

## Tech specs

SUPERIOR

# Superior MotionCam AM (PhOD) Jeweller

Wireless PIR motion detector with an anti-masking system and extended photo verification possibilities. Supports HD resolution.



## Device compatibility

Check

## Communication

## Jeweller communication technology

Proprietary wireless communication technology to transmit commands, alarms, and events.

Key features:

- Two-way communication.
- Advanced sabotage protection.
- Block encryption featuring a dynamic key.
- Instant notifications.
- Remote control and configuration in Ajax apps.

[Learn more](#) >

### Frequency bands

868.0–868.6 MHz

### Maximum effective radiated power (ERP)

up to 20 mW

Automatic power control to reduce power consumption and noise interference.

### Radio signal modulation

GFSK

### Radio signal range

up to 1,700 m

Between the detector and a hub (or a range extender) in an open space.

[Calculate the radio signal range at the facility](#) >

### Encrypted communication

All the data stored and transmitted are protected by block encryption with a dynamic key.

## Frequency hopping

Radio communication uses frequency hopping to prevent interception and jamming.

[Learn more](#) >

## ◆ Wings communication technology

Proprietary wireless communication technology to transmit photo verifications.

Key features:

- Two-way communication.
- Block encryption featuring a dynamic key.
- Advanced sabotage protection.
- Reloading the data packages in case of transmission errors.
- Photo delivery check.

[Learn more](#) >

## Frequency bands

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[Calculate the radio signal range at the facility](#) >

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[Learn more](#) >

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## Detection

### Sensitive elements

1 × PIR sensor

### Motion detection distance

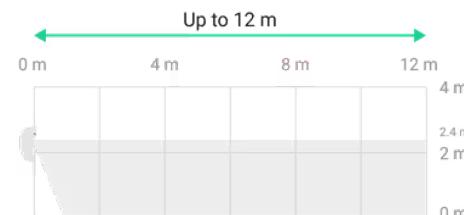
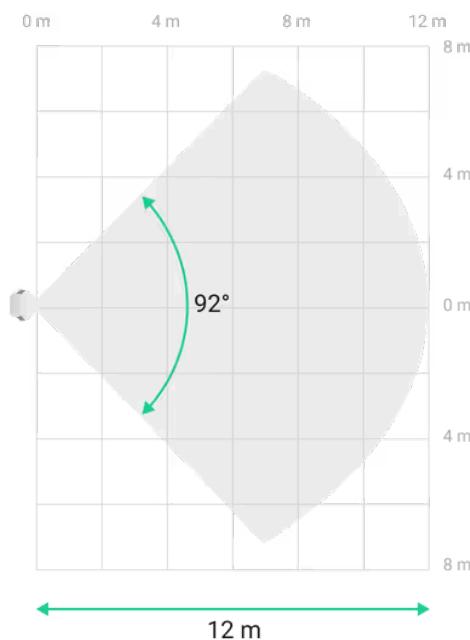
up to 12 m

When installed at a height of 2.4 m.

### Reduced blind zone

from 80 cm

It detects a standing person at a distance of 80 cm from the device when the detector is properly installed at a height of 2.4 m. Does not depend on the sensitivity level. Testing was performed with a person of 175 cm height.



### Crawling detection zone

## from 2 m (TBC)

Detects a person crawling at a distance of 2 m from the device when the detector is properly installed at a height of 2.4 m. The test results may be updated.

## Motion detection angles

horizontal: 92°

## Motion detection speed

from 0.2 to 2.0 m/s

The direction of the detector sensors should be perpendicular to an alleged intrusion path into the facility.

## Sensitivity

3 levels

Adjusted by a PRO or a user with admin rights in Ajax apps.

## Temperature compensation

Effective motion detection at temperatures from -10 °C to +40 °C.

[Learn more](#) >

## False alarm prevention

SmartDetect

## Software algorithm.

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### Photo verification

#### Photo by alarm

A built-in camera is activated if the detector is armed and motion is detected.

[Learn more](#) >

#### Photo by tamper alarm

A built-in camera takes a photo if the tamper triggering is detected. The feature is disabled by default.

#### Photo by masking

A built-in camera takes a photo if the masking is detected. The feature is disabled by default.

#### Photo on demand

The user takes photos at any time or when the detector is armed (depending on settings). The feature is disabled by default.

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#### Photo by scenario

The detector's camera takes photos automatically when other Ajax detectors are triggered. The feature is disabled by default.

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## Photo by schedule

The detector automatically takes photos at a specified time.

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## Photo by arming/disarming

The detector automatically takes photos when the security state is changed.

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## Adjustable photo resolution

960 × 720 px\*

640 × 480 px (by default)

320 × 240 px

160 × 120 px

Adjusted by a PRO or a user with admin rights in an Ajax app.

\* The firmware version confirmation is required. First photo delivery in 15.5 seconds with TurboWings protocol.

## IR illumination

For photography at night and in low-light conditions.

## Series of pictures

from 1 to 5 images with a resolution of 320 × 240 px or 160 × 120 px

from 1 to 3 images with a resolution of 640 × 480 px or 960 × 720 px\*

Adjusted by a PRO or a user with admin rights in an Ajax app.

\* The firmware version confirmation is required. First photo delivery in 15.5 seconds with TurboWings protocol.

## Photo delivery time

- up to 3 s – 160 × 120 px resolution
- up to 4.5 s – 320 × 240 px resolution
- up to 11 s – 640 × 480 px resolution
- up to 15.5 s – 960 × 720 px resolution

Photo delivery time depends on the image resolution selected in the device settings.

## Recommendations

It is recommended that the detector be installed at a height of 2.4 m.

The **pet immunity** feature is not available for this device.

The device is designed for indoor use only.

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## Sabotage protection

### Tamper alarm

1 tamper

Notifications of attempts to detach the detector from the surface or unlock the SmartBracket and remove the detector from the mounting panel.

[Learn more](#) >

## Protection against spoofing

device authentication

## Anti-masking system

detects attempts to block the detector view

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## Communication loss detection

after 36 s

Detection time depends on the Jeweller/Fibra settings.

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## Power supply

### Batteries

2 × CR123A

Pre-installed.

### Type

Type C.

## Calculated battery life

up to 4 years

With the Photo on demand feature disabled.

up to 3 years

With the Photo on demand feature enabled.

[Learn more](#) >

## Detector's operating voltage range

4.2–6.2 V<sub>dc</sub>

## Detector's nominal operating voltage

6 V<sub>dc</sub>

## Quiescent detector's current consumption at nominal voltage

0.040 mA

## Maximum detector's current consumption at nominal voltage

400 mA

## Full capacity

3,300 mAh

## Low battery voltage

4.85 V<sub>dc</sub>

## Low battery recovery voltage

4.9 V<sub>dc</sub>

## End-of-life battery voltage

4.2 V<sub>dc</sub>

The device is switched off.

## End-of-life battery capacity

600 mAh

## Enclosure

### Dimensions

134 × 70 × 59 mm



### Weight

176 g

### Operating temperature range

from -10 °C to +40 °C

### Operating humidity

up to 75% non-condensing

### Protection class

IP50



## Color

## White



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## Complete set

Superior MotionCam AM (PhOD) Jeweller

SmartBracket mounting panel

Installation kit

Quick start guide

## Certification and compliance with standards



Superior MotionCam AM (PhOD) Jeweller



## Additional information

## Compliance with standards

[Learn more](#) >

## User manual

[Learn more](#) >

## Warranty

24 months

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## Request extra help

 support@ajax.systems

 @AjaxSystemsSupport\_Bot

 Send a request



4,000,000

people worldwide under Ajax protection

Rating 4.7

 Suggest a feature

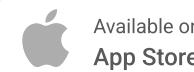


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Intrusion protection

## Software

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