

Tech specs

B BASELINE

MotionProtect Plus Jeweller

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



Devices 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.

Learn more >

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.

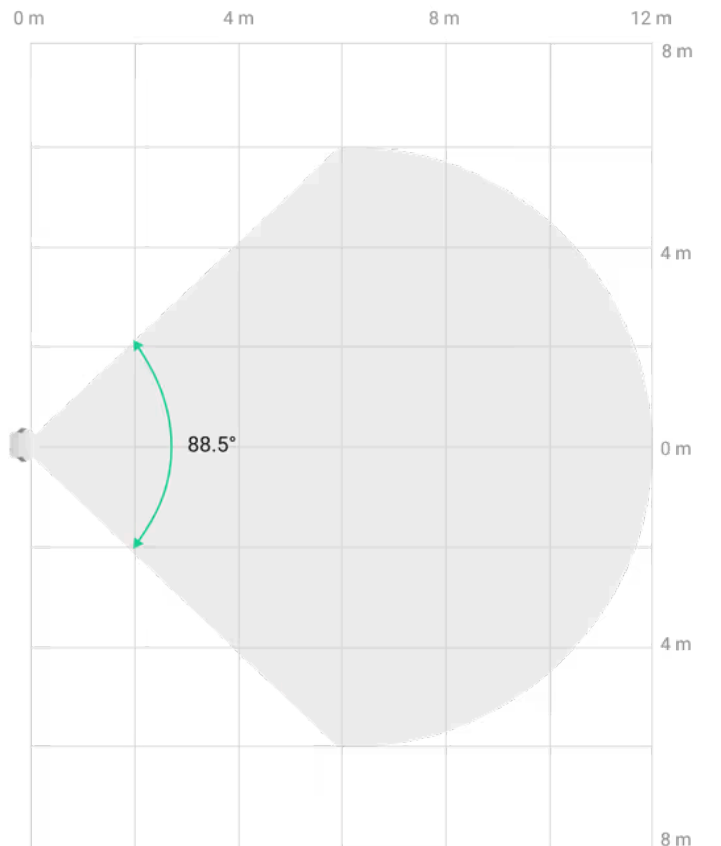
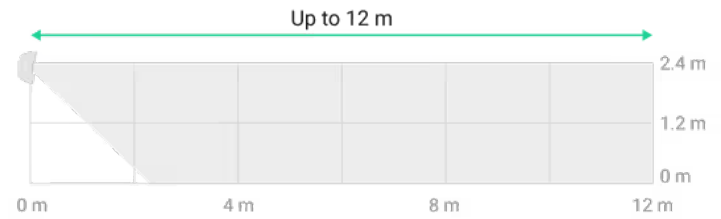
Motion detection angle

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

[Learn more >](#)

False alarm prevention

SmartDetect

Software algorithm.

[Learn more >](#)

Temperature compensation

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

[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.

[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](#) >

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 \approx

Low battery recovery voltage

2.7 V \approx

End-of-life battery voltage

2.1 V \approx

The device is switched off.

End-of-life battery capacity

300 mAh

Calculated battery life

up to 5 years

[Learn more >](#)

Manufacturer

Huidrui 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

Learn more >

Products

Superior
Fibra
Intrusion protection
Video surveillance
Fire detection
Water leak prevention
Comfort & Productivity
All products
Ajax ecosystem integrations
Ajax Ready products

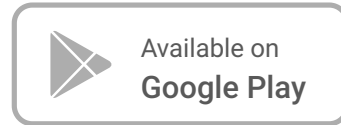
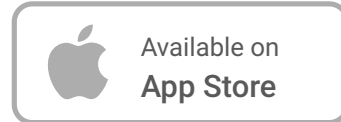
Solutions

Customer stories
Solutions by facility type
Upgrades and retrofits
Why Ajax
How it works

Company

Software

For users
PRO Desktop
Ajax Translator
Scenarios



Support

Manuals and articles
Compliance with standards

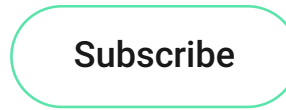
Tools

Battery life calculator
Radio communication range calculator
Fibra power supply calculator
Case configurator
Switches and outlets configurator
Ajax devices compatibility
All web tools

For partners

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Rating 4.6

2,500,000

people worldwide under Ajax protection



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