

# MotionCam Outdoor HighMount (PhOD) Jeweller

Wireless PIR motion detector with extended photo verification possibilities. For outdoor installation at a height of 2–4 m.

## All threats detected and verified

MotionCam Outdoor HighMount (PhOD) Jeweller is a wireless motion detector designed primarily for remote locations, warehouses, and industrial complexes, yet equally suited for offices and private houses. The device can be installed at heights ranging from 2 to 4 m 6.6 to 13 ft, providing extensive area coverage with no blind zones. With a built-in camera, it is easy to quickly assess the situation at the protected facility. This is possible thanks to several types of photo verification available: by alarm, by scenario, by schedule, by arming/disarming, and on demand. The false alarm filter distinguishes non-threatening factors, such as swaying tree branches or heat flows. The metal swivel mount allows for flexible adjustment of the viewing angle.

## Key features

2–4 m 6.6–13 ft  installation height	Swivel mount	90° horizontal viewing angle	90° vertical viewing angle
Up to 15 m 49 ft  movement detection distance	Dual motion detection technology  to trigger the device only when both sensors detect movement	Temperature compensation  for effective detection in heat and cold	Anti-masking system
Software algorithm to prevent false alarms		Several types of photo verification  <ul style="list-style-type: none"> <li>● Photo by alarm</li> <li>● Photo by scenario</li> <li>● Photo on demand</li> <li>● Photo by schedule</li> <li>● Photo by arming/disarming</li> </ul>	IR illumination
Magnetometer to monitor the surrounding magnetic field  <b>Ajax</b> Device was moved, MotionCam Outdoor HighMount (PhOD) Jeweller in Entrance	Hood to protect masking sensors from rain and snow	Over-the-air firmware updates	Up to 1,700 m 5,550 ft of wireless communication range <sup>1</sup>
HDR technology for clear photos in any condition	Tamper alarm  to notify of attempts to dismantle the device	IP55 enclosure protection	Jeweller and Wings radio communication  Power adjustment

			Frequency hopping Encryption TDMA Two-way communication Power adjustment
Up to 3 years of operation on pre-installed batteries	EN 50131   Grade 2 PD 6662:2017		Remote control and configuration
Possibility to connect a 12–24 V <sup>=</sup> external power supply unit	<p style="text-align: center;">Informative push notifications</p> <p><b>⚠ CRITICAL</b> <b>Ajax</b> Warehouse: Motion detected, MotionCam Outdoor HighMount (PhOD) in Storage area</p> <p><b>Ajax</b> Office: MotionCam Outdoor HighMount (PhOD) in Office is online again. Connection via Jeweller channel restored.</p>		Hassle-free installation QR code → SmartBracket App

In an Ajax system, you can combine devices of all product categories: Intrusion protection (both Superior and Baseline), Video surveillance, Fire and life safety, or Comfort and automation. Create the system to suit your needs and manage it in a single interface.

## Captures movement where it is most needed

Keep any commercial premises secure day and night, with no blind zones or false alarms. MotionCam Outdoor HighMount (PhOD) Jeweller detects movement at a distance of 15 m 49 ft. The detector instantly takes a series of photos so the user can check the reason for the alarm. All alarms are thoroughly checked at both software and hardware levels. At the software level, the device uses algorithms such as SmartDetect and LISA. At the hardware level, it is equipped with two types of sensors – two PIR sensors and a microwave sensor – to provide dual motion detection. Also, a Fresnel lens differentiates between the PIR diagrams of people and thermal noise.

## Wherever there is a risk of intrusion

Construction site	High-risk property	Gas production station	Production facility
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## No intruder goes unnoticed

## PIR sensors

MotionCam Outdoor HighMount (PhOD) Jeweller has two PIR sensors to ensure accurate movement detection. One sensor is responsible for near-field movement detection, while the other detects movement in the far-field movement detection zone.

## K-band microwave sensor

The device responds only when both PIR and microwave sensors are triggered. When the PIR sensor detects the movement of an object with a temperature similar to that of the human body, the device performs a radio wave scan using the K-band microwave sensor. This is how the dual motion detection technology works. Unlike traditional X-band sensors, the K-band sensor offers enhanced precision and superior energy efficiency. This results in minimal impact on battery lifespan and significantly fewer false alarms. Additionally, the sensor is completely safe and does not harm human health.

## Thermal interference filter

In armed mode, the detector constantly analyzes the thermal diagram from the PIR sensors, including the IR radiation intensity, thermal spot size, movement speed, time spent in the detection zone, and other parameters. The SmartDetect algorithm filters out potential false triggers such as headlights, lighting devices, and heat flows instantly and with high accuracy. As a result, the detector accurately responds to movement without false alarms.

## Temperature compensation

Temperature compensation is a software mechanism that maintains the contrast of the thermal diagram even if the ambient temperature is close to the temperature of the human body. With each ambient temperature measurement, the detector corrects the PIR sensors' data according to the coefficient table stored in its memory. The detector is effective over the entire operating temperature range.

## Sensitivity level

MotionCam Outdoor HighMount (PhOD) Jeweller features three sensitivity levels that can be adjusted through an Ajax app. The optimal sensitivity level depends on the facility type, the presence of potential sources of false alarms, and the specifics of the protected area. A low sensitivity level is suitable for areas prone to false alarms; normal sensitivity is ideal for most facilities, and high sensitivity is recommended for areas with no obstacles.

## Professional installation

Proper installation and configuration of a motion detector are key to detecting threats quickly. MotionCam Outdoor HighMount (PhOD) Jeweller should be placed on a vertical surface at a height of 2–4 m 6.6–13 ft. The device's tilt angle must be adjusted using the swivel mount. The detector sensors should be directed to the expected intrusion path.

**MotionCam Outdoor HighMount (PhOD) Jeweller does not have a pet immunity feature.**

## Peace of mind on demand

- HDR technology for clear photos
- IR illumination for low light conditions
- The first photo is delivered in less than 9 seconds<sup>2</sup>
- Up to 5 photos in a series

MotionCam Outdoor HighMount (PhOD) Jeweller is equipped with a camera to quickly assess the situation at the site. The device takes a series of photos as soon as it detects movement. A series of photos is combined into a GIF or MP4 format to show how the situation develops in the dynamics. The outdoor detector can take a series of photos by request of the user from an Ajax mobile app, regardless of the security mode. Furthermore, the device can take photos on a set schedule, by arming/disarming, or when selected devices in the system activate an alarm.

- Photo by alarm
- Photo on demand
- Photo by schedule
- Photo by scenario
- Photo by arming/disarming

## Unique wireless technologies

MotionCam Outdoor HighMount (PhOD) Jeweller uses Jeweller and Wings proprietary radio protocols for reliable communication.

Up to 1,700 m 5,550 ft of radio communication with a hub or range extender <sup>1</sup>	Encrypted two-way radio communication
Notifications of jamming and connection loss	Over-the-air firmware updates

## Communication through steel and concrete

Some facilities have thick walls, metal partitions, or sheer distances that affect signal quality. [Ajax range extenders](#) are designed to increase the range of a wireless network and deliver stable connection with a hub despite the obstacles. And by choosing the model with an Ethernet cable connector, you get an additional communication channel. A single system can accommodate up to five range extenders.

Up to 5 range extenders within one system  
Ethernet-equipped model available

Large estate  
Business center with underground parking  
Metal hangar  
Industrial complex

## Outstanding autonomy

MotionCam Outdoor HighMount (PhOD) Jeweller delivers impressive autonomy: up to 3 years of operation on pre-installed batteries. The system will notify a security company and users of low battery levels in advance. A 12–24 V<sup>==</sup> external power supply unit can be connected to the detector. In this case, pre-installed batteries will serve as a backup power source. An external power supply is not required for the device to receive over-the-air updates.

## Ready for heat and cold

MotionCam Outdoor HighMount (PhOD) Jeweller is ready to operate in any weather. The device withstands heat up to +60 °C 140 °F and cold down to –25 °C –13 °F. Additionally, the detector can be installed with the hood to protect the anti-masking system from rain and snow.

IP55 protection rating  
Efficiency in heat and cold  
The hood to protect against rain and snow

## Sabotage resistance

<p><b>Tamper alarm</b></p> <p>The detector contains a tamper that activates an alarm if the device is detached from the surface or if its enclosure is opened. The system instantly notifies the security company and users of any intrusion attempts.</p>	<p><b>Magnetometer</b></p> <p>The integrated magnetometer records local magnetic field data during calibration, allowing the detector to identify and monitor the installed magnet. Instant alarms are activated by any changes in the magnetic field.</p>
<p><b>Anti-masking system</b></p> <p>MotionCam Outdoor HighMount (PhOD) Jeweller can identify when an obstacle obstructs the sensitive area of the detector's motion sensor, when the sensitive area is painted over, or when it is taped. This feature is only available for PIR sensors.</p>	<p><b>Device authentication against spoofing</b></p> <p>The hub checks the detector's unique parameters for authentication during each communication session. If any parameter fails the check, the hub ignores device commands.</p>
<p><b>Data encryption</b></p> <p>All data the system stores and transmits is protected by block encryption featuring a dynamic key. This encryption deters intentional sabotage attempts on the detector.</p>	<p><b>Regular polling</b></p> <p>The device regularly exchanges data with the hub. The system controls each device state and reports if there is a malfunction or connection loss.</p>
<p><b>Informative notifications</b></p> <p>An Ajax system instantly delivers informative notifications of alarms and events. Security companies and users receive precise details about the incident, including the triggered device, along with the time and location.</p>	<p><b>Connection loss detection</b></p> <p>With the minimum polling interval settings (3 data packages every 12 seconds), it takes only 36 seconds to detect connection loss and notify the security company and users of the incident.</p>

## Privacy first

<p><b>Detailed event log</b></p> <p>The event log records the last 500 events in the system. The data is explicit with the device, time, and event description. On-demand photos are linked to the user who requested them. Security companies do not receive the photos.</p>	<p><b>Encryption and GDPR</b></p> <p>Photos are encrypted at every stage of transmission. Only authorized system users can access the virtual Ajax Cloud storage and view photos. Once stored, the photos are not processed or analyzed. The Ajax Cloud server is hosted on servers distributed worldwide, which meets the General Data Protection Regulation (GDPR) requirements.</p>	<p><b>Strict permission distribution</b></p> <p>The <b>Privacy</b> menu in Ajax apps helps precisely configure access to visual data for users and security company operators. It's easy to determine users who can request a photo and view the received pictures.</p>
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## Effortless installation and setup

MotionCam Outdoor HighMount (PhOD) Jeweller is ready to operate straight out of the box. Ajax apps help quickly make the device a part of the system: simply pair the device with the hub by scanning the QR code. In the Ajax PRO app for

installers, it is possible to check the camera's field of view and maximum detection zone with the **Motion detection area** option. Remote configuration and monitoring are also available via PRO apps.

Connection	Installation	Configuration	Monitoring
Pairing with an Ajax system via the QR code	Installing using the swivel mount only	Configuring and testing in Ajax mobile and desktop apps	The <b>PRO Desktop</b> app for macOS and Windows <sup>3</sup>

<sup>1</sup> In an open space.

<sup>2</sup> With default settings (photo resolution is 320×240 px).

<sup>3</sup> Monitoring through PRO Desktop will be available with future device updates.