

Operational description

IoT^{PS}10101



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Content

Content	2
1. Device version.....	3
2. Operational description.....	3
3. Case	3
4. Technical information.....	4
4.1. Connections	4
4.2. Radiofrequency	4
4.3. Power supply and consumption	4
4.4. Mechanical information	4
4.5. User interface	4

1. Device version

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

- Case version 1

- HW version 1

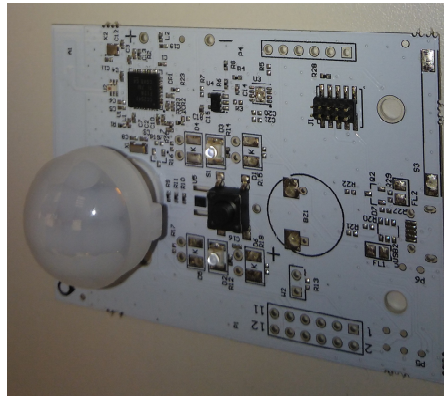
- FW version 1

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.