

Tech specs

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ASELINE

MotionProtect Plus Jeweller

Wireless IR motion detector with an additional K-band microwave sensor



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

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 1,200 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.

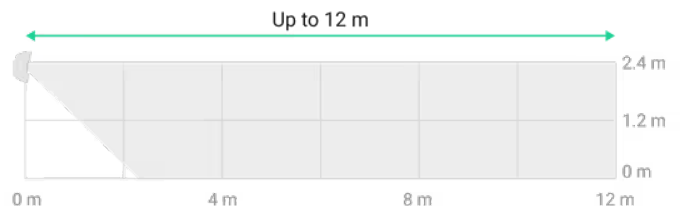
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Detection

Sensitive element

PIR sensor

microwave sensor



K-band microwave sensor to prevent false alarms caused by thermal interference.
Operation frequency: 24 GHz.

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

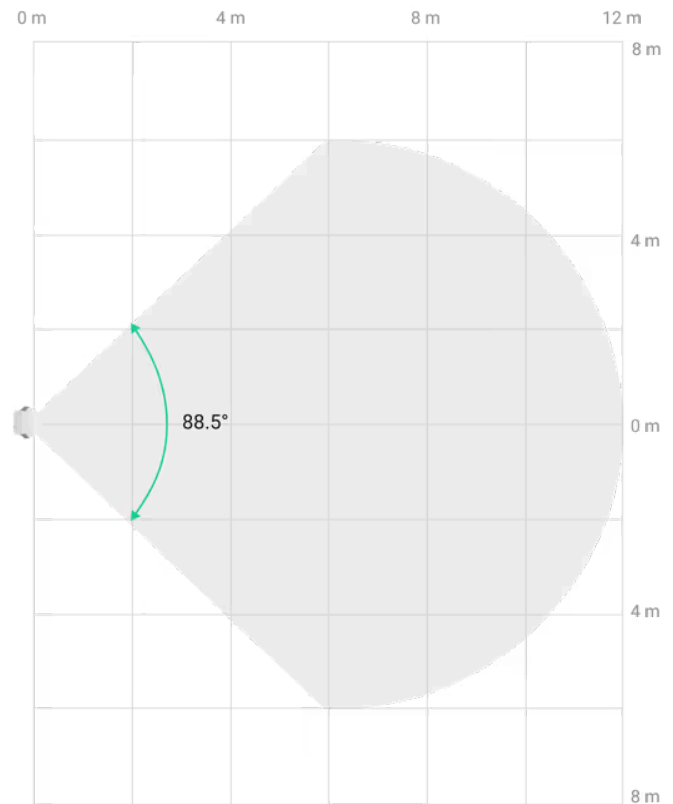
Adjusted by a PRO or a user with admin rights in the Ajax app.

Pet immunity

weight: up to 20 kg

height: up to 50 cm

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False alarm prevention

SmartDetect

Software algorithm.

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Temperature compensation

Effective motion detection at temperatures from -10°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.

Sabotage protection

Tamper alarm

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

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Protection against spoofing

device authentication

Communication loss detection

after 36 s

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

[Learn more](#) >

Power supply

Battery

1 × CR123A

Pre-installed.

Type

Type C.

Detector's operating voltage range

2.1–3.3 V_{DC}

Detector's nominal operating voltage

3 V_{DC}

Quiescent detector's current consumption at nominal voltage

31 µA

Maximum detector's current consumption at nominal voltage

62 mA

Full battery capacity

1,600 mAh

Low battery voltage

2.5 V_{DC}

Low battery recovery voltage

2.7 V_{DC}

End-of-life battery voltage

2.1 V_{DC}

The device is switched off.

End-of-life battery capacity

300 mAh

Calculated battery life

up to 5 years

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Manufacturer

Huiderui or Panasonic

Enclosure

Dimensions

110 × 65 × 50 mm

Weight

96 g



Operating temperature range

from -10 °C to +40 °C

Operating humidity

up to 75%

Protection class

IP50



Colors

Black



White



Complete set

MotionProtect Plus Jeweller

SmartBracket mounting panel

CR123A battery (pre-installed)

Installation kit

Quick start guide

Certification and compliance with standards



MotionProtect Plus Jeweller



Additional information

Compliance with standards

[Learn more](#) >

User manual

[Learn more](#) >

Warranty

24 months

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Rating 4.8

4,000,000

people worldwide under Ajax protection

 Suggest a feature

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- Ajax radio protocols

Solutions

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- Ajax Translator PRO
- Ajax Cloud Signaling
- Scenarios

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