

Operational description

IoTAS10101



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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.