

MOTION GUARD OUTDOOR

OUTDOOR PIR DETECTOR



Motion Guard Outdoor is a wireless outdoor dual PIR motion detector with an integrated microwave sensor. Thanks to advanced intelligent signal analysis, it reliably detects motion within a secured area up to 15 meters. The detector ignores movement from animals up to 40 kg and 80 cm in height, as well as vegetation or other common sources of false alarms. The device also features an anti-masking function that protects the PIR sensors from being covered or tampered with.



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 40 kg and measuring up to 80 cm in height.



Motion Detection Range up to 15 m

The microwave sensor detects motion at distances of up to 15 meters.



Security Level 2 According to EN 50131

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



Firmware Update via Cloud Services

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



Microwave Motion Detection Sensor

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



Tamper Protection Against Sabotage and Unauthorized Handling of the Device

If an unauthorized person attempts to remove, force open, or otherwise tamper with the detector, Motion Guard Outdoor immediately triggers an alarm.



Protection Against Radio Signal Interference

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



Dual PIR Sensor for Motion Detection

Delivers more reliable detection and greater accuracy in challenging environments.



Up to 5 Years of Battery Life

Powered by a replaceable battery that ensures continuous operation for up to 5 years.

Technical Specifications - Motion Guard Outdoor

Model Identification

SAFE 38460	White EAN code - 0728204234846
------------	-----------------------------------

Interface

Indication	1× green LED
Button	1× power switch 1× detection range adjustment switch

Function

Sabotage Contact	Yes (tamper)
Remote Update	Yes (Cloud)
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
RF Communication Distance	Up to 1,600 m (5249.34 ft) in open space
Encryption Mode	AES128
Frequency Hopping	Yes (automatic)

Temperature Parameters

Measuring Range	-25 °C to +65 °C (-13 °F to +149 °F) (outdoor)
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	15 m (49.21 ft) (86°) at an installation height of 1 m (3.28 ft)
Detected Object Speed	From 0.3 m/s to 2 m/s (0.98 ft/s to 6.56 ft/s)
Ignoring Animal Movement	≤80 cm (2.62 ft), ≤40 kg (88.19 lb)
White Light Immunity Level	10 000 lx
Bidirectional digital temperature compensation	Yes
Antimasking	Yes
Microwave Frequency	24 GHz
Sensitivity	Adjustable in 3 levels (PIR)

Efficient Motion Detection

Motion Guard Outdoor is a wireless motion detector designed for maximum reliability and convenience for both indoor and outdoor use. This intelligent device features an advanced dual PIR and microwave sensor that accurately detects motion up to 15 meters with a horizontal viewing angle of 90°. It includes an advanced tamper function to protect against interference or sabotage. If an unauthorized person attempts to detach, force open, or otherwise compromise the detector, Motion Guard Outdoor 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.

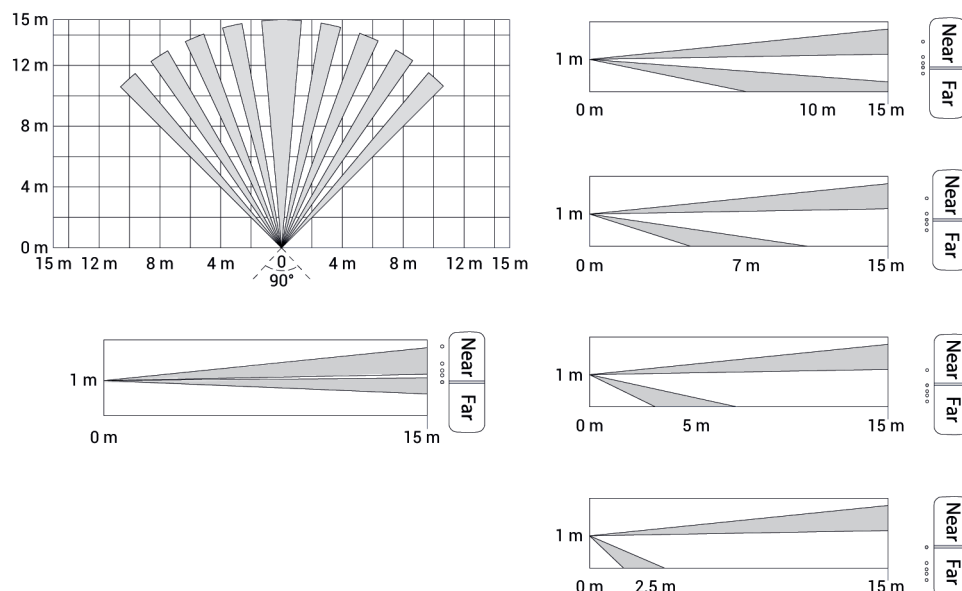


Technical Specifications - Motion Guard Outdoor

General

Power Supply	4× CR123A batteries
Power Consumption	Current 20 µA; Alarm: 26 mA (avg.); 250 mA (max.)
Battery Life	5 years (10 alarms per day)
Operating Temperature	-25 °C to +60 °C (-13 °F to +140 °F) (outdoor)
Operating Humidity	10 % to 90 % (RH)
Product Dimensions	211 mm × 106 mm × 94 mm (8.31" × 4.17" × 3.7") (L × W × H)
Package Dimensions	251 mm × 116 mm × 119 mm (9.88" × 4.57" × 4.69") (L × W × H)
Weight (net)	651 g (1.44 lb)
Weight (gross)	890 g (1.96 lb)
Installation	Wall mount, corner mount, pole mount
Recommended Installation Height	0.8 to 1.3 m
Housing Material	PC + GF
Degree of Protection	IP65
Compatibility	Hub 2 Plus LTE SAFE 38300
Compliance	CE EN 50131-1:2006+A1:2009+A2:2017+A3:2020 EN 50131-6:2017+A1:2021 EN 50131-5-3:2017 EN 50131-2-4:2020 Security Grade 2 Environmental Class IV
Warranty	36 months

Detection Parameters



Pets Under the Protection of a 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.

Unusual Temperature Alarm

Motion Guard Outdoor includes an integrated temperature sensor that not only provides an overview of current temperature conditions at the installation site but also alerts the user when preset temperature limits are exceeded—whether too high or too low. Once the temperature returns to the preset range, the user is notified that normal conditions have been restored. This feature ensures the user is effectively informed as needed, monitoring the environment for unusual temperature changes that could indicate, for example, a fire or other hazardous situation.

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.

