

## Operational description

# IoT<sup>PS</sup>10101



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## 1. Device version

This document is related to the MYSPHERA Presence Sensor (IOTPS10101)

- Case version 1

- HW version 1

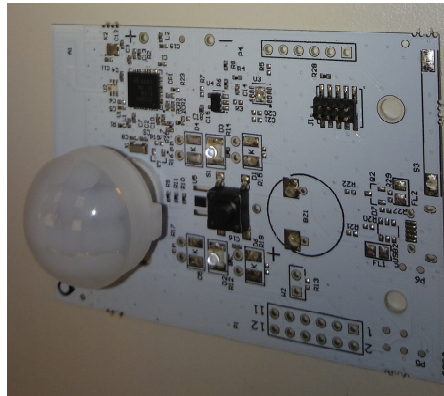
- FW version 1

## 2. Operational description

The hardware of the device is made out of a single PCB board. It includes a System-on-Chip microcontroller, among other components, featuring the radio transceiver. The antenna is a 2.4GHz patch PCB antenna.

The device is powered through the alkaline batteries situated on the back side of the device.

It detects movements from people.



## 3. Case

The device's outer casing has been designed to fit and to protect the electronics. It comprises four parts: the base, holding the electronic board, the cover, batteries tape and a small button.



Plastic material: ABS

## 4. Technical information

### 4.1. Connections

Wired connection: USB 2.0, limited power to 15 W

Communication protocol: Radio - BLE

### 4.2. Radiofrequency

Standard: Bluetooth Low Energy (Bluetooth 4.0)

Bluetooth class: B

Broadcast channels: 37-39

Modulation: GFSK

Data rate: 1Mbps

Maximum Antenna Gain: 0 dBi

Maximum transmission power: 0 dBm

Maximum conducted output power calculated: 3,04 dBm

Reception sensitivity: -94dBm

### 4.3. Power supply and consumption

Typical consumption: 40mA

Power supply: 4,5V DC (batteries)

### 4.4. Mechanical information

Dimensions	95mm x 85mm x 45mm
Weight	150 gr
Material de la carcasa	ABS.
Temperatura de operación	-5°C a 45°C
Temperatura de almacenamiento	-10°C a 50°C
Humedad de operación	25% to 75%
Humedad de almacenamiento	20% to 80%

### 4.5. User interface

Leds: blue, red.