

Ajax Superior NVR H2DAI16PAC (16-ch)

16-channel AI-powered network video recorder with 4K HDMI output, Gigabit Ethernet port, 16 PoE ports, and support for 2 hot-swappable HDDs

Source: <https://ajax.systems/products/specs/superior-nvr-h2dai16pac-16-ch/>

Video

Video input	16 channels
Recording resolution	12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, UXGA, 720p, VGA, 4CIF, DCIF, 2CIF, CIF, QCIF
HDMI output resolution	3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 px
Live view / playback resolution	12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 1080p, 720p, D1, VGA, CIF

Decoding

Format	H.265, H.264, JetSparrow
Capability	• 2 × channel at 4096 × 4096 px (25 fps) • 4 × channel at 3840 × 2160 px (25 fps) • 8 × channel at 2880 × 1620 px (25 fps) • 10 × channel at 2560 × 1440 px (25 fps)
Capability for third-party cameras with AI enabled	• 1 × channel at 4096 × 4096 px (25 fps) • 2 × channel at 3840 × 2160 px (25 fps) • 4 × channel at 2880 × 1620 px (25 fps) • 5 × channel at 2560 × 1440 px (25 fps) • 9 × channel at 1920 × 1080 px (25 fps) • 12 × channel at 1280 × 720 px (25 fps) • 16 × channel at 1024 × 576 px (25 fps) These capability values apply when the Object detection function is enabled.
Live view window division	templates: 1, 4, 9, 16, 25, 5+1, 7+1, 12+1 views custom: up to 10×10 views
Synchronous playback	4 channels

Intelligent video analytics

Motion detection	Ajax camera: 16 channels Ajax NVR: 16 channels Ajax NVR features built-in software to detect movement in the frame. It is possible to switch between image analysis by Ajax NVR or camera algorithms in an Ajax app.
AI-powered object detection	People Pets Vehicles Line crossing
AI analytics on third-party cameras	up to 12 channels

Interface

HDD/SSD	2 × SATA III: supports drives with up to 24 TB capacity (2.5" and 3.5" form factors) Supports full hot-swap functionality. HDDs or SSDs are not included.
Network	1 × RJ-45 self-adaptive Ethernet (10/100/1000 Mbps) + 802.3af/at PoE RJ-45 fast Ethernet (10/100 Mbps)
USB	rear panel: 2 × USB 2.0 (Type-A) For connecting a keyboard, mouse, or USB Audio Device Class devices (Audio IN/Audio OUT). front panel: 1 × USB 3.0 (Type-A) To connect a USB flash drive.

PoE standard

PoE port	16 × IEEE 802.3af/at (Alternative A, power over data pairs)
Maximum power per port	up to 25 W
Total power budget	up to 200 W

Network

Bandwidth	incoming: up to 384 Mbps outgoing: up to 384 Mbps
Protocol	HTTP, HTTPS, TCP/IP, IPv4, IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS
ONVIF ®	conformant with ONVIF ® Profile S The device implements 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.

Key features

Supported devices	• Ajax cameras • IP cameras that conform to ONVIF ® Profiles • RTSP
Redundancy mode	Simultaneous recording of the same video streams to two storage devices to ensure data redundancy and reliability.
Split mode	Sequentially distributes video streams across multiple storage devices to balance the load and optimize storage.
Built-in video management system	• Integrated video wall interface with live camera feeds. • Smart event filters for quick access to relevant video recordings. • Interactive timeline with preview navigation for efficient playback and incident review.
Visual verification of Ajax system alarms	Ajax NVR supports a scenario in which events triggered by Ajax detectors automatically highlight the corresponding camera feed on the video wall. This allows an operator to immediately verify the intrusion.
Privacy	Advanced privacy controls ensure a high level of personal data protection. All access rights — including those for mobile app users, installers, and monitoring company operators via Ajax PRO Desktop — are fully configurable by the device owner. This guarantees that only authorized persons can access video streams, event history, or device settings in accordance with the owner's preferences.

Accelerometer	alarm when Ajax NVR is moved
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Power supply

Main	100–240 V, 50/60 Hz, 5 A
Power consumption	up to 280 W
Clock battery	CR2032 battery, 3 V Only to power the system clock.

Complete set

	Ajax Superior NVR H2DAI16PAC (16-ch)
	2 × rack-mount brackets
	Power cable
	Ethernet cable
	Installation kit
	Quick start guide

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