DomeCam HLVF

Wired AI-powered security IP camera
with a 2.8–12 mm motorized varifocal lens, hybrid illumination, True WDR, audio and alarm inputs/outputs, microphone, and PoE/12 V. For outdoor and indoor use.



IR · WL · IK10 · IP67 · True WDR · PoE · micro SD · NDAA Compliant

Product versions



DomeCam HLVF (5 Mp)

up to 2880 × 1620 px (3K UHD)



DomeCam HLVF (8 Mp)

up to 3840 × 2160 px (4K UHD)

Adaptability by design

DomeCam HLVF is engineered to adapt to any scenario. Featuring a motorized varifocal lens with autofocus, a single camera can provide both wide coverage and sharp detail. This flexibility simplifies installation, enables smarter setups, and ensures consistently clear visuals.

Adjustable focal length for wide or focused views: 2.8–12 mm

Instant autofocus for sharp visuals after adjustment

Seeing in color after dark

Thanks to hybrid illumination, DomeCam HLVF records in full color even at night. Once motion or an object is detected, the camera automatically switches from infrared (IR) to white light to capture every detail. The sudden flash of white light also acts as a deterrent, stopping intruders in their tracks.

IR illumination range: up to 60 m (197 ft)

White light illumination range: up to 40 m (131 ft)

Seamless user experience

- AI-powered object recognition: people, vehicles, and pets
- High-resolution visual verification of alarms via video scenarios
- Built-in microphone with noise suspension and echo cancellation
- Instant transition from notifications to on-site video recordings
- Camera synchronization with security system modes
- Sirens or automation devices activation upon detection[1]
- Real-time monitoring with a customizable video wall
- True WDR (Wide Dynamic Range) for better image quality

Smooth archive navigation

- Proprietary JetSparrow technology for instant, secure video streaming and smooth archive navigation
- Instant access to live view
- Fast archive navigation using event timeline, calendar view, and search filters
- Dual streams for instant preview and optimized bandwidth usage
- Quick video clip export in just a few clicks

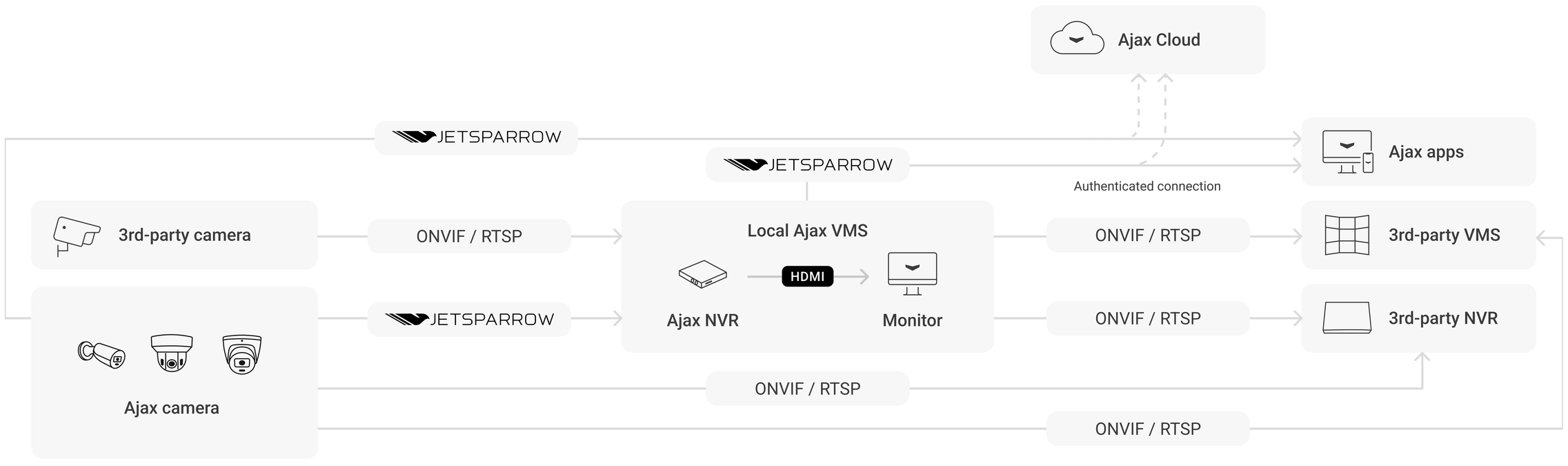
Uncompromising security and privacy

- Passwordless camera authentication via mutual TLS (mTLS) handshake
- TLS-encrypted video streams
- User-controlled access to video content
- Secure video export with digital signature verification
- Multi-tiered account protection: passcodes, biometrics, and two-factor authentication
- Session control for additional account security
- NDAA-compliant components

Easy installation and maintenance

- Adding to an Ajax system via QR code
- Remote control and configuration via Ajax apps
- Conformance with ONVIF® Profile G and S
- RTSP support
- Alarm and audio inputs and outputs to connect third-party devices
- Motion detection zone configurations via mobile and desktop Ajax apps
- Real-time system health monitoring with automatic state checks

Flexible video surveillance for any scale and scenario



DomeCam HLVF cameras can operate without an Ajax NVR. In this case, video footage is stored locally on a microSD card if one is installed.

Compliance with standards

CE
RoHS
NDAA

Key features

Motorized varifocal lens
Allows changing the viewing angle from wide to narrow

JetSparrow
Proprietary Ajax protocol for fast and secure video transmission

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

Built-in digital microphone

Object recognition with built-in AI
People
Pets
Vehicles

Alarm verification
Motion detection
AI-powered recognition
Detector alarm
Automation scenarios

Installation

Operating temperature
−40 °C to +60 °C
−40 °F to 140 °F

Operating humidity
up to 90%

Video and optics

Resolution

5 MP version:
up to 2880 × 1620 px @ 25 fps (3K UHD)

8 MP version:
up to 3840 × 2160 px @ 25 fps (4K UHD)

Field of view
horizontal: 31°–111°
vertical: 17°–57°
diagonal: 35°–135°

Lens focal length
2.8–12.0 mm

Image processing
True WDR
(hardware and software)

Video compression
H.265, H.264

Illumination

IR illumination range:
up to 60 m (197 ft)

White light illumination range:
up to 40 m (131 ft)

Bitrate
100 Mbps, full-duplex

Simultaneous live view
Up to 5 channels

Video stream
RTSP
Conformant with ONVIF® Profile G and 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.

Storage
Ajax NVR
microSD card
Up to 256 GB

Power supply

Power supply unit
8–14 V⎓

Ethernet
10/100 Mbps
(RJ-45)

Ethernet port
PoE standard
802.3at/af

Power consumption
up to 12 W

Enclosure

Color
black, white

Dimensions
136 × 136 × 115.3 mm
5.35" × 5.35" × 4.53"

Weight
430 g
15 oz

Protection class
IP67
IK10

Complete set

DomeCam HLVF
Installation template
Installation kit
Quick start guide

[1] To activate sirens or automation devices upon detection, the system must include such devices and an Ajax hub.

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

ajax.systems/support/devices/domecam-hlvf

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