

Tech specs

BASELINE

MotionProtect U Jeweller

Wireless PIR motion detector



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

868.0–868.6 MHz

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 is protected by block encryption featuring a dynamic key.

Frequency hopping

To prevent radio interference and jamming.

[Learn more](#) >

Detection

Sensitive element

1 × PIR sensor

Motion detection distance

up to 12 m

When installed at a height of 2.4 m.

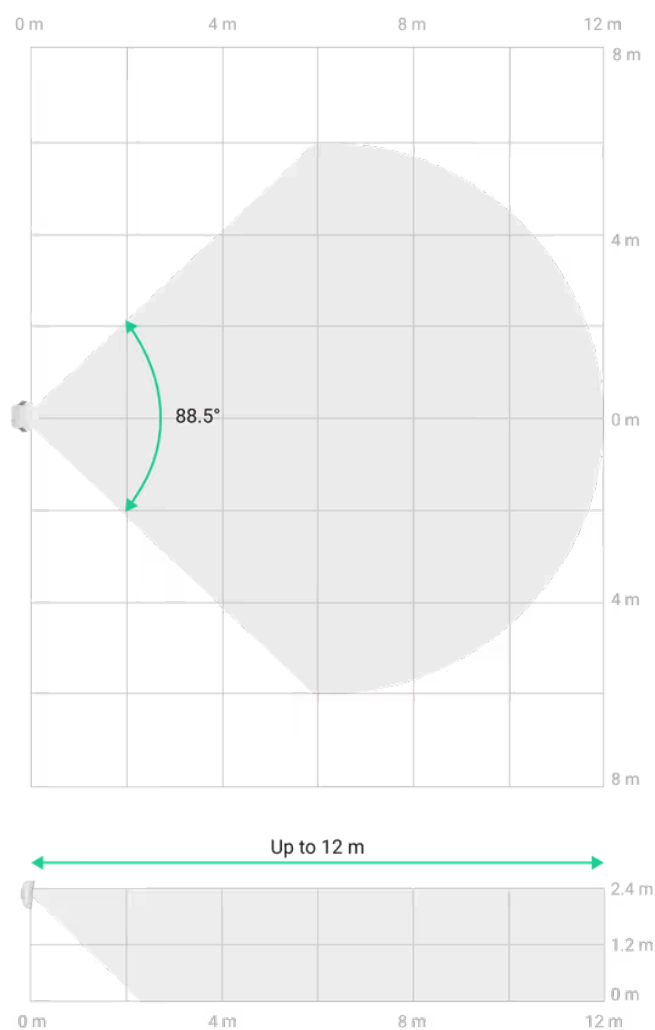
Motion detection angle

horizontal: 88.5°

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 a PRO or a user with admin rights in Ajax apps.

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 $-10\text{ }^{\circ}\text{C}$ 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](#) >

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/Fibra settings.

[Learn more](#) >

Power supply

Battery

1 × CR123A

Pre-installed.

Type

type C

Calculated battery life

up to 5 years

Operating voltage range

2.1–3.3 V $\approx$

Nominal operating voltage

3 V $\approx$

Quiescent current consumption at nominal voltage

19 μ A

Maximum current consumption at nominal voltage

2.75 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 $\approx$

Device is switched off.

End-of-life battery capacity

300 mAh

B MotionProtect U Jeweller

More 

Dimensions

110 × 65 × 50 mm

Weight of the white device

96 g

Weight of the black device

88 g



Operating temperature range

from -10 °C to +40 °C

Operating humidity

up to 75%

Protection class

IP50, IK04



Colors

Black



White



Complete set

MotionProtect U Jeweller

SmartBracket mounting panel with holding screw

CR123A battery (pre-installed)

Installation kit

Quick start guide

Certification and compliance with standards



MotionProtect U Jeweller



Additional information

Compliance with standards

Learn more >

User manual

Learn more >

Warranty

24 months

Learn more >

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Scenarios



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