Tech specs

BASELINE

MotionProtect Jeweller

Wireless IR 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

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

Detection

Sensitive element

PIR sensor

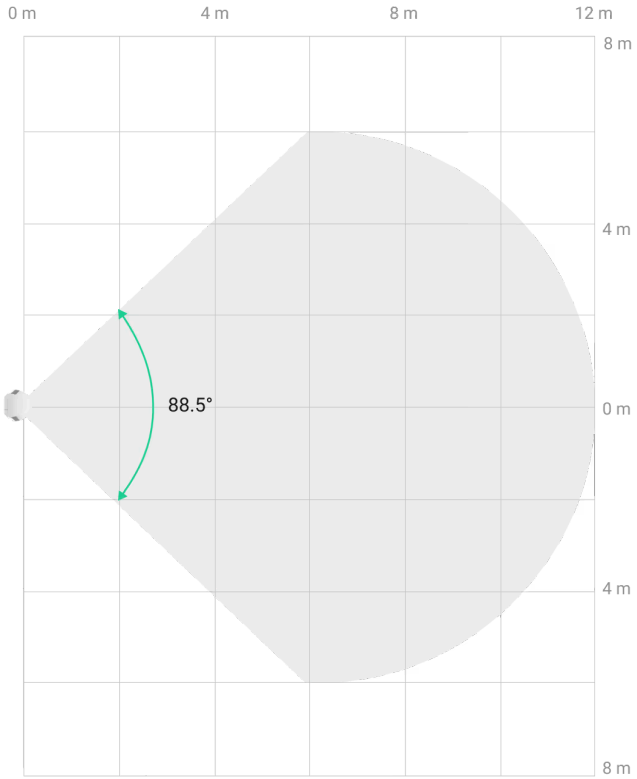
Motion detection distance

up to 12 m

When installed at the height of 2.4 m.

Motion detection angle

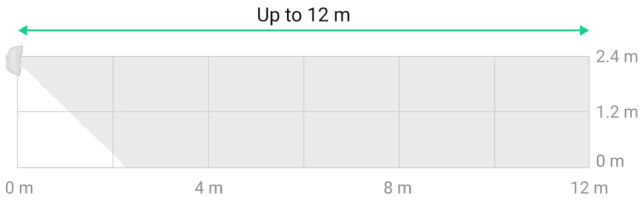
horizontal: 88.5°



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

Learn more

False alarm prevention

SmartDetect

Software algorithm.

Learn more

Temperature compensation

Effective motion detection at temperatures from −10 °C to +40 °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⎓

Detector’s nominal operating voltage

3 V⎓

Quiescent detector’s current consumption at nominal voltage

34.5 µA

Maximum detector’s current consumption at nominal voltage

61 mA

Full battery capacity

1,600 mAh

Low battery voltage

2.5 V⎓

Low battery recovery voltage

2.7 V⎓

End-of-life battery voltage

2.1 V⎓

The device is switched off.

End-of-life battery capacity

300 mAh

Calculated battery life

up to 5 years

Learn more

Manufacturer

Huiderui

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

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

Learn more

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