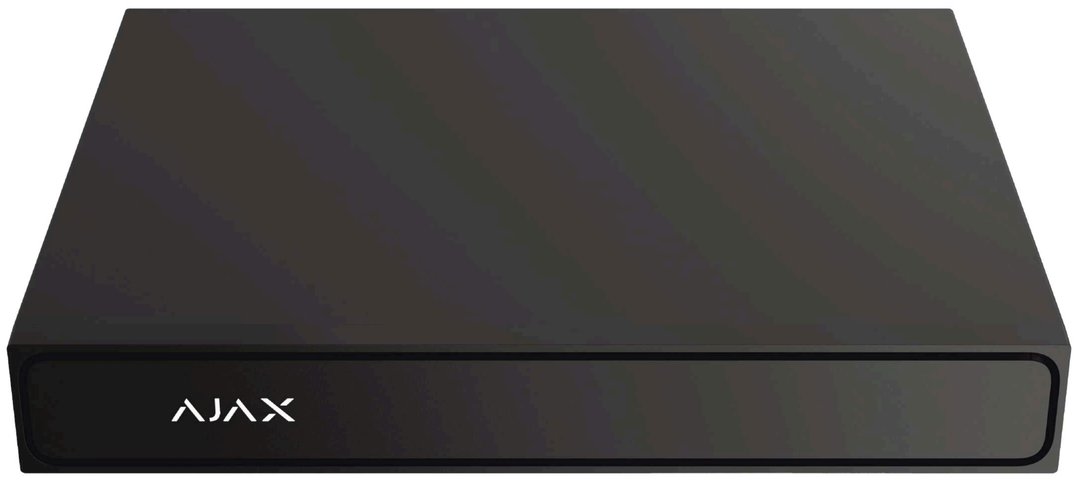
Ajax Superior NVR H2D series

AI-powered network video recorders with 4K HDMI output, up to 2 Gigabit Ethernet ports, up to 16 PoE ports, and support for 2 hot-swappable HDDs



Onboard AI

NDAA Compliant

Ajax Superior products are available exclusively to accredited Ajax Systems partners for sales, installation, and maintenance, creating a protected, high-value revenue channel.

AI Bringing AI to any video setup

Ajax network video recorders integrate Ajax video devices and third-party IP cameras into a single ecosystem. Ajax Superior NVR H2D series features onboard AI, providing intelligent analytics to existing setups without costly camera replacements. The recorders can house two hot-swappable HDDs up to 24 TB each — optimal for continuous archiving and reliable backup. With 4K decoding, the NVRs deliver seamless playback of multiple camera feeds at once. And with a wide selection of Ajax Superior NVR configurations, it's easy to build an efficient and flexible monitoring system for any facility — and manage it remotely via Ajax apps or on-site through the built-in VMS.

Explore Ajax Superior NVR H2D series

Product versions	AI	HDD support	Channels	PoE	HDMI	Ethernet	USB
Ajax Superior NVR H2DAI2GAC (8-ch)	✓	2	8	✗	4K	2 × up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI2GAC (16-ch)	✓	2	16	✗	4K	2 × up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI2GAC (32-ch)	✓	2	32	✗	4K	2 × up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI8PAC (8-ch)	✓	2	8	8	4K	up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI8PAC (16-ch)	✓	2	16	8	4K	up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI16PAC (16-ch)	✓	2	16	16	4K	up to 1 Gbps	1 × 3.0 2 × 2.0
Ajax Superior NVR H2DAI16PAC (32-ch)	✓	2	32	16	4K	up to 1 Gbps	1 × 3.0 2 × 2.0

Designed to fit every project

Ajax NVRs come in a variety of options to suit any application or network design. The new Ajax Superior NVR H2D series includes recorders that support up to 32 channels to cover systems of different scales. Models with PoE[1] ports can connect and power up to 16 cameras. Meanwhile, NVRs without PoE support feature two Ethernet ports — ideal for connecting to industrial-grade switches on sites with strict network requirements.

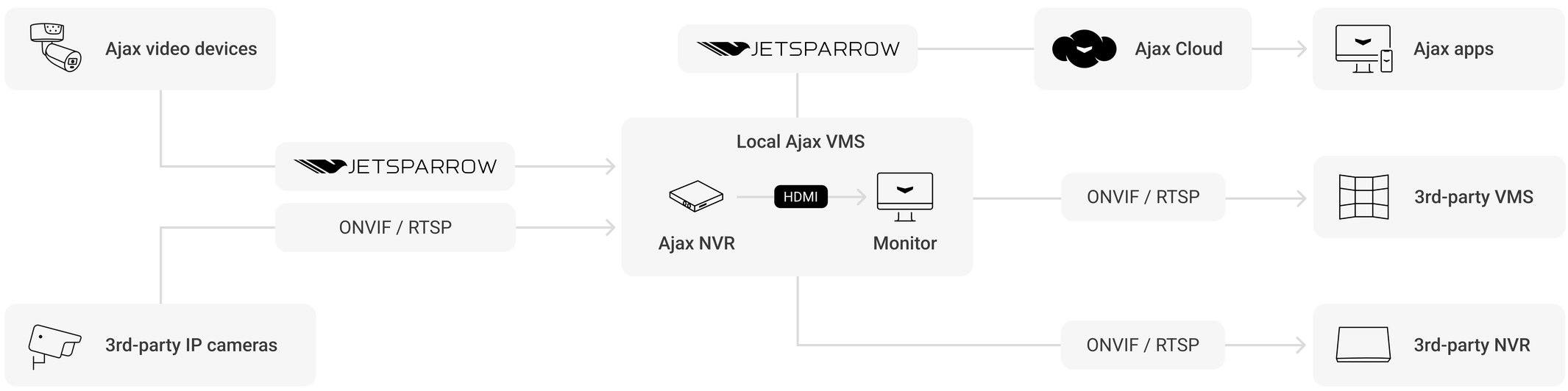
Intelligent upgrade for existing setups

Ajax Superior NVRs feature proprietary onboard AI, bringing smart Ajax video surveillance to even outdated setups. The recorders enable basic cameras to recognize people, pets, and vehicles — with the same accuracy as native Ajax cameras. Third-party cameras enhanced via Ajax Superior NVRs can also send detection notifications, trigger sirens, or run automation scenarios. All of this comes with a single Ajax Superior NVR, without the need for costly camera replacements.

Always-on recording without service breaks

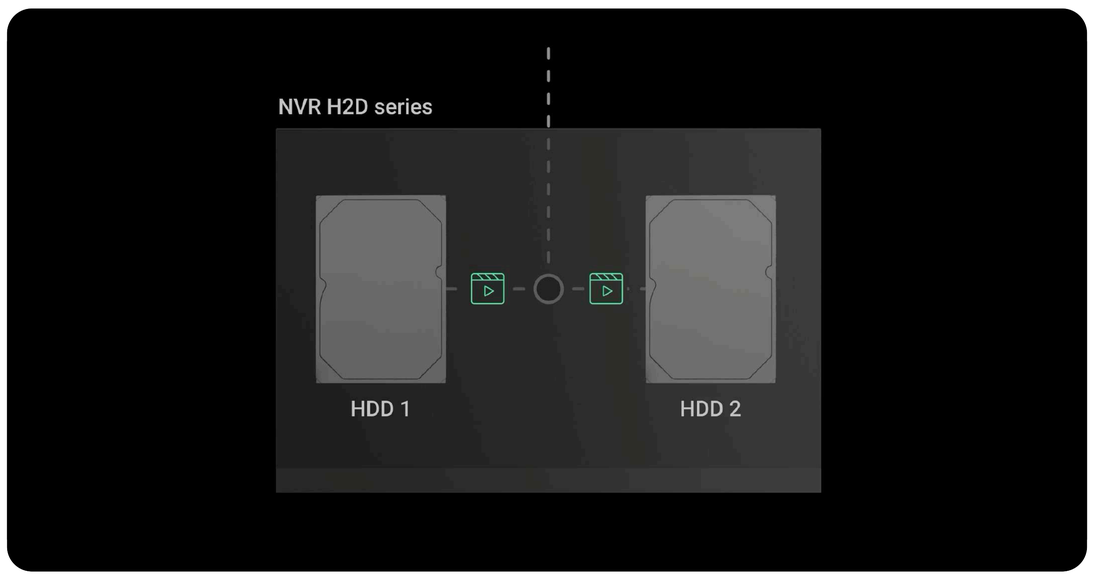
All devices in the Ajax Supeior NVR H2D series deliver continuous recording, even during maintenance.
They support **hot swapping**, so installed HDDs can be replaced at any time without shutting down the recorder.

Flexible video surveillance for any scale and scenario

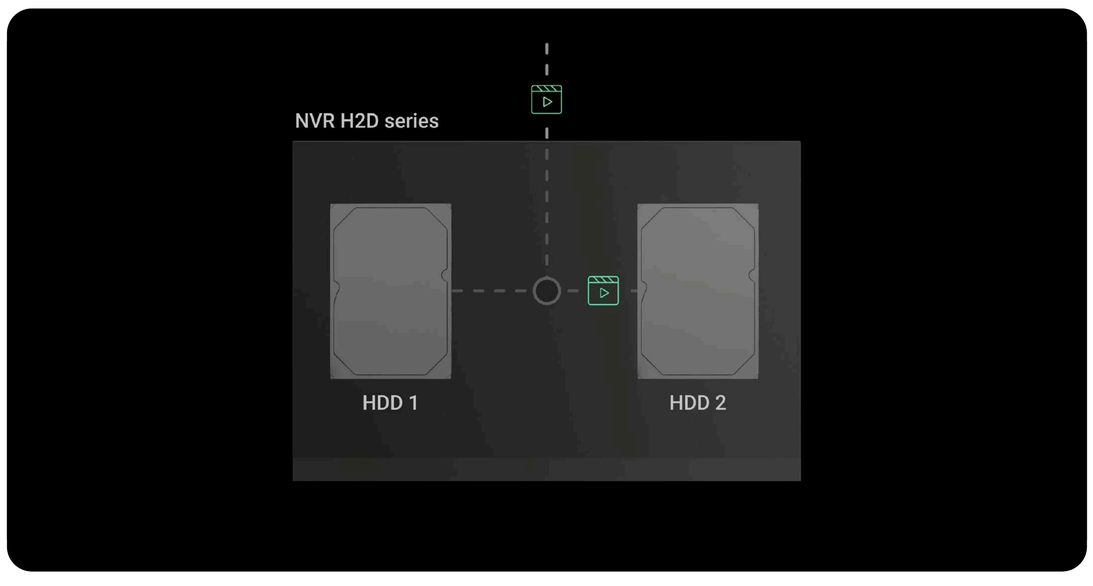


Full story preserved with two-drive recording

Ajax Superior NVR H2D series offers two recording modes designed to enhance system resilience. Both minimize the risk of data loss if one drive fails, always preserving sufficient context of recorded events.



Redundancy mode
Footage is duplicated across both hard drives to ensure a full backup.



Split mode
Footage is recorded alternately in equal segments across both hard drives, optimizing storage capacity and balancing HDD load.

Local video management experience

- On-site video surveillance without an internet connection
- Local video management and archive access
- Customizable virtual video wall and slideshow mode
- 4K HDMI port for connecting a display
- One USB 3.0 port and USB 2.0 ports for a keyboard, mouse, or flash drive

Remote video management via Ajax apps

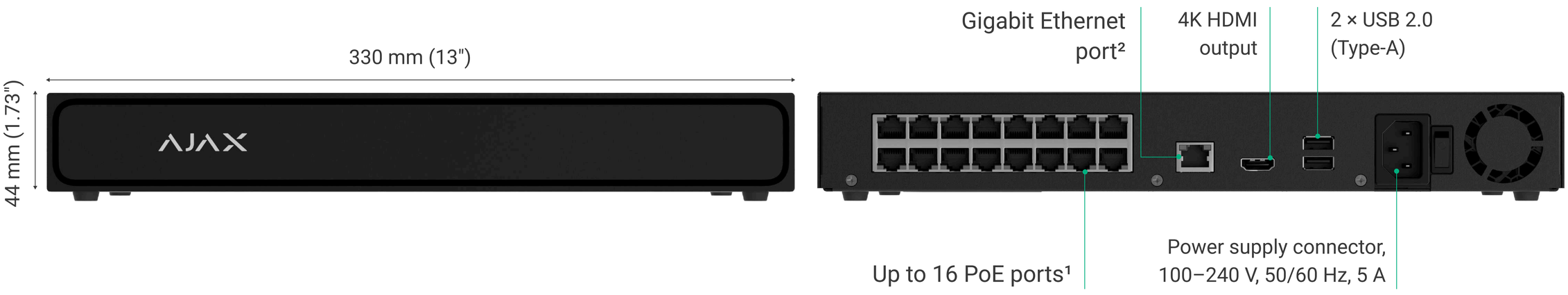
- Proprietary JetSparrow technology for instant, encrypted video streaming and smooth archive navigation
- Archive synchronization with security system events
- High-resolution visual verification of alarms via video scenarios
- Instant transition from notifications to on-site video recordings
- Fast archive navigation using event timeline, calendar view, and search filters

Robust security without privacy compromises

- TLS-encrypted video streams
- User-controlled access to video content
- Passwordless camera authentication
- Secure video export with digital signature verification
- Multi-tiered account protection: passcodes, biometrics, and two-factor authentication
- Session control for additional account safety
- Exclusive owner access to content stored on hard drives
- NDAA compliance

Easy installation and maintenance

- PoE ports for effortless camera connection
- Option for rack mounting with the ready-to-use kit
- Adding to an Ajax system via QR code
- Remote control and configuration via Ajax apps
- Configurable motion detection zones for connected cameras
- Conformance with ONVIF® Profile S
- RTSP support
- Automatic search for available cameras on the local network
- Support for two hot-swappable HDDs
- Real-time NVR health monitoring, including HDD state



HDMI cable and HDDs are not included in the complete set.

Ports

PoE+
up to 16 ports

Ethernet
up to 2 × RJ45

4K HDMI

USB
1 × USB 3.0 (Type-A)
2 × USB 2.0 (Type-A)
To export data and connect an interface device (e.g., mouse, keyboard, etc.) or a flash drive.

Video stream

IP cameras
RTSP
Conformant with ONVIF® Profile S
Ajax Superior NVRs implement ONVIF® H.265 (HEVC) encoding, transmission of motion detection and AI recognition events, control over Wide Dynamic Range (WDR), and other image settings – not ONVIF® profile or add-on conformant.

Decoding formats
H.265/H.264

Storage
two hard drives with up to 24 TB capacity (SATA connectivity, 3.5” size)
HDDs are not included in the complete set

Bandwidth
incoming: up to 600 Mbps
outgoing: up to 600 Mbps

Key features

Built-in AI
AI-powered detection of people, pets, and vehicles for connected cameras

AI analytics on third-party cameras
up to 12 channels

JetSparrow
Proprietary Ajax protocol for fast and secure video transmission

Motion detection
Built-in software to detect movement in the frame

Built-in video management system

Visual verification of system alarms

Power supply

Ajax Superior NVR H2DAI2GAC (8-ch)
Ajax Superior NVR H2DAI2GAC (16-ch)
Ajax Superior NVR H2DAI2GAC (32-ch)

Main
100–240 V, 50/60 Hz, 0.6 A

Power consumption
up to 85 W

Ajax Superior NVR H2DAI8PAC (8-ch)
Ajax Superior NVR H2DAI8PAC (16-ch)
Ajax Superior NVR H2DAI16PAC (16-ch)
Ajax Superior NVR H2DAI16PAC (32-ch)

Main
100–240 V, 50/60 Hz, 5 A

Power consumption
up to 320 W

Installation

Operating temperature
0 °C to +50 °C
32 °F to 122 °F

Operating humidity
up to 75%

Protection class
IP20

Enclosure

Colors
black, white

Dimensions
330 × 330 × 44 mm
13" × 13" × 1.73"

Weight
3,300 g
116.4 oz
Without hard drives

Complete set

Ajax Superior NVR
2 × rack-mount bracket
Power cable
Ethernet cable
Installation kit
Quick start guide

[1] PoE ports are available for Ajax Superior NVR H2DAI8PAC (8-ch), Ajax Superior NVR H2DAI8PAC (16-ch), Ajax Superior NVR H2DAI16PAC (16-ch), and Ajax Superior NVR H2DAI16PAC (32-ch).

[2] Ajax Superior NVR H2DAI8PAC (8-ch), Ajax Superior NVR H2DAI8PAC (16-ch), Ajax Superior NVR H2DAI16PAC (16-ch), and Ajax Superior NVR H2DAI16PAC (32-ch) feature one Gigabit Ethernet port. Two ports are available for Ajax Superior NVR H2DAI2GAC (8-ch), Ajax Superior NVR H2DAI2GAC (16-ch), and Ajax Superior NVR H2DAI2GAC (32-ch).

For detailed information, scan the QR code or follow the link:

ajax.systems/products/superior-nvr-h2d/manuals/

support@ajax.systems
@AjaxSystemsSupport_Bot
ajax.systems