

Tech specs

AJAX **SUPERIOR**

Superior MotionProtect Plus Jeweller

Previously: MotionProtect S Plus Jeweller

Wireless IR motion detector with an additional K-band microwave sensor. Ajax Superior edition



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 configuration in the 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 noise interference.

Radio signal modulation

GFSK

Radio signal range

up to 1,200 m

Between detector and control panel (or range extender) in an open space.

Calculate the radio signal range at the facility >

Encrypted communication

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

Frequency hopping

Radio communication uses frequency hopping to prevent interception 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

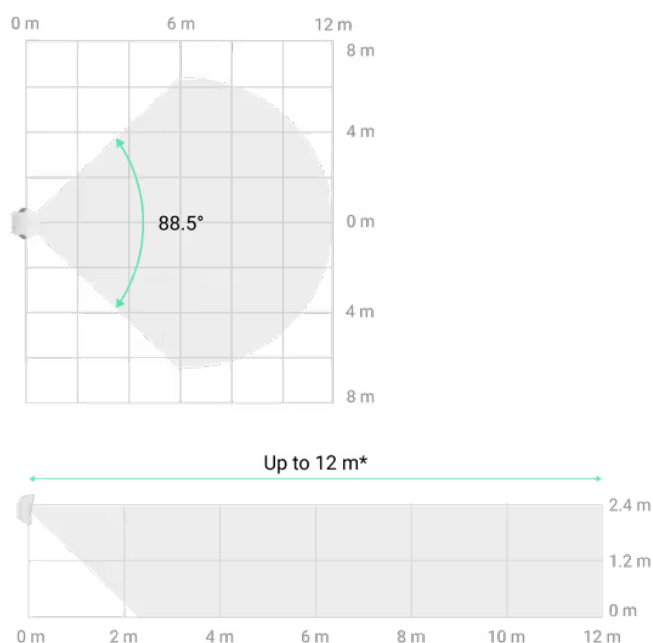
up to 12* m

When installed at the height of 2.4 m.

* — 10 m according to INCERT (with high sensitivity level)

Motion detection angles

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 PRO or 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°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.



[Learn more](#) >

Holding screw

to secure the detector on SmartBracket

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.

Calculated battery life

up to 5 years

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

0.019 mA

Maximum detector's current consumption at nominal voltage

2.75 mA

Full capacity

1,600 mAh

Low battery voltage

2.5 V $\approx$

End of life battery voltage

2.1 V $\approx$

Device is switched off.

End of life battery capacity

300 mAh

Manufacturer

Panasonic

Enclosure

Dimensions

110 × 65 × 50 mm

Weight of the white device

105 g

Weight of the black device

95 g

Operating temperature range

from -10 °C to +40 °C

Operating humidity

up to 75%

Protection class

IP50, IK04



Colors

Black

White



Complete set

Superior MotionProtect Plus Jeweller

SmartBracket mounting panel with holding screw

CR123A battery (pre-installed)

Installation kit

Quick start guide

Certification and compliance with standards



Superior MotionProtect Plus Jeweller



Additional information

Compliance with standards

[Learn more](#) >

User manual

[Learn more](#) >

Warranty

24 months

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