




Superior product line

# MotionProtect S Plus

 Jeweller

Wireless indoor IR motion detector with additional K-band microwave sensor to filter thermal interferences



2  
GRADE  
EN 50131

PD 6662  
2017

INCERT

SSF

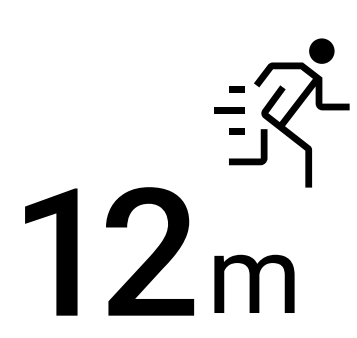
NFA2P

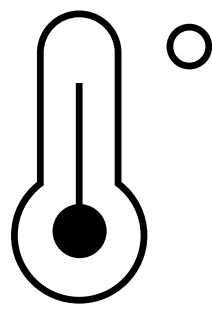
## What's new


Baseline MotionProtect Plus Jeweller	Superior MotionProtect S Plus Jeweller
SmartBracket mounting panel without screw	SmartBracket mounting panel with screw
Common battery	Enhanced battery
Glossy enclosure	Matte enclosure
Available for all PROs	Available only for accredited partners

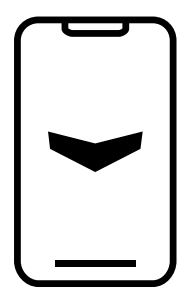
This is the device of the **Superior product line**. Superior products is advanced versions of the Jeweller devices. This product line is developed for projects. Only accredited Ajax Systems partners can sell, install, and administer Superior products.

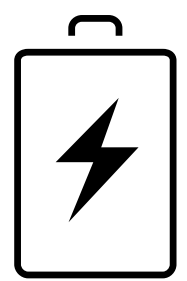
# Key features

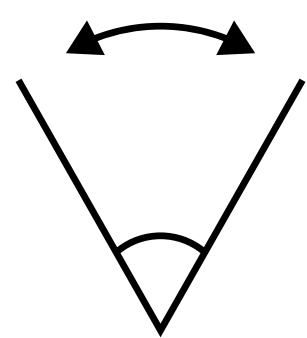
- 

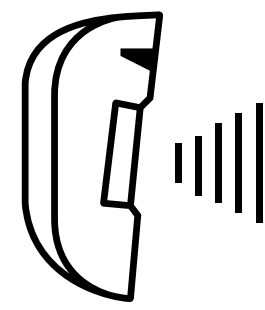
Detection range of up to 12 m<sup>1</sup>
- 

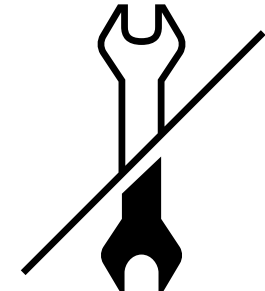
Temperature compensation
- 

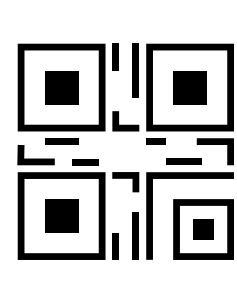
SmartDetect algorithm to prevent false alarms
- 

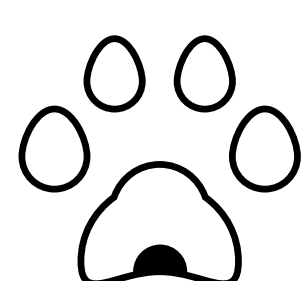
Remote control and configuration in the app
- 

Up to 5 years of operation with pre-installed Panasonic battery
- 

88.5° horizontal angle
- 

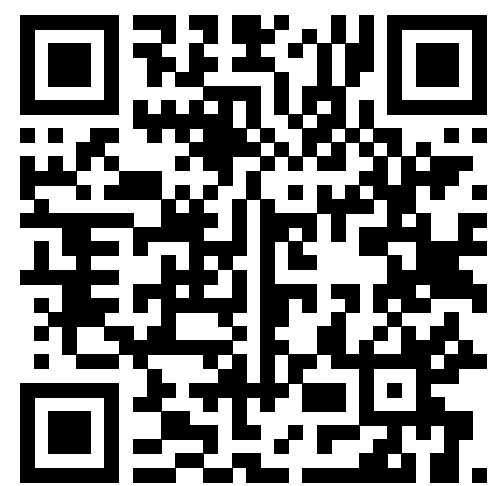
Thermal interference filter with K-band microwave sensor
- 

Effortless installation and replacement
- 

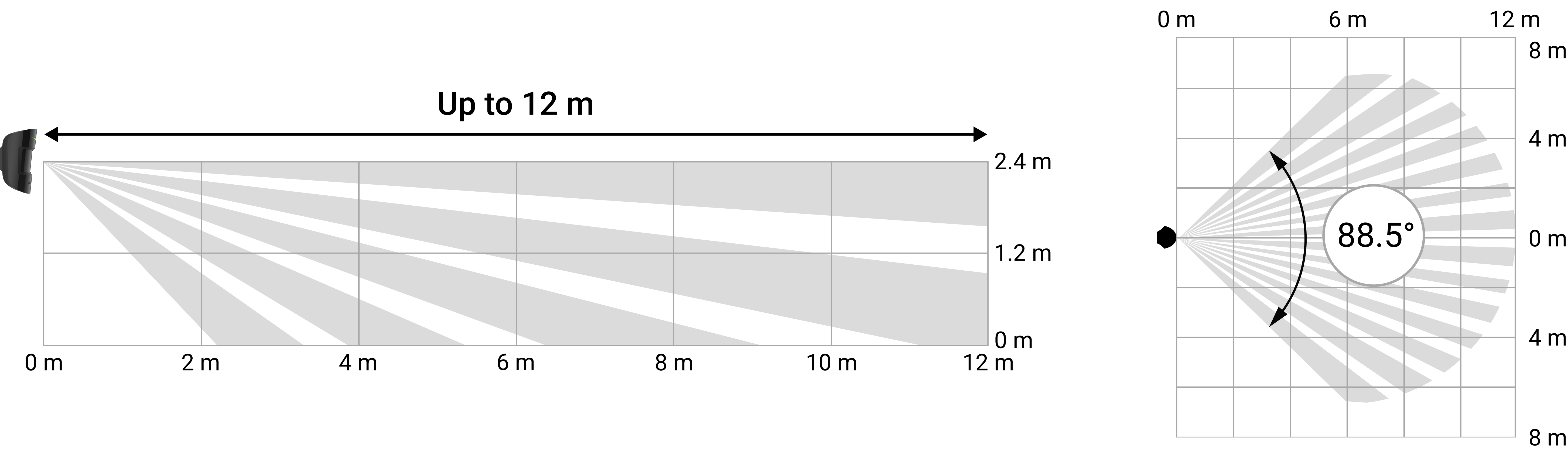
Pairing with a hub via QR code
- 

Pet immunity

An Ajax hub is required for operation. Find the detailed information on the device by the link: [ajax.systems/support/devices/motionprotect-s-plus/](https://ajax.systems/support/devices/motionprotect-s-plus/)



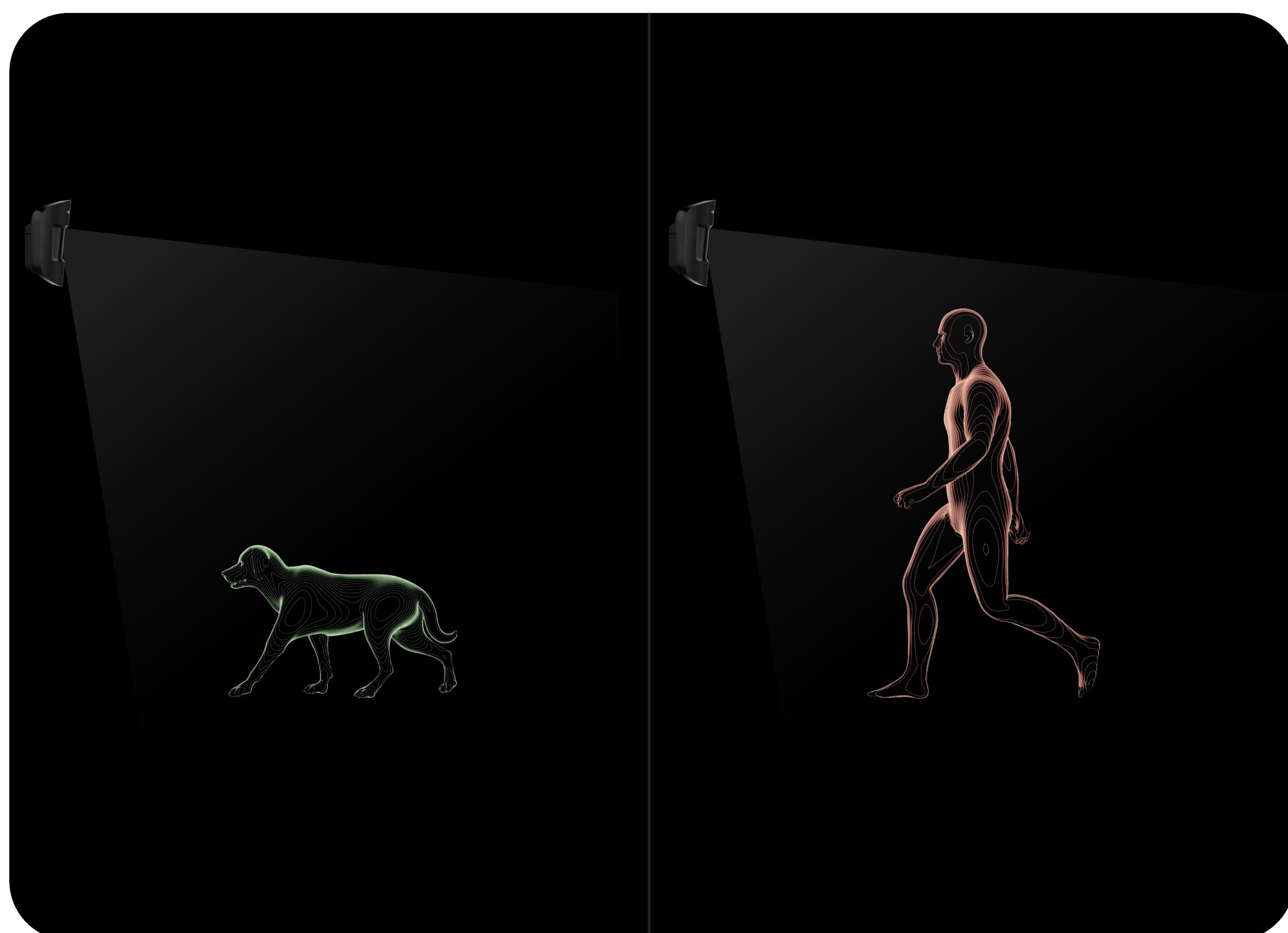
## Motion detection range<sup>1</sup> and viewing angles



<sup>1</sup> – according to INCERT certification, detection range is up to 10 m (high sensitivity).



# False alarm prevention

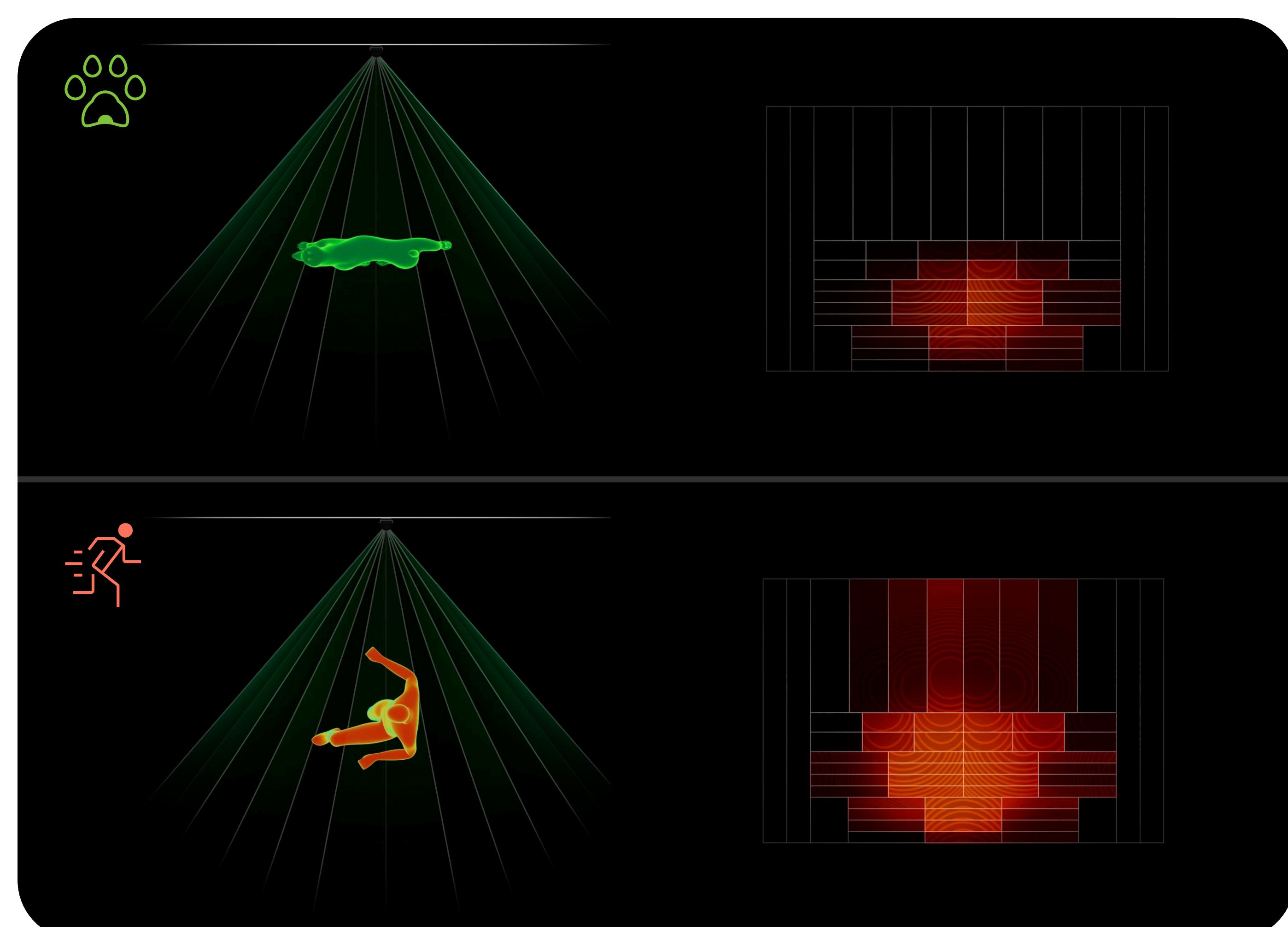


## Optics

The detector lens is highly sensitive to human motion, cutting off false alarms caused by other sources of IR radiation. The lens is designed so that potential IR radiation from pets and other interferences affect only the small lens sections. Large sections, on the contrary, are focused on the most likely places of burglar motion.

## Hardware

MotionProtect S Plus features an additional K-band microwave sensor. When the device detects motion, it conducts an RF scan of the facility to eliminate false alarms due to thermal interference: air flows, heated by the sun curtains and blinds, fans, fireplaces, air conditioners, and other likely sources of false alarms.



## Software

For additional protection against false alarms, the detector uses the SmartDetect algorithm. The armed detector constantly analyses the thermal diagram received from sensors: the intensity of IR radiation, the size of the thermal spots, the speed of movement and other parameters.



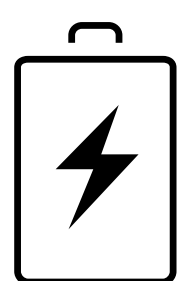
# Installation

When properly installed and configured, the detector does not react to common sources of false alarms and animals under 50 cm tall and 20 kg weight. For seamless installation, it has pre-installed Panasonic batteries and the SmartBracket mounting panel with a screw on the bottom. So, installers don't need to disassemble the detector and won't damage the electronics during installation.

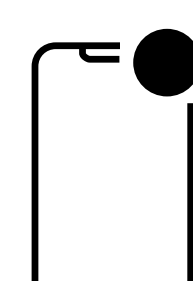


# Flawless autonomy

MotionProtect S Plus is entirely autonomous, as it works on the pre-installed Panasonic battery. The Panasonic company proves to be an expert and professional in batteries that can significantly enhance the devices' reliability and overall battery life operation. Thanks to that, the device works for up to 5 years. The app will notify the installer a few months before the battery is fully discharged, so you have time to change it.



Up to 5 years of battery life



Notifications on low battery

# Encrypted two-way communication



Jeweller radio protocol provides fast and reliable two-way communication between the hub and devices. The protocol delivers instant data-rich alarms: security companies and users know which device was triggered when and where it happened.

Jeweller features **encryption** and **authentication** to prevent spoofing, and polling to monitor devices' statuses in real time. Supporting up to 1,200 m of wireless connectivity, Jeweller is ready to protect facilities and deliver the **best user experience** for both system owners and installers.



# Quick installation and start-up



## Easy to mount

Installing MotionProtect S Plus won't take much time. Using the SmartBracket panel, an installer can securely mount the device on the wall or in a corner without disassembling the detector's enclosure. An installer won't damage the hardware during installation, and the screw on the bottom of the device helps to make it safe.

## Quick pairing process

To pair MotionProtect S Plus with the hub, scan the QR code or enter the device ID manually using the desktop or mobile PRO app. An installer only needs to name the detector and assign it to the room and security group.

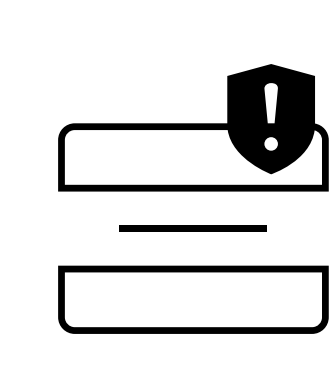


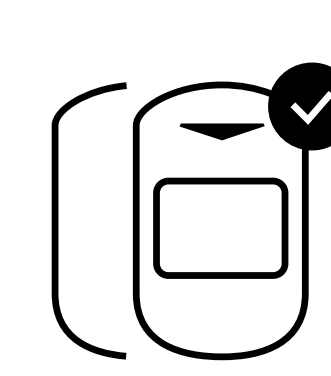
## Remote configuration

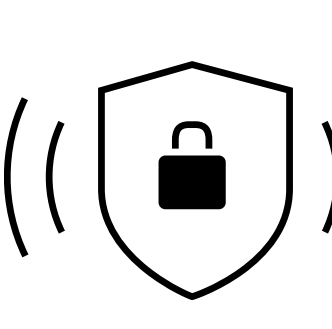
Intuitive Ajax apps provide remote set-up and all detector information from anywhere the Internet is available, on a smartphone or PC. The installer can remotely change the settings and provide services in time. No need to visit the facility.




# Sabotage resistance


 Tamper alarm

 Device authentication to prevent spoofing

 Jamming detection

 Holding screw to secure the device on SmartBracket

# Technical specifications

Compliance with standards	EN 50131-2-4 (Grade 2) PD 6662:2017 INCERT SSF NFA2P	Compatibility	<b>Hubs</b> Hub Plus Hub 2 (2G) Hub 2 (4G) Hub 2 Plus Hub Hybrid (2G) Hub Hybrid (4G)  <b>Range extenders</b> ReX ReX 2
Communication with control panel	 <b>Jeweller communication technology</b>  <b>Frequency bands</b> 868,0 – 868,6 MHz  <b>Maximum effective radiated power (ERP)</b> ≤ 20 mW  <b>Communication range</b> up to 1,200 m In an open space	Motion detection	<b>Sensitive element</b> 1 × PIR sensor 1 × K-band microwave sensor  <b>Detection distance</b> up to 12 m <sup>1</sup> When installed at a height of 2.4 m  <b>Detection angle</b> horizontal – 88.5°

1 – according to INCERT certification, detection range is up to 10 m (high sensitivity).



Communication with control panel	<p><b>Polling interval</b> 12–300 s Adjusted by PRO or user with admin rights in the Ajax app</p> <p><b>Protection against spoofing</b> Device authentication</p>	Motion detection	<p><b>Motion detection speed</b> 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</p> <p><b>Temperature compensation</b></p> <p><b>Sensitivity</b> 3 levels Adjusted by PRO or user with admin rights in the Ajax app</p> <p><b>Pet immunity</b> weight: up to 20 kg height: up to 50 cm</p>
Power supply	<p><b>Battery</b> 1 x CR123A Pre-installed</p> <p><b>Battery life</b> up to 5 years</p>	Installation	<p><b>Recommended installation height</b> 2.4 m</p> <p><b>Operating temperature range</b> from –10°C to +40°C</p> <p><b>Operating humidity</b> up to 75%</p> <p><b>Protection class</b> IP50</p>
Enclosure	<p><b>Colour</b> white black</p> <p><b>Dimensions</b> 110 × 65 × 50 mm</p> <p><b>Weight</b> 105 g</p> <p><b>Tamper alarm</b></p>	Complete set	<p><b>MotionProtect S Plus Jeweller</b> 1 x CR123A (pre-installed) <b>SmartBracket with holding screw</b> <b>Installation kit</b> <b>Quick start guide</b></p>