

Tech specs

BASELINE

MotionCam U (PhOD) Jeweller

Wireless PIR motion detector with extended photo verification possibilities



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 radio interference.

Radio signal modulation

GFSK

Radio communication range

up to 1,700 m

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

Calculate radio communication range at the facility >

Encrypted communication

All stored and transmitted data is protected by block encryption featuring a dynamic key.

Frequency hopping

To prevent radio interference and jamming.

[Learn more >](#)

Wings communication technology

Proprietary wireless communication technology to transmit photo verifications.

Key features:

- Two-way communication.
- Advanced sabotage protection.
- Block encryption featuring a dynamic key.
- Data packages reload in case of transmission errors.
- Photo delivery confirmation.

[Learn more >](#)

Frequency bands

868.0–868.6 MHz

Radio communication range

up to 1,700 m

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

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

Encrypted communication

All stored and transmitted data is protected by block encryption featuring a dynamic key.

Frequency hopping

To prevent radio interference and jamming.

[Learn more](#) >

Detection

Sensitive element

PIR sensor

Motion detection distance

up to 12 m

When installed at a height of 2.4 m.

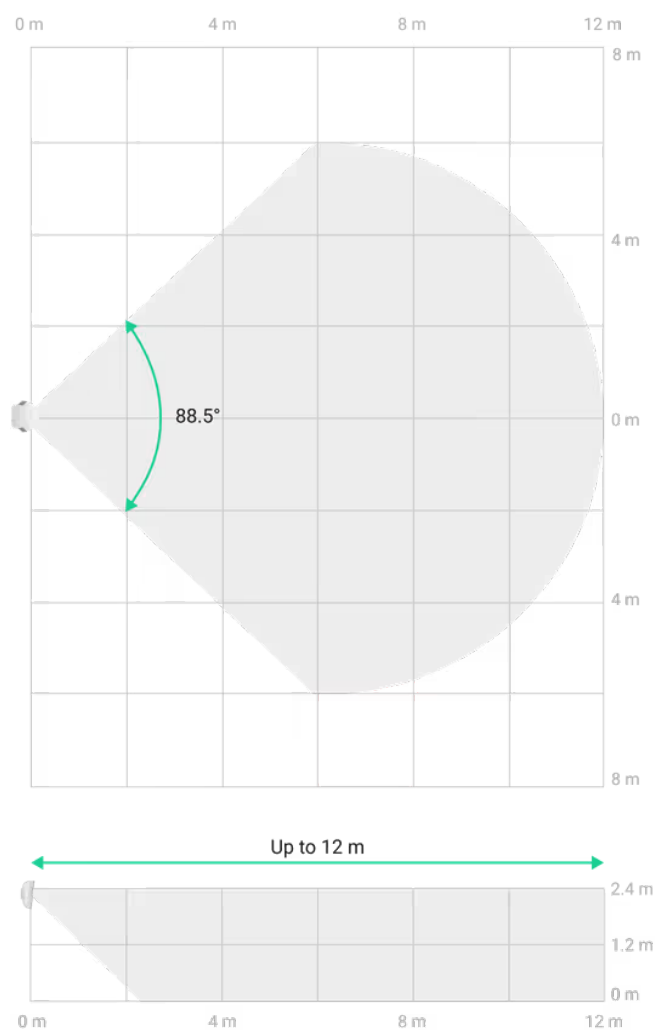
Motion detection angle

horizontal: 88.5°

Motion detection speed

from 0.3 to 2 m/s

The detector lens should be positioned perpendicular to the likely intrusion path into the facility.



Sensitivity

3 levels

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

Pet immunity

weight: up to 20 kg

height: up to 50 cm

[Learn more](#) >

False alarm prevention

SmartDetect

Software algorithm.

[Learn more](#) >

Temperature compensation

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

[Learn more](#) >

Photo verification

Photo by alarm

The built-in camera is activated if the detector is armed and movement is detected.

[Learn more >](#)

Photo on demand

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

[Learn more >](#)

Photo by scenario

The detector takes pictures automatically when other Ajax detectors are triggered. The feature is disabled by default.

[Learn more >](#)

Photo by schedule

The detector automatically takes photos at the specified time. The feature is not configured by default.

[Learn more >](#)

Photo by arming/disarming

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

[Learn more >](#)

Adjustable photo resolution

640 × 480 px

320 × 240 px (by default)

160 × 120 px

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

HDR image

Improves detail accuracy in bright and dark scenes.

IR illumination

For night photography and 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

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

Photo delivery time

up to 7 s — 160×120 px resolution

up to 9 s — 320×240 px resolution

up to 20 s — 640×480 px resolution

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

Recommendations

It is recommended to install the detector at a height of 2.4 m.

The device is designed for indoor use only.

Sabotage protection

Tamper alarm

Notifications on attempts to detach the device from the surface or remove it from the mounting panel.

[Learn more](#) >

Holding screw

to secure the detector on SmartBracket



Protection against spoofing

via device authentication

Communication loss detection

after 36 s

Detection time depends on the Jeweller or Jeweller/Fibra settings.

[Learn more](#) >

Power supply

Batteries

2 × CR123A

Pre-installed.

Type

type C

Calculated battery life

up to 4 years

With Photo on demand toggle disabled.

up to 3 years

With Photo on demand toggle enabled.

[Learn more](#) >

Operating voltage range

4.2–6.2 V⁼⁼

Nominal operating voltage

6 V⁼⁼

Quiescent current consumption at nominal voltage

0.03 mA

Maximum current consumption at nominal voltage

400 mA

Full battery capacity

1,550 mAh

Low battery voltage

4.71–5.00 V==

Low battery recovery voltage

5.06–5.36 V==

B MotionCam U (PhOD) Jeweller

More ▾

End-of-life battery voltage

3.8 V==

Device is switched off.

End-of-life battery capacity

150 mAh

Enclosure

Dimensions

135 × 70 × 60 mm

Weight of the white device

170 g

Weight of the black device

157 g



Operating temperature range

from -10 °C to +40 °C

Operating humidity

up to 75%

Protection class

IP50, IK04



Colors

Black



White



Complete set

MotionCam U (PhOD) Jeweller

SmartBracket mounting panel with holding screw

2 × CR123A battery (pre-installed)

Installation kit

Quick start guide

Certification and compliance with standards



MotionCam U (PhOD) Jeweller



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

- +447451279411
- support@ajax.systems
- @AjaxSystemsSupport_Bot
- Ask a question



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
- Ajax radio protocols

Solutions

- Customer stories
- Solutions by facility type
- Commercial fire detection and alarm system

Software

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



Available on
App Store



Available on
Google Play

Support

- Manuals and articles
- Compliance with standards

[Wireless Grade 3 solution](#)

[Video surveillance solution](#)

[Integration with Yale smart locks](#)

[Upgrades and retrofits](#)

[Why Ajax](#)

[How it works](#)

Tools

[Ajax kit configurator](#)

[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](#)

[Video monitoring and visual alarm verification](#)

[Audio alarm verification](#)

Company

[Blog](#)

[About us](#)

[Press page](#)

[Events](#)

[Career](#)

[Ajax Next](#)

[Reviews and feedback](#)

For partners

[For partners](#)

[Ajax Academy](#)

[Partner Portal](#)

[Ajax PRO channel](#)

 [United Kingdom](#) [Privacy policy](#) [Report a vulnerability](#) [GDPR White Paper](#) [NDAA Statement](#) [Cookie policy](#)

[Anti-Spam Policy](#) [Ajax Services T&C](#) [End user agreement](#) [Warranty](#)

© 2026 AJAX SYSTEMS CH. All rights reserved