

Operational description

IoTAS10101



Mysphera S.L.

Parque Tecnológico de Valencia

Ronda Auguste y Louis Lumiere, 23 - Nave 13,

46980 Paterna (Valencia)

info@mysphera.com

www.mysphera.com

Telf.: +34 96 182 71 77

Fax +34 96 182 94 15

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 MYSHERA Presence Sensor (IOTAS10101)

- 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 a microUSB connector situated on the bottom side of the device.

It emits an acoustic and lighting signal when it receives a BLE signal.



3. Case

The device's outer casing has been designed to fit and to protect the electronics. It comprises three parts the base, holding the electronic board, the cover and a batteries tape without usually use.

The batteries tape offers the possibility to supply with alkaline batteries instead of microUSB.



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 conducted output power calculated: 3,04 dBm

Reception sensitivity: -94dBm

4.3. Power supply and consumption

Typical consumption: 40mA

Power supply: 5V DC (microUSB)

4.4. Mechanical information

Dimensions	95mm x 85mm x 37mm
Weight	68 gr
Material de la carcasa	ABS.
Temperatura de operación	-5°C to 45°C
Temperatura de almacenamiento	-10°C to 50°C
Humedad de operación	25% to 75%
Humedad de almacenamiento	20% to 80%

4.5. User interface

Leds: red.

Digital device, class B.