

### Tech specs

BASELINE

# MotionProtect Jeweller

Wireless IR motion detector



Device compatibility

Check

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## 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

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

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 are protected by block encryption featuring a dynamic key.

## Frequency hopping

To prevent radio interference and jamming.

**Learn more** >

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## Detection

### Sensitive element

PIR sensor

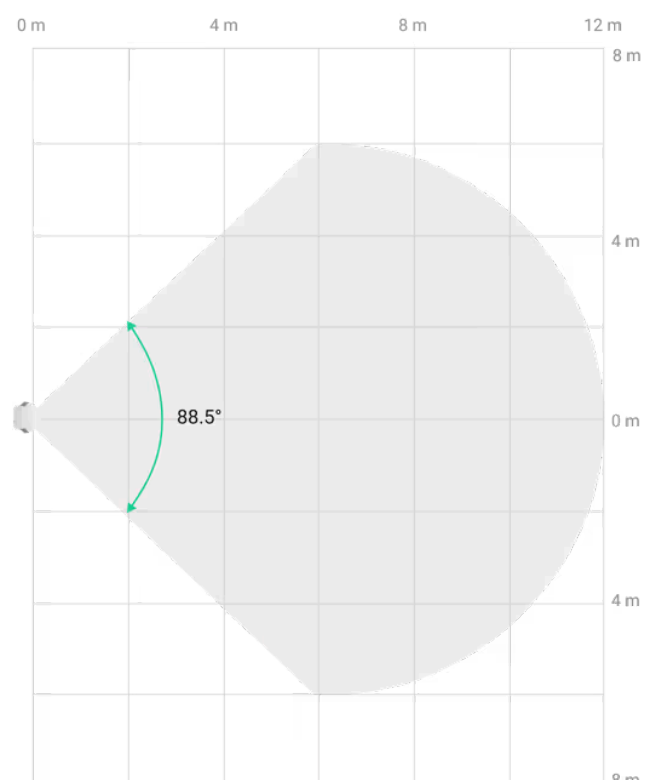
### Motion detection distance

up to 12 m

When installed at the height of 2.4 m.

### Motion detection angle

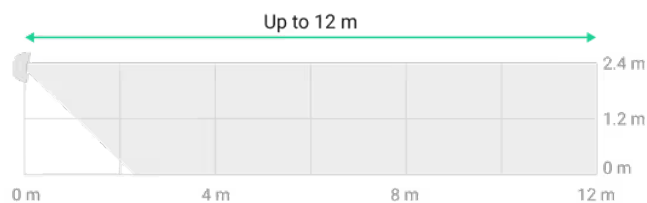
horizontal: 88.5°



## Motion detection speed

from 0.3 to 2 m/s

The direction of the detector lens 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 the Ajax app.

## Pet immunity

weight: up to 20 kg

height: up to 50 cm

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## False alarm prevention

SmartDetect

Software algorithm.

[Learn more >](#)

## Temperature compensation

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

[Learn more >](#)

## Recommendations

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

The device is designed for indoor use only.

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## Sabotage protection

## Tamper alarm

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

[Learn more](#) >

## Protection against spoofing

device authentication

## Communication loss detection

after 36 s

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

[Learn more](#) >

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## Power supply

### Battery

1 × CR123A

Pre-installed.

### Type

Type C.

### Detector's operating voltage range

2.1–3.3 V<sub>DC</sub>

**Detector's nominal operating voltage**

3 V<sub>DC</sub>

**Quiescent detector's current consumption at nominal voltage**

34.5  $\mu$ A

**Maximum detector's current consumption at nominal voltage**

61 mA

**Full battery capacity**

1,600 mAh

**Low battery voltage**

2.5 V<sub>DC</sub>

**Low battery recovery voltage**

2.7 V<sub>DC</sub>

**End-of-life battery voltage**

2.1 V<sub>DC</sub>

The device is switched off.

**End-of-life battery capacity**

300 mAh

**Calculated battery life**

up to 5 years

[Learn more >](#)

## Manufacturer

Huiderui

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## Enclosure

### Dimensions

110 × 65 × 50 mm

### Weight

86 g

### Operating temperature range

from -10 °C to +40 °C

### Operating humidity

up to 75%

### Protection class

IP50



## Colors

Black



White



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## Complete set

MotionProtect Jeweller

SmartBracket mounting panel

CR123A battery (pre-installed)

Installation kit

Quick start guide

## Certification and compliance with standards



MotionProtect Jeweller



## Additional information

### Compliance with standards

[Learn more >](#)

### User manual

[Learn more >](#)

### Warranty

24 months

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Rating 4.8

**4,500,000**

people worldwide under Ajax protection

💡 [Suggest a feature](#)



## Products

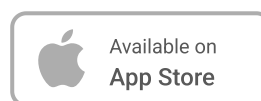
- Intrusion protection
- Video surveillance
- Fire and life safety
- Comfort and automation
- All products
- Services
- System integrations
- Ajax Ready products
- Fibra wired protocol
- Ajax radio protocols

## Solutions

- Customer stories
- Solutions by facility type
- Commercial fire detection and alarm system
- Wireless Grade 3 solution
- Video surveillance solution
- Integration with Yale smart locks
- Upgrades and retrofits
- Why Ajax
- How it works

## Software

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



## Support

- Manuals and articles
- Compliance with standards

## Tools

- 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](#)
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- [Events](#)
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