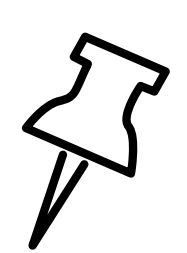


# MotionCam (PhOD) Jeweller

Wireless indoor IR motion detector supporting photo verification of alarms, **Photo on Demand** and **Photo by Scenario** features



An Ajax hub is required for operation.  
Find the detailed information on the device by the link:



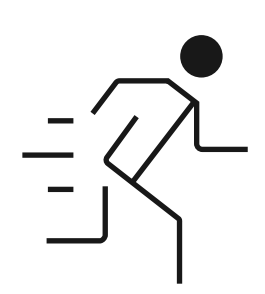
<http://ajax.systems/support/devices/motioncam-phod/>



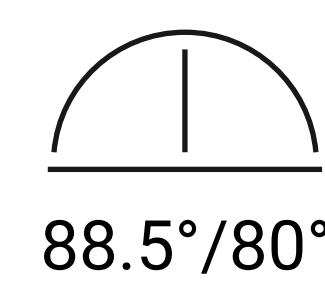
2  
GRADE  
EN 50131

PD 6662  
2017

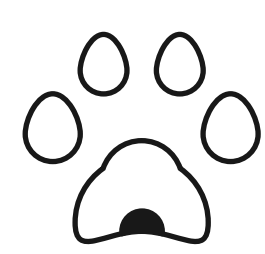
## Key features



Up to 12 m detection distance



88.5°/80° viewing angles



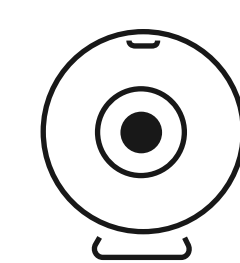
Pet immunity



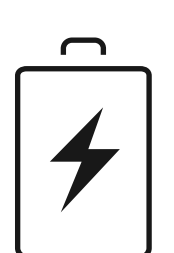
Temperature compensation



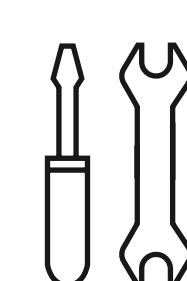
False alarms prevention algorithm



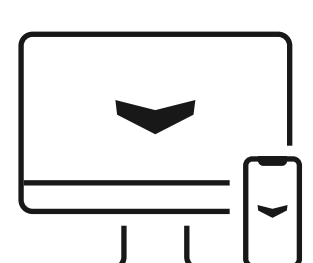
A built-in camera for photo verification



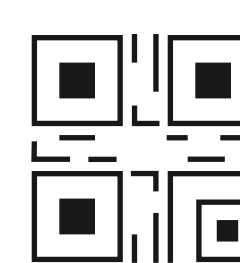
Up to 4 years of operation  
on pre-installed battery



Effortless installation and replacement

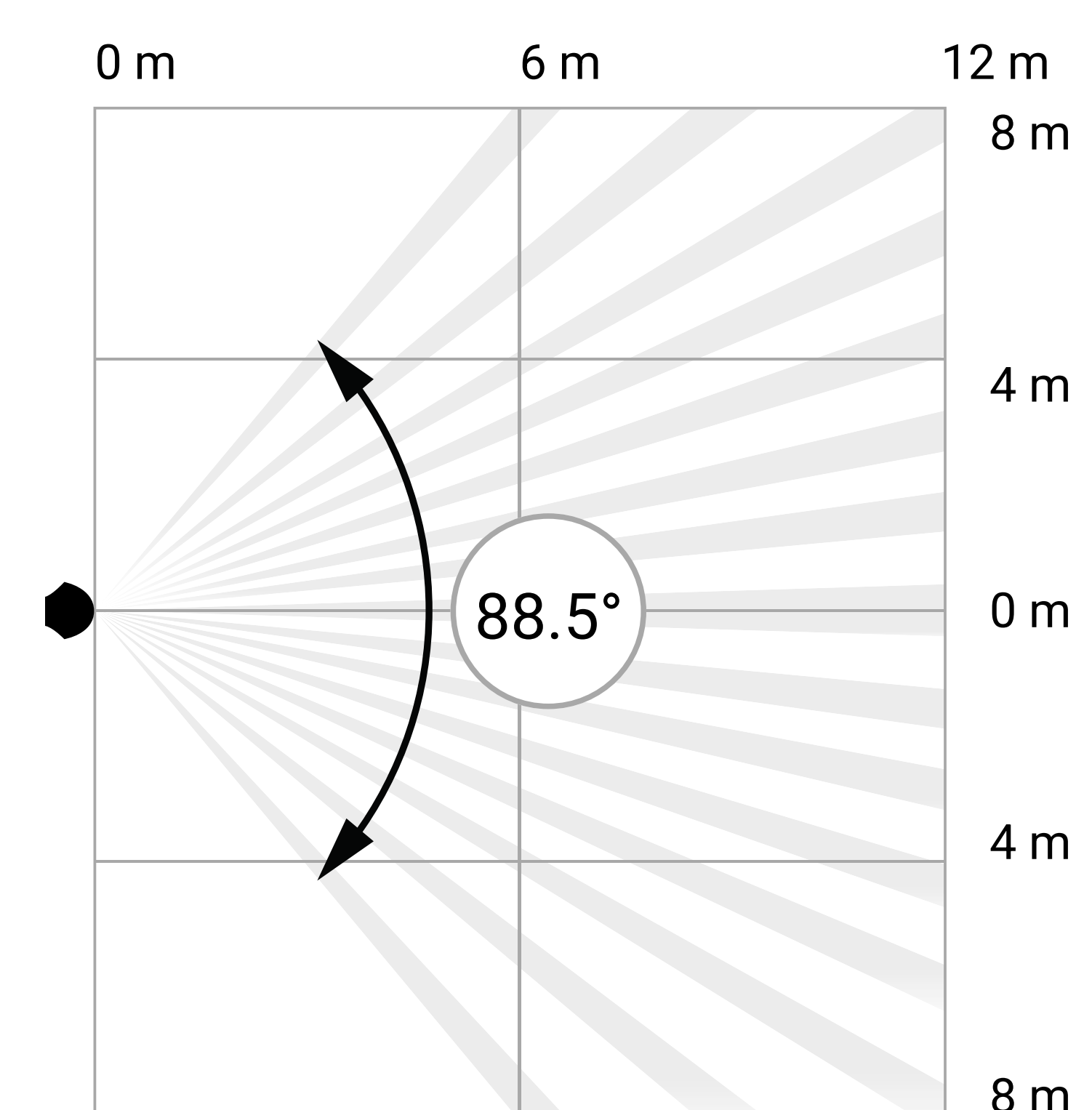
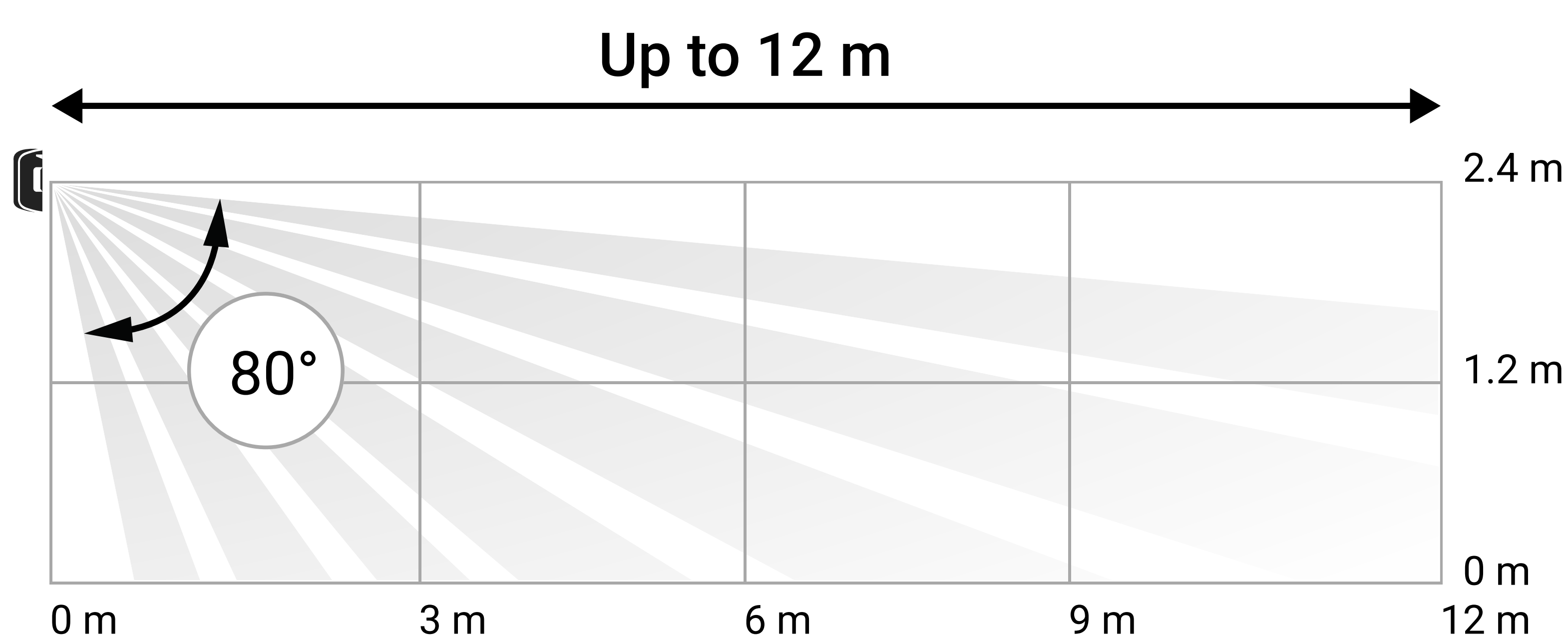


Remote control and setup via the app



Connecting via QR code

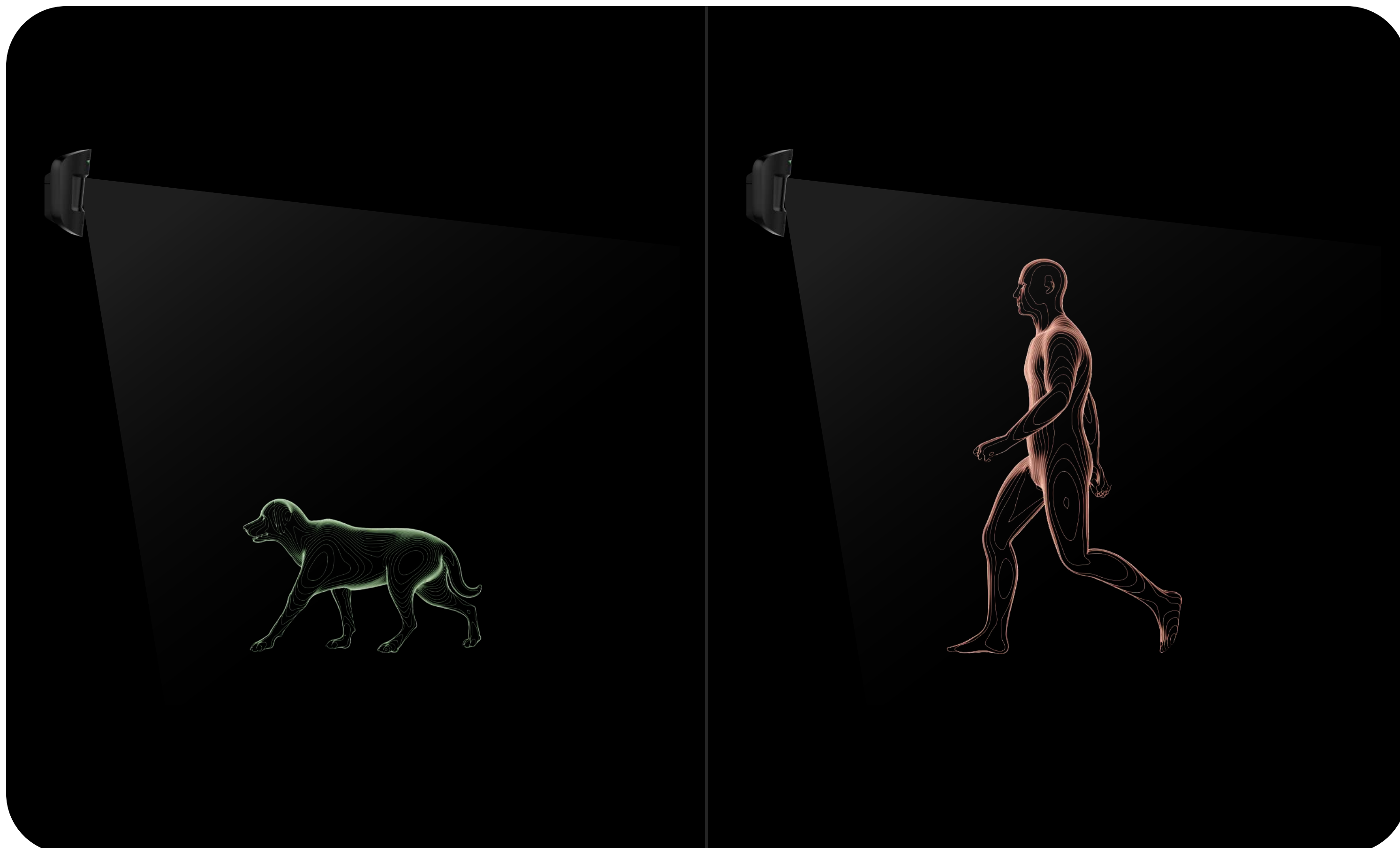
## Angles and detection range





# False alarms prevention

MotionCam (PhOD) Jeweller combines special optics and software to filter false alarms. When professionally installed, the detector doesn't react to pets and other common sources of false alarms.

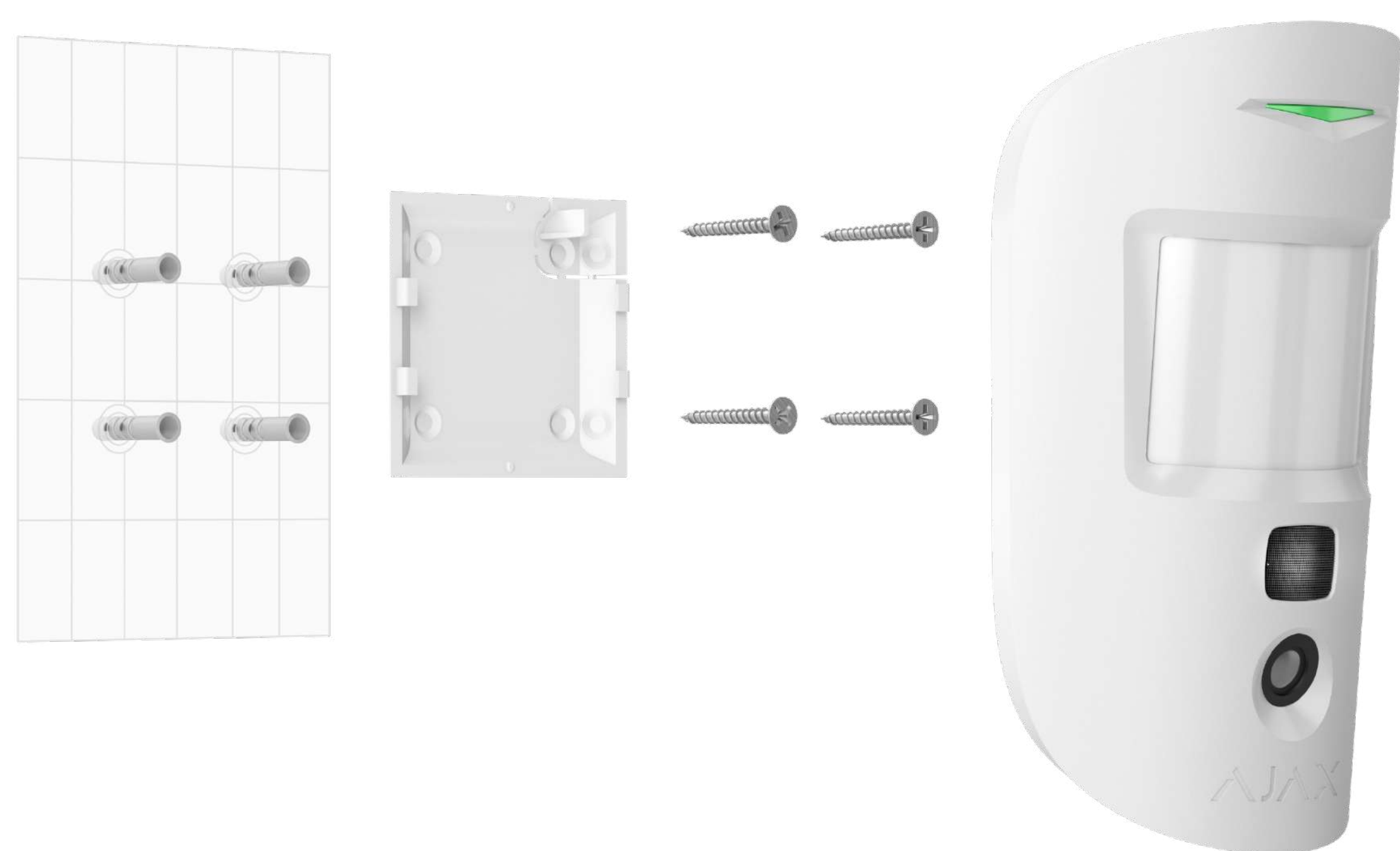
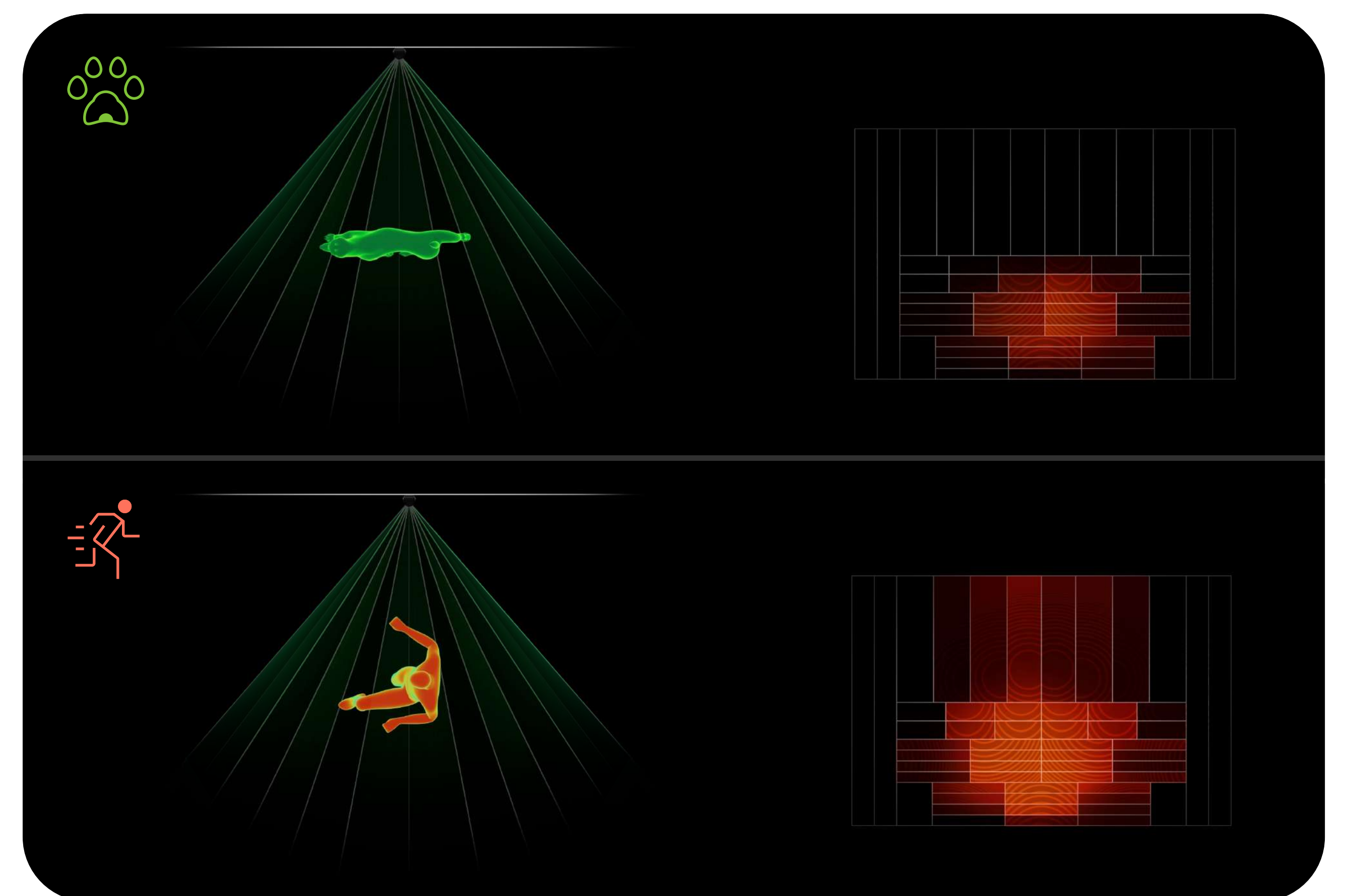


## Optics

The detector lens increases sensitivity to human motion, cutting off false alarms to other sources of IR radiation. It is designed so that potential IR radiation from pets and other interferences affect only the small lens sections. Large sections, on the contrary, are aimed at the most likely places of burglar motion.

## Software

For additional protection against false alarms, the detector uses the SmartDetect algorithm. The armed detector constantly analyses the thermal diagram from the PIR sensor: the intensity of IR radiation, the size of the thermal spots, the speed of movement and other parameters.



## Installation

When properly installed and configured, the detector does not react to common sources of false alarms and pets under 50 cm tall and 20 kg weight. For seamless installation, it has pre-installed batteries and the SmartBracket mounting panel. So, installers don't need to disassemble the detector and won't damage the electronics during installation.



# Photo verification

MotionCam (PhOD) Jeweller equipped with a built-in camera to show the real situation at the facility. There are three types of photo verification: by alarm, by scenario, and on demand. The user can request and view photos with one click in the Ajax app.

## Photo by Alarm

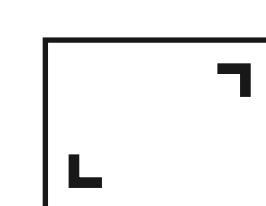
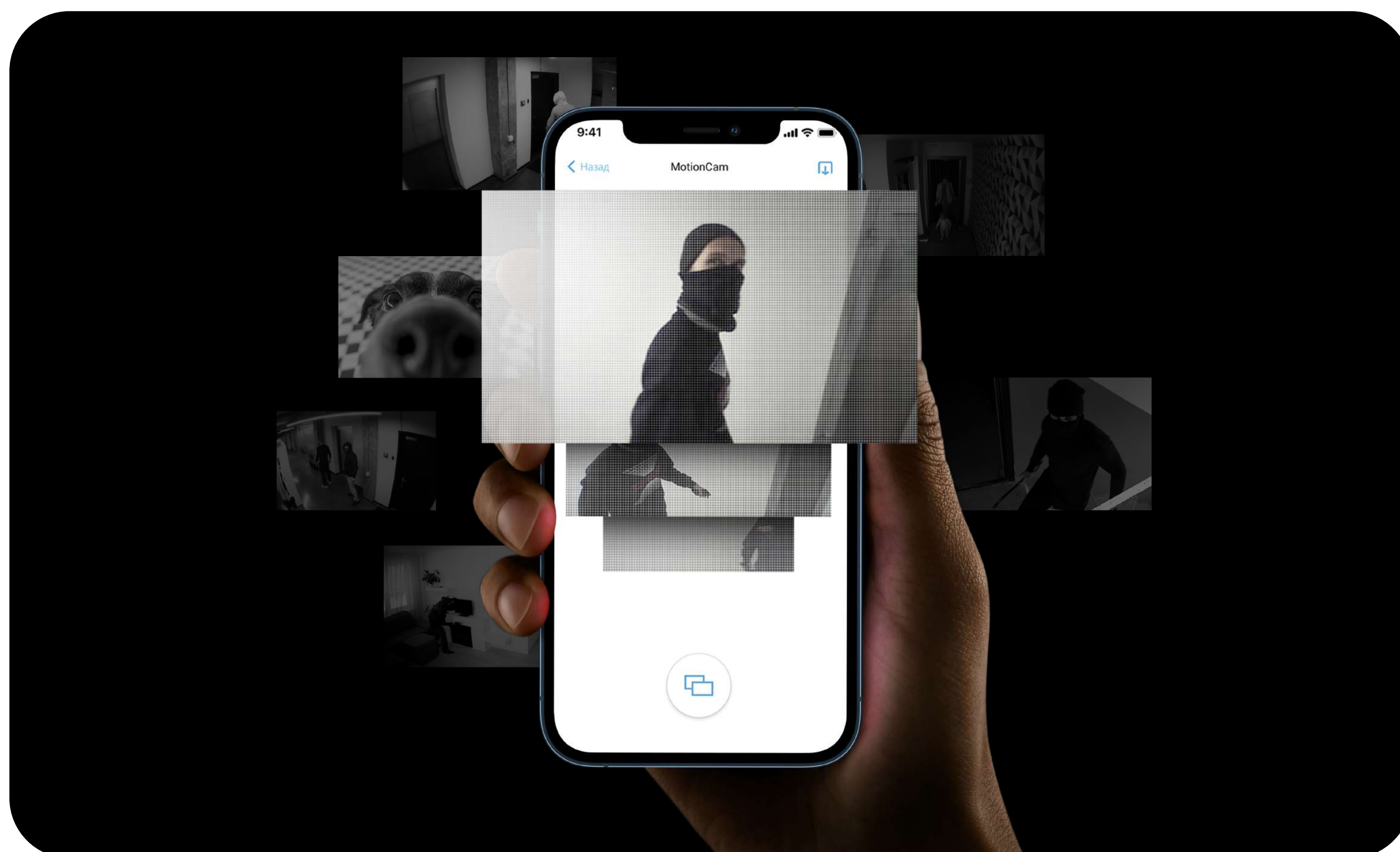
A built-in camera is activated if the detector is armed and motion is detected. Only users with access to the hub event feed and security company employees can view the photos.

## Photo by Scenario

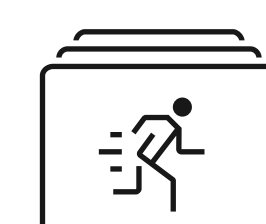
A detector camera takes pictures automatically when other Ajax devices are triggered.

## Photo on Demand

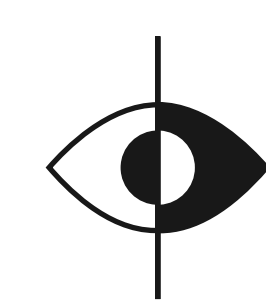
The user takes pictures at any time or when a detector is armed (depending on settings). Photos on demand are not sent to the security company monitoring station.



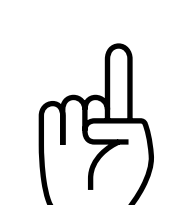
Up to 640 × 480 pixels photo resolution



Up to 5 photos in a series



IR backlight for low light conditions



The Ajax security system product line also includes MotionCam detectors without **Photo on Demand** and **Photo by Scenario** features. These detectors do not have the “PhOD” mark in the product name.

## Monitoring software that supports Ajax photo verification

HORUS

Horus

Manitou®

Manitou



SBN



Sentinel



WEB BUNCHER™

WBB

See the full list by the link: [ajax.systems/connecting-to-cms/](https://ajax.systems/connecting-to-cms/)

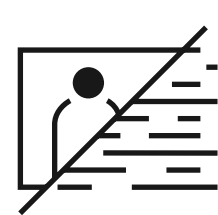
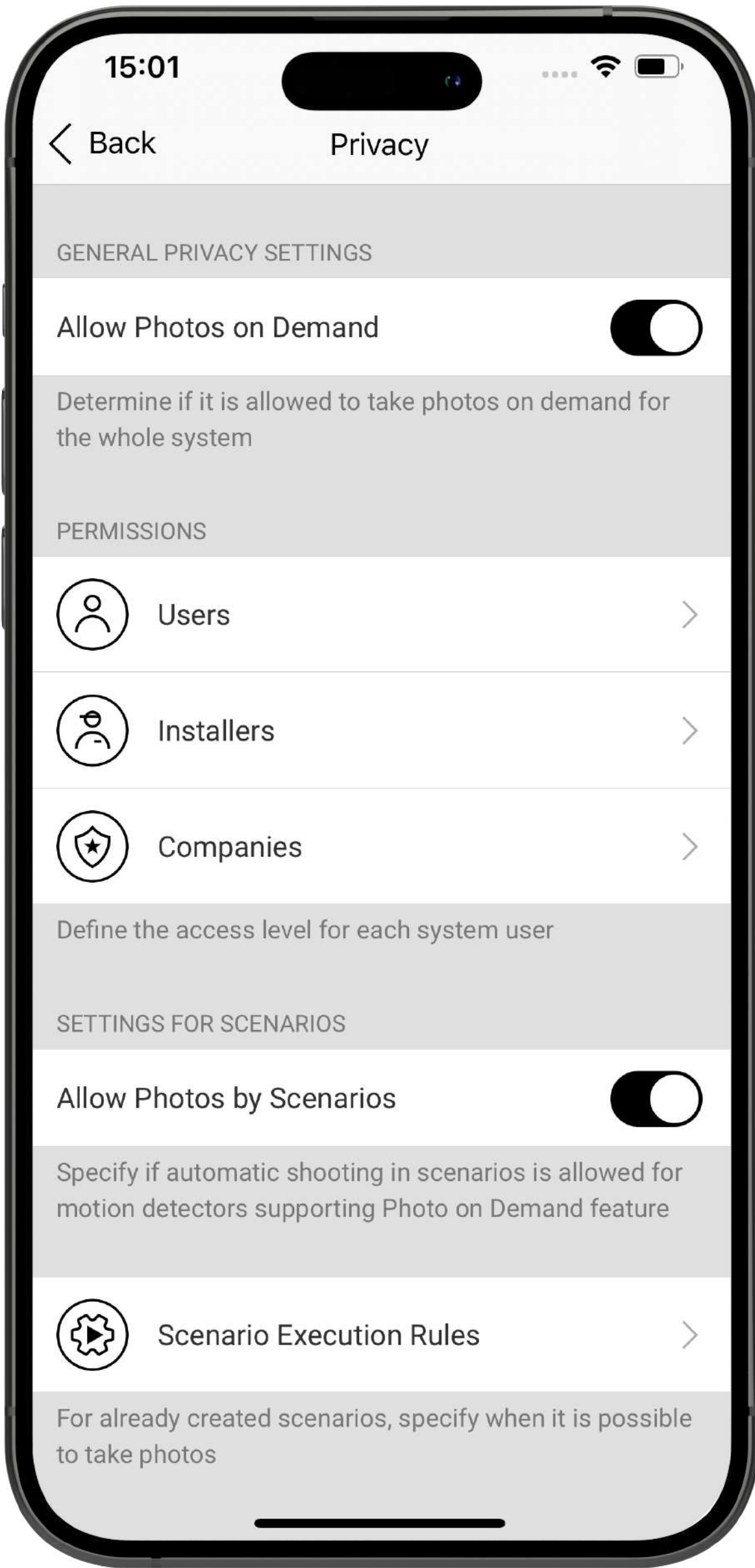


# Privacy on demand

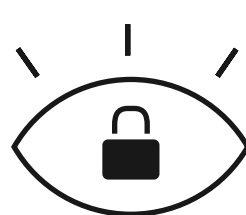
Users can manage access rights to detectors with photo verification. The access level can be defined for each system user. Privacy settings determine:

- Which user can take and view photos on demand.
- Which detectors with photo verification can be used to take photos on demand.
- When the user can take photos on demand: at any moment or only when a detector is armed.

By default, all hub admins have the right to manage privacy settings. PRO users cannot manage privacy settings.



Photos are encrypted throughout the transmission and storage processes

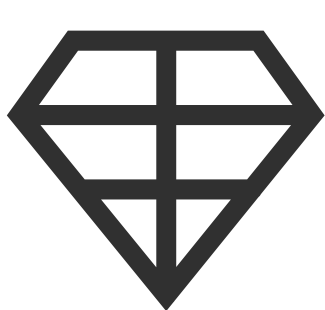
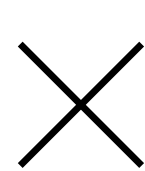


Photos are available only for users with proper access rights

# Two-way encrypted communication



Jeweller



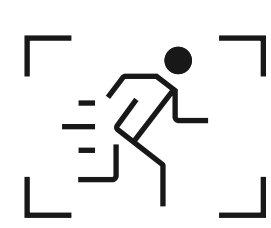
Wings

communication technology

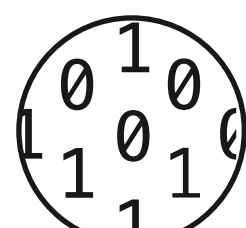


**Jeweller** and **Wings** are two-way **wireless data transfer protocols** that provide fast and reliable communication between hubs and devices. Radio protocols work independently of each other and focus on their own function. The **Jeweller** protocol delivers instant data-rich alarms: security companies and users know which device was triggered, when and where it happened. The **Wings** protocol delivers photos taken by a detector built-in camera.

Both protocols feature **encryption** and **authentication** to prevent forgery, and **polling** to display devices' status in real time. Supporting **up to 1,700 m** of wireless connectivity, Jeweller and Wings are ready to protect facilities and deliver **the best user experience** for both end users and installers.



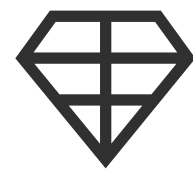
Alarm delivery in 0.15 s,  
the first photo — less than in 9 s



Up to 1,700 m of two-way encrypted  
wireless communication between hub  
and detector



# Technical specifications

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compliance with standards                | EN 50131 (Grade 2)<br>PD 6662:2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CMS connectivity | <b>Hubs</b><br>Hub 2<br>Hub 2 Plus<br>Hub Hybrid (2G)<br>Hub Hybrid (4G)<br><br>Range extenders<br>ReX 2                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Communication channels with Ajax devices | <div> <b>Jeweller communication technology</b></div> <div> <b>Wings communication technology</b></div> <div><b>Frequency bands</b><br/>866.0 – 866.5 MHz<br/>868.0 – 868.6 MHz<br/>868.7 – 869.2 MHz<br/>905.0 – 926.5 MHz<br/>915.85 – 926.5 MHz<br/>921.0 – 922.0 MHz<br/>Depends on the region of sale</div> <div><b>Maximum effective radiated power (ERP)</b><br/>≤ 20 mW</div> <div><b>Communication range</b><br/>up to 1,700 m<br/>In an open space</div> <div><b>Polling interval</b><br/>12–300 s<br/>Adjusted by PRO or user with admin rights in the Ajax app</div> | Motion detection | <b>Sensitive element</b><br>1 × PIR sensor<br><br><b>Detection distance</b><br>up to 12 m<br>When installed at a height of 2.4 m<br><br><b>Detection angles</b><br>horizontal – 88.5°<br>vertical – 80°<br><br><b>Motion detection speed</b><br>from 0.3 to 2.0 m/s<br>The direction of the detector lens should be perpendicular to an alleged intrusion path into the facility.<br><br><b>Temperature compensation</b><br><br><b>Sensitivity</b><br>3 levels<br>Adjusted by PRO or user with admin rights in the Ajax app |



|                                                    |                                                                                                                                                                                                                                                                                              |                  |                                                                                                                                                                                                       |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication with control panel or range extender | <b>Protection against forgery</b><br>Device authentication                                                                                                                                                                                                                                   | Motion detection | <b>Pet immunity</b><br>weight: up to 20 kg<br>height: up to 50 cm<br>SmartDetect software algorithm filtering false alarms                                                                            |
| Photo verification                                 | <b>Photo resolution in pixels</b><br>640 × 480<br>320 × 240 (default)<br>160 × 120<br>Adjusted by PRO or user with admin rights in the Ajax app<br><br><b>Photos in a series</b><br>from 1 to 5 pics<br>Adjusted by PRO or user with admin rights in the Ajax app<br><br><b>IR backlight</b> | Installation     | <b>Recommended installation height</b><br>2.4 m<br><br><b>Operating temperature range</b><br>from –10°C to +40°C<br><br><b>Operating humidity</b><br>up to 75%<br><br><b>Protection class</b><br>IP50 |
| Power supply                                       | <b>Battery</b><br>2 x CR123A, 3 V<br>Pre-installed<br><br><b>Battery life</b><br>up to 4 years<br>With <b>Photo on demand</b> disabled<br><br>up to 3 years<br>With <b>Photo on demand</b> enabled                                                                                           | Enclosure        | <b>Colour</b><br>white, black<br><br><b>Dimensions</b><br>110 × 65 × 50 mm<br><br><b>Weight</b><br>86 g<br><br><b>Tampering alarm</b>                                                                 |
| Complete set                                       | MotionCam (PhOD)<br>Jeweller<br>2 × CR123A battery<br>Pre-installed<br>SmartBracket mounting panel<br>Installation kit<br>Quick Start Guide                                                                                                                                                  |                  |                                                                                                                                                                                                       |