

Tech specs

BASELINE

MotionCam Jeweller

Wireless IR motion detector with photo camera



Compatibility

Compatible hub models [Hub 2 \(2G\)](#) [Hub 2 \(4G\)](#) [Hub 2 Plus](#) [Hub Hybrid \(2G\)](#) [Hub Hybrid \(4G\)](#)

Compatible range extenders: [ReX 2](#)

Communication

Jeweller communication technology

Proprietary wireless communication technology to transmit alarms and events. It features:

- Two-way communication.
- Advanced anti-sabotage.
- Block encryption featuring a dynamic key.
- Instant notifications.
- Remote configuration via the Ajax apps.

Frequency bands

866.0 – 866.5 MHz

868.0 – 868.6 MHz

868.7 – 869.2 MHz

905.0 – 926.5 MHz

915.85 – 926.5 MHz

921.0 – 922.0 MHz

Depends on the sales region.

Maximum effective radiated power (ERP): up to 20 mW

Radio signal modulation: GFSK
Radio signal range: up to 1,700 m

Between detector and hub or range extender in an open space.

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

Encrypted communication

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

Radio frequency hopping

Radio communication uses frequency hopping to prevent interception and jamming.

Wings communication technology

Proprietary wireless communication technology to transmit photo verifications. It features:

- Two-way communication.
- Block encryption featuring a dynamic key.
- Advanced anti-sabotage.
- Data package reloading in case of transmission errors.
- Photo delivery check.

Frequency bands

866.0 – 866.5 MHz

868.0 – 868.6 MHz

868.7 – 869.2 MHz

905.0 – 926.5 MHz

915.85 – 926.5 MHz

921.0 – 922.0 MHz

Depends on the sales region.

Radio signal range: up to 1,700 m

Between detector and hub or range extender in an open space.

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

Encrypted communication

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

Radio frequency hopping

Radio communication uses frequency hopping to prevent interception and jamming.

Detection

Sensitive element: 1 × PIR sensor

Motion detection distance: up to 12 m

When installed at a height of 2.4 m.

Motion detection angles:

horizontal — 88.5°

vertical — 80°

Motion detection speed: from 0.3 to 2.0 m/s

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

Sensitivity: 3 levels

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

Pet immunity: weight: up to 20 kg height: up to 50 cm

False alarm prevention

SmartDetect

Software algorithm.

Temperature compensation

Effective motion detection at temperatures from -10°C to $+40^{\circ}\text{C}$.

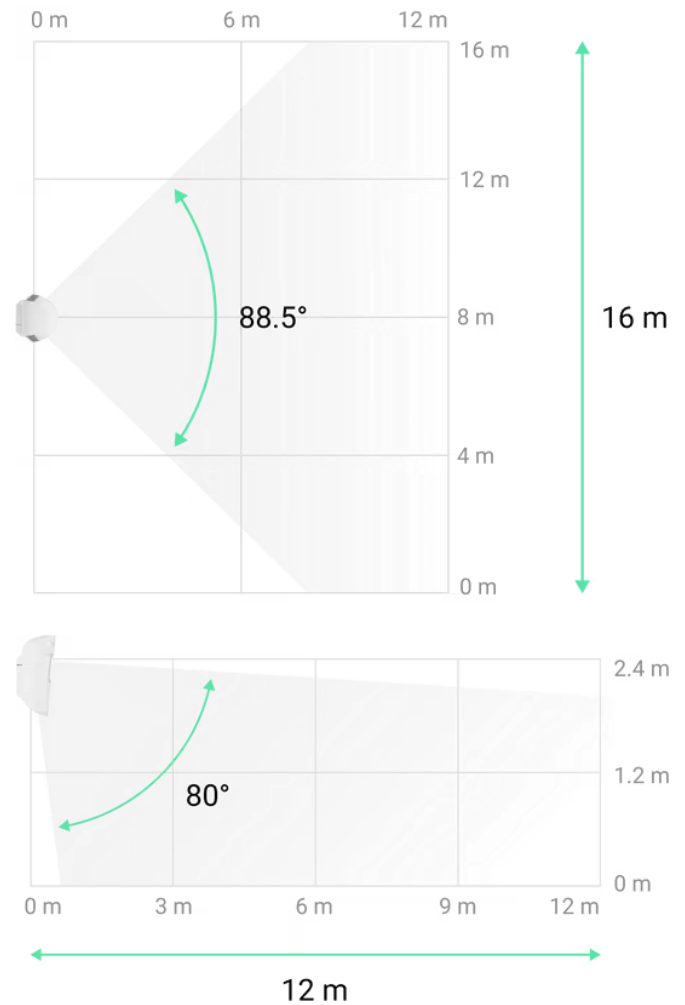


Photo verification

Photo by alarm

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

Photo resolution

640 × 480 px

320 × 240 px (by default)

160 × 120 px

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

IR backlight

For night photography and low light conditions.

Pictures in a series

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

from 1 to 3 images with resolution of 640 × 480 px

Adjusted by PRO or user with admin rights in the 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

When the hub is connected via Ethernet or 4G and the Wings signal strength between hub and device is 2–3 bars.

Recommendations

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

Device is designed for indoor use only.

Anti-sabotage protection

Tampering alarm

Alerts of attempts to detach the detector from the surface or remove it from the mounting panel.

Protection against forgery device authentication

Communication loss detection within 36 s

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

Power supply

2 × CR123A battery

Up to 4 years of battery life.

Enclosure

Dimensions: 135 × 70 × 60 mm

Weight: 167 g

Operating temperature range: from -10°C to +40°C

Operating humidity: up to 75%

Protection class: IP50



Colour

Black



White



Complete set

MotionCam Jeweller

SmartBracket mounting panel

Installation kit

2 × CR123A battery (pre-installed)

Quick Start Guide