MOTION SENSOR

The Wireless Motion Sensor uses Passive Infrared (PIR) technology to detect human presence. Upon motion detection, it transmits data to the cloud via a Cloud Connector. This enables real-time monitoring of space usage, energy optimization, and room availability management.

Technical specifications

Mechanics & design

Housing material: Polycarbonate (PC)
Color: White
Sensor technology: Passive Infrared (PIR), 360° detection pattern with Fresnel lens
Operating temperature range: 0°C to 50°C
Operating humidity range: 0% to 90% RH (non-condensing)
Storage conditions: Cool and dry, near room temperature
Mounting method: Screws (ceiling-mounted)
IP rating: IP20

Size & weight

110 × 42 mm; 123 g

Band and mode / Output power

Radio Protocol: SecureDataShot
EU Radio Frequency: 868 MHz SRD band
US Radio Frequency: 915 MHz ISM band
Transmission power: < 100 mW

Power

Battery powered
Battery type: 2 × 1.5V AA (Lithium or Alkaline)
Battery life: Up to 15 years at room temperature
Battery replaceable: Yes (Figure 2)

Scalability

Communication range of sensor to gateway: up to 160 m (indoors, with 2nd Gen Cloud Connector)
1 gateway can provision for thousands sensors
Fully cloud-managed connectivity with automatic scaling – no pairing required

Data security

Sensor data is encrypted using symmetric AES-128 encryption in CCM-mode

Package content

Sensors typically packaged in project shipments
Mounting screws included
Installation via bracket and safety screw

Certification

EU: CE, UKCA, WEEE
US/Canada: FCC, ISED
FCC ID: 2ATFX-102518
IC: 25087-102518

Customs

HS-code: 8517620800
HST: 8517620800
ECCN: 5A992.c

Installation

1 Preparations

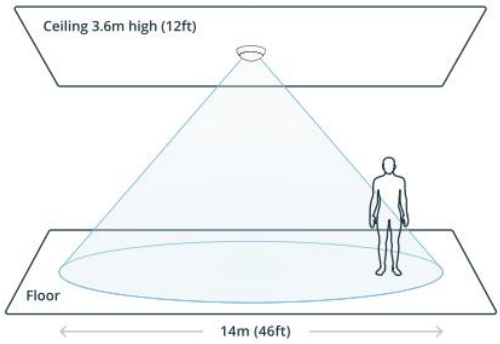
Before using the Motion Sensor, read the safety, installation, and operation instructions to ensure proper use. Please contact support@iotspot.co for any questions.

2 Intended use

The Motion Sensor is designed for indoor use to detect the presence of people in a room. It uses Passive Infrared (PIR) technology to identify motion within its detection area and transmits data to the cloud via a Cloud Connector. This data can be used for room occupancy monitoring, meeting room utilization, and integration into workspace management systems.

3 Motion Sensor

The product's main functions are:
Detecting motion within the 360° Fresnel lens coverage area
Transmitting "Motion Detected" or "No Motion Detected" events to the cloud through SecureDataShot. Providing continuous network status updates to ensure the sensor remains online and functional.
Allowing configuration of Activity Timer, Sensitivity, and Heartbeat Interval to match application requirements.

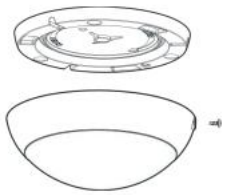


4 Mounting and commissioning

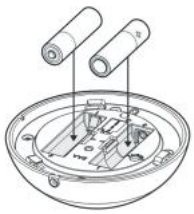
The Wireless Motion Sensor is designed for ceiling mounting to achieve optimal coverage

Placement: For maximum detection area, position the sensor in the center of the room. Installation Height: Maximum height is 3.6 m; detection diameter varies from 9.5 m to 14 m depending on height.

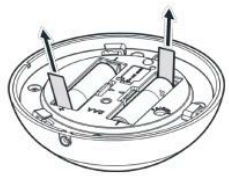
Mounting Process:



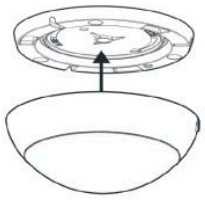
Remove the safety screw and turn the sensor counter-clockwise to remove it from the mounting bracket.



Replace the batteries with two new AA type batteries. Pay attention to the polarity.



Remove the bracket by rotating it counter clockwise and remove the battery tabs to activate the sensor.



Mount the bracket to the ceiling using screws. Lock the sensor in place by turning it clockwise.

Fasten the safety screw using a philips screw driver.

5 Activation

The sensor is configured, using a smartphone app ('iotspot setup-app' in Google's PlayStore or Apple's Appstore). In essence this setup app allows you to synchronize the sensor to a iotspot device, so that the sensory data is transmitted to the smart workspace platform. Once the configuration of the product is finalized the sensor data can be displayed in dashboards or accessed as raw data. More detailed instructions about the iotspot setup app: https://iotspot.zendesk.com/hc/en-nl/sections/360004605360-Setup-App.

6 Maintenance & Care

The sensor housing can be dusted or cleaned with a damp cloth. Do not use solvents or abrasive cleaning agents.

7 Disposal

Electrical and electronic equipment, accessories, and packaging must be recycled in an environmentally responsible manner. Do not dispose of electrical and electronic equipment as household waste.

EU countries only: In accordance with the European Directive on Waste Electrical and Electronic Equipment (WEEE), products no longer suitable for use must be collected separately and recycled appropriately.

Warranty

A warranty period of 12 months applies to the product, commencing on the day of purchase of the product. The warranty solely covers inadequacies caused by material defect or manufacturing defect. The warranty does not cover any unauthorized use or tampering with the product, such as product overloading, use of violence or force, damage as a result of any unauthorized interference or caused by foreign items. Failing to follow the safe conditions or safe installation condition instructions and common wear are also not included in the guarantee. Visit https://www.iotspot.co/terms-and-conditions to view more about the terms, conditions and guarantee of this product.