

MOTION GUARD PLUS

PIR DETECTOR WITH MICROWAVE SENSOR



Motion Guard Plus is a wireless dual PIR motion detector with an integrated microwave sensor that detects movement up to 12 meters. It reliably ignores the movement of pets (PET immunity) up to 18 kg in weight and 50 cm in height, as well as drafts or other potential causes of false alarms.



Data Encryption with AES Algorithm with Floating Code

The SAFEKeeper encrypted communication protocol ensures maximum protection of the security system.



Radio Signal Range up to 1600 m

Stable and efficient communication with a range of up to 1600 m in open space.



Bidirectional Information Transfer between Devices

Uninterrupted interaction between the central unit and devices using AES128 encryption.



Ignoring Animal Movement

The microwave sensor ignores movement from animals weighing up to 18 kg and measuring up to 50 cm in height.



Dual PIR Sensor for Motion Detection

Delivers more reliable detection and greater accuracy in challenging environments.



Motion Detection Range up to 12 m

The microwave sensor detects motion at distances of up to 12 meters.



Firmware Update via Cloud Services

Adding new features, enhancing software security and expanding the security system capabilities.



Security Level 2 According to EN 50131

Represents the highest standard protection for wireless components of the alarm and emergency system (PZTS).



Up to 4 Years of Battery Life

Powered by a replaceable battery that ensures continuous operation for up to 4 years.



Protection Against Radio Signal Interference

If signal interference is detected, the user is alerted, and the device automatically switches to a clear frequency band.



Microwave Motion Detection Sensor

Effectively analyzes and filters out disturbances caused by the combination of thermal emissions and movement of various objects or phenomena.



Tamper Protection Against Sabotage and Unauthorized Handling of the Device

Protects devices from sabotage or any unauthorized handling.

Technical Specifications - Motion Guard Plus

Model Identification

SAFE 38410	White EAN code - 0728204234815
SAFE 38411	Black EAN code - 0728204235034

Interface

Indication	1× green LED
Button	1× power button

Function

Sabotage Contact	Yes (tamper)
Remote Update	Yes (Cloud)
Temperature Sensor	Yes
Search	Signal strength detection
Test Mode	Yes
Low Battery Alarm	Yes

Wireless Transmission

Carrier Frequency	868.0 MHz – 868.6 MHz
Transmitter Power (EIRP)	Limit 25 mW
Communication Type	Bidirectional
Communication Distance	Up to 1,600 m (5249.34 ft) in open space
Encryption Mode	AES128
Frequency Hopping	Yes (automatic)

Temperature Parameters

Measuring Range	-15 °C to +65 °C (+18.8 °F to +149 °F) (indoors)
Measurement Accuracy	±1 °C (± 33.8 °F)
Resolution	1 °C (33.8 °F)

Detection Parameters

Detection Mode	Motion
Sensor	Dual element low noise PIR sensor, microwave sensor
Detection Range	12 m (39.37 ft) (90°) at an installation height of 2.2 m (7.21 ft)
Detected Object Speed	0.3 m/s – 3 m/s (0.98 ft/s – 9.84 ft/s)
Ignoring Animal Movement	≤18 kg (39.68 lb)
White Light Immunity Level	2000 lx
Bidirectional Digital Temperature Compensation	Yes, no attenuation of detection distance at high temperature
Microwave Frequency	24 GHz
Sensitivity	Adjustable (3 levels)

Effective Motion Detection at Distances up to 12 m

Motion Guard is a premium wireless motion detector designed for maximum reliability and comfort in indoor use. This intelligent device features an advanced dual PIR sensor that accurately detects motion up to 12 meters with a horizontal viewing angle of 90°. It includes a sophisticated tamper function to protect against interference or sabotage. If an intruder attempts to remove, force open, or otherwise compromise the detector, the Motion Guard immediately triggers an alarm.

Microwave Sensor

One of the key advantages of this detector, in addition to the dual PIR sensor, is the integrated microwave sensor. It effectively analyzes and filters out complex disturbances caused by a combination of thermal emissions and the movement of various objects or phenomena. As a result, Motion Guard Plus handles common sources of false alarms such as moving curtains, fluttering blinds, or intense sunlight. This advanced technology ensures more reliable detection and higher accuracy in challenging environments, as expected from a professional SAFE alarm system component.

Digital Intelligent Motion Detection Algorithm

Motion Guard uses a digital motion detection algorithm to ensure maximum reliability in detecting movement within the monitored area. This intelligent algorithm effectively distinguishes human motion from common distractions such as moving curtains, pets, or temperature fluctuations. Using advanced infrared detection, it accurately identifies relevant motion and adjusts its response according to environmental factors such as temperature changes, lighting variations, or humidity levels. This adaptability ensures consistent performance even in challenging conditions. Additionally, digital processing allows for rapid motion assessment and immediate alarm activation.

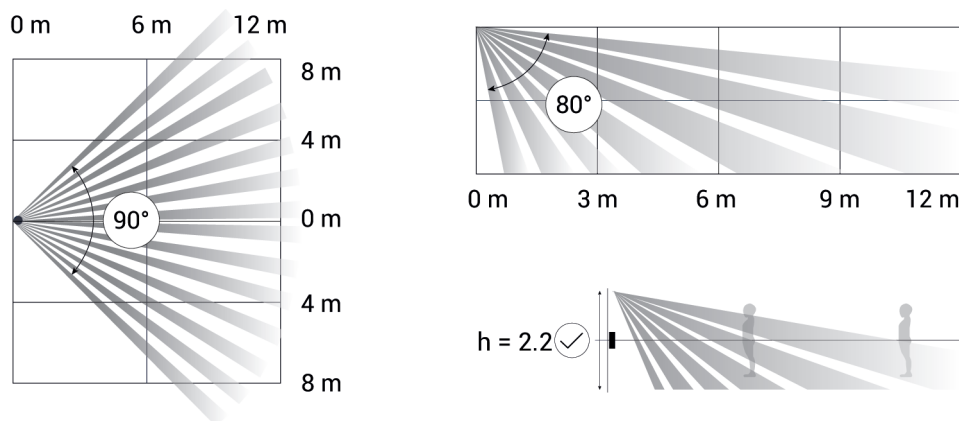


Technical Specifications - Motion Guard

General

Power Supply	1× CR123A battery
Power Consumption	Max. 615 mW
Current Consumption	≤11 µA (operation) ≤71 mA (alarm)
Battery Life	4 years
Operating Temperature	-10 °C to +55 °C (+14 °F to +131 °F) (indoors)
Operating Humidity	10 % to 90 % (RH)
Package Dimensions	104.0 mm × 60.0 mm × 50.0 mm (4.09" × 2.36" × 1.97")
Rozměry balení	137.0 mm × 98.0 mm × 57.0 mm (5.39" × 3.86" × 2.24")
Weight (net)	106 g (0.23 lb)
Weight (gross)	192 g (0.42 lb)
Installation	Bracket mount (wall mount, corner mount)
Recommended Installation Height	2 to 2.4 m
Housing Material	PC + ABS
Compatibility	Hub 2 Plus LTE SAFE 38300
Compliance	CE EN 50131-1:2006+A1:2009+A2:2017+A3:2020 EN 50131-2-2:2017 EN 50131-6:2017 EN 50131-5-3:2017 Security Grade 2 Environmental Class II
Warranty	36 months

Detection Parameters



Pets Protected by the Bodyguard

We understand that audible alarms can be stressful for pets, which is why Motion Guard features pet-friendly technology. With advanced pet immunity, Motion Guard easily distinguishes between human and animal movement. While it immediately responds to a person's presence by analyzing infrared radiation, household pets can move freely without triggering false alarms.

Smart Security

Motion Guard is a versatile solution that not only reliably detects movement to ensure your safety but also offers additional practical features. Its integrated temperature sensor provides accurate information about the current conditions at the installation site. Moreover, it seamlessly integrates into your smart security system—for example, automatically initiating an alarm scenario or activating lighting in the event of an intrusion. By combining motion detection with immediate automated response, it enhances property safety and increases the effectiveness of your security measures.

Wireless Communication of the SAFE Keeper Protocol

SAFE Keeper is a radio protocol designed for the SAFE wireless security system. It operates at a frequency of 868.0-868.6 MHz and provides an interference-free communication range of over 2,000 m in open areas. Protected by AES128 encryption and a bi-directional communication mechanism, it ensures enhanced security for the transmitted data. In case of radio signal interference, the user is notified and the device automatically switches to a clear frequency band. The device is reliably protected against software-level threats. SAFE Keeper delivers the maximum and effective protection of the wireless security system.

