

Tech specs

BASELINE

TurretCam HLVF (8 Mp)

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.



Camera

Image sensor

8 MP CMOS, 1/2.8" type

Lens focal length

2.8–12.0 mm

Maximum aperture

f/1.6

Lens iris type

fixed

Lens focal type

varifocal

Field of view

horizontal: 31°–111°

vertical: 17°–57°

diagonal: 35°–135°

Maximum illumination distance

- white LED: up to 40m
- IR LED: up to 60 m

Intelligent lighting control automatically adjusts the intensity of IR and white LEDs in real time to prevent overexposure. This ensures clear visibility of objects at varying distances, both near and far, in low-light conditions.

Minimum illumination

color: 0.005 lx

B/W: 0 lx

Signal-to-noise ratio (SNR)

more than 52 dB

Video

Resolution

- 8 MP (3840 × 2160)
- 6 MP (3072 × 1728)
- 5 MP (2944 × 1656)
- 5 MP (2880 × 1620)
- 5 MP (2688 × 1520)
- 5 MP (2592 × 1944)
- 4 MP (2560 × 1440)
- 3 MP (2304 × 1296)
- 2 MP (1920 × 1080)
- 0.6 MP (1024 × 576)

Frame rate

up to 25 fps

Image rotation

0°, 90°, 180°, 270°

Video codec

H.265, H.264

Dynamic range

120 dB (True WDR)

Storage

microSD

Ajax NVR >

Camera supports microSD cards up to 256 GB. The memory card must be Class V30 or faster. The card is not included in the complete set.

Audio

Built-in microphone

1

With the corresponding settings applied, the camera can record audio at the scene.

Audio codec

G.711 μ -law, G.711 A-law, G.726, G.722

Intelligent video analytics

Motion detection

The camera detects motion using software-based image frame analysis.

AI object detection

People

Pets

Vehicles

Line-crossing

Network

Port

1 × RJ45 self-adaptive Ethernet (10/100 Mbps)

Protocol

HTTP, HTTPS, TCP/IP, IPv4, RTSP, UDP, DHCP, DNS

Interoperability

ONVIF (Profile S/T*)

Ajax cameras and NVRs can be integrated into third-party video management systems (VMS).

* Profile T is supported for basic streaming and configuration. Advanced features such as metadata, event handling, or edge recording may not be available.

[Learn more](#) >

Alarm port

Lines for third-party devices

2

Alarm IN type

NO, NC

Configured in Ajax apps.

Alarm OUT operating range

48 V $\overline{=}$, 300 mA

Audio port

Lines for third-party devices

2

Audio IN type

external microphone input

Supports active microphones with a built-in preamplifier.

Audio IN settings

gain

enable/disable

Configured in Ajax apps.

Audio OUT type

speaker output

Supports connection of an external speaker (min. 3 W, $\geq 4 \Omega$). When an external speaker is connected, the internal one is disabled.

Key features

Video transmission

JetSparrow

Fast and encrypted peer-to-peer technology developed by Ajax Systems.

Focal length change

autofocus

manual focus control

Configured in Ajax apps.

Visual verification of system alarms

Ajax systems allow users to configure a scenario in which Ajax detectors trigger selected cameras to start recording. The recorded event is immediately delivered to the mobile or desktop Ajax PRO app.

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 using Ajax PRO Desktop — are fully configurable by the device owner. This guarantees that only authorized parties can access video streams, event history, and device settings in accordance with the owner's preferences.

Sabotage protection

mTLS

Encrypted connection for data protection.

Authentication

via Ajax Cloud

Secure Boot

Protection against firmware spoofing.

OTA signature verification

Secure automatic firmware update.

Accelerometer

Alerts on attempts to move or dismount the camera.

Power supply

PoE standard

802.3at/af (Class 3)

External power connector type

screw terminal connector (2 pin)

Power consumption

- maximum: up to 12 W
- average: up to 6 W

Power supply unit

12 V $\overline{=}$, 1 A

Enclosure

Dimensions

136 × 113 × 136 mm

Weight

850 g

Operating temperature range

from -40 °C to +60 °C

Operating humidity

up to 90%

Protection class

IP67, IK10, IK08



Color

Black

White



Complete set

TurretCam HLVF (8 Mp)

Installation template

Installation kit

3 screw terminal connectors

Quick start guide

Additional information

Compliance with standards

[Learn more](#) >

User manual

[Learn more](#) >

Warranty

24 months

Learn more >

Subscribe

Subscribe to our emails about secure life. No spam.

Subscribe

Request extra help

- support@ajax.systems
- @AjaxSystemsSupport_Bot
- Send a request



Rating 4.8

4,500,000
people worldwide under Ajax protection

Suggest a feature



Products

- Intrusion protection
- Video surveillance
- Fire and life safety
- Comfort and automation
- All products
- Services
- System integrations
- Ajax Ready products
- Fibra wired protocol

Software

- Ajax Security System
- Ajax PRO: Tool for Engineers
- Ajax Desktop
- Ajax PRO Desktop
- Ajax TV
- Ajax Translator PRO
- Ajax Cloud Signaling
- Scenarios



Available on
App Store



Available on
Google Play

Solutions

Customer stories

Solutions by facility type

Commercial fire detection and alarm system

Wireless Grade 3 solution

Video surveillance solution

Integration with Yale smart locks

Upgrades and retrofits

Why Ajax

How it works

Support

Manuals and articles

Compliance with standards

Tools

Ajax device compatibility

CMS software compatibility

Ajax Services availability

Video storage calculator

Video device calculator

Battery life calculator

Radio communication range calculator

Switches and outlets configurator

Fibra power supply calculator

All web tools

Monitoring solutions and integrations

Intrusion alarm monitoring

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