iotspot product sheet

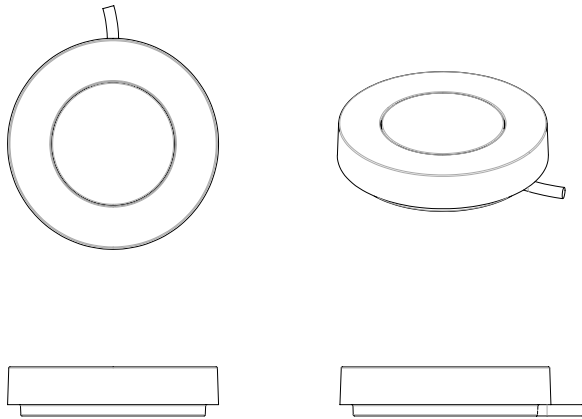**Fig. 1** iotspot

Functional description: iotspot LTE-M

The iotspot LTE-M is a GSM/BLE/NFC device that is at the heart of iotspot's smart workspace platform. Its functions are threefold: a) an availability indicator of desks or rooms, b) a booking interface of these office resources and c) an internet gateway for associated monitoring data of occupancy, climate, utilization and footfall sensors.

Technical specifications

Mechanics & design
Housing material: ABS (acrylonitrile-butadieen-styreen) and P2,2x10 T6 torx screws
NFC-tag material: LUPOY Polycarbonate 1201-15
Color: White
iotspot LTE-M is designed for indoor use only
Operating temperature range: 5ºC to 35ºC

Size & weight
iotspot: 55 x 55 x 12 mm; USB cable: 930 mm; 37g
USB adapter: 70 x 60 x 25 mm ; 50g
Mounting bracket: (L-shape): 80 x 70 x 31 mm; 18g
Mounting ring: 65 x 65 x 19 mm; 7g
Hanging sign plate: 110 x 110x 6 mm; 154g

Band and mode / Output power
LTE-M (Cat M1) 1.4 MHZ: 23 dBM
EGSM 900 MHZ: 33 dBM
EGSM 1.800 MHZ: 30 dBM
Bluetooth 2.4 GHz: -4 dBM
NFC 13.56 MHz: passive

Power
Power input: ISL80103IRAJZ IC 3,8V (OR 5V-2Amp)
Power consumption: 45-50 mA, i.e. 0,22-0,25 Watt
Power USB adapter: 5V-2Amp

Alternative power
Alternative power source: CE/FCC certified USB adapter with a power output of 5V-2Amp per plug

Scalability
Number of iotspots: 1 per desk or meeting room
Number of paired sensors over Bluetooth: 1 per iotspot

Package content*
1 iotspot Device
1 USB-power adapter with 1 outlet of 5V-2Amp
1 Product guide

*For mounting package content see installation sheet.

Certification:
Office dot:
HST: 8517 69 90 00
ECCN: 3A001.a.3
Type approved: CE - 192140545/AA/00
                   FCC - 2AYAIIEM02
USB Power plug:
HST: 851769 90 00   ECCN: 3A001.a.3

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Installation

1. Preparations

Before using the iotspot LTE-M, read the safety, installation and operation instructions to ensure proper use. You can view these instructions on our website www.iotspot.co. Please contact support@iotspot.co for any questions.

2. Intended use

The product is intended to be mounted on desks or from the ceiling in meeting rooms to indicate the availability status of these resources in an office environment. The availability status, as indicated by an RGB-LED coloring scheme, is 'communicated' to the product by means of a GSM connection (LTE-M or 2G) with our Cloud Computing infrastructure or a Bluetooth connection with our presence sensor(s). The foreseeable use of the product is that of an internet access hub for Bluetooth monitoring devices, i.e. sensors of third-party manufacturers in and outside of an office environment.

3. iotspot LTE-M

The product's function is six-fold:
1. Receiving a 'status' play load over LTE-M or 2G connectivity, as generated in the iotspot back-end software.
2. Receiving a 'sensor' play load over Bluetooth connectivity as generated by the connected sensors.
3. Sending the 'sensor' play load over LTE-M or 4G connectivity to the iotspot back-end software.
4. Communicating its 'identity' using the passive NFC chip to smartphones that have the iOS or Android app of iotspot active.
5. Displaying the 'status' through a color indication as emitted by eight RGB-LEDs in a semi-circle.

4. Mounting and commissioning

Position the product at the desk (top right corner) or at the entrance of a collaboration area or meeting room (from the ceiling) so that a user can easily view the LED status display as well as easily reach out for it to be able to 'NFC-tap' the product with a smartphone. After determination of the product position either:

Mounting option A - Desk. Stick the USB-cable through the middle of the L-shaped mounting device from the facing side. Screw the mounting device to the iotspot using with the two screws such that the 0º, 90º, 180º or 270º orientation suits the placement position. Position the mounting device and iotspot with proper orientation (Figure 4) and use the double-sided tape to fit the product-mounting device combination (Figure 3).

Mounting option B - Desk. Stick the USB-cable through the upper opening of the desk built-in device from the facing side. Position the 'build-in' device with proper orientation into the cutout of the desk surface and screw the iotspot in the position (Figure 6). For commissioning of this option, please contact iotspot or one of its partners for consultation with your furniture supplier or service provider.

Mounting option C - Desk. Fit double-sided tape at the bottom of the product, while not covering the product information sticker. Uncover the cover of the double-side tape and stick the device at the designated position (Figure 7). The 'north-south' orientation of the product is determined by the position where the USB-cable leaves the casing, indicating 'north'. (Figure 8)

Mounting option D - Room. 1) Position the Drop-down sign above the door of the meeting room using the ceiling bracket. 2) Depending on the material of your ceiling, you can decide to use magnets, screws or stickers that are provided. 3) By removing the white metal plate, the magnets can be used directly on the ceiling. Screw or stick the white metal plate to the ceiling to connect the magnets to if your ceiling is not made out of metal. (Figure 9)
The preferred height for the Drop-down sign above the door is 20cm.

If the entrance to the meeting room opens outwards, ensure the Drop-down sign is at a sufficient height, so as not to cause an obstruction. (Figure 10)
The power supply and USB cable provided must always be used. A power socket will need to be within reach of this.
No USB-extension cable! WITHIN 70CM of power socket!
If you have a high ceiling, you will need to ensure you have both a way of hanging the Drop-down sign and ensuring power can be supplied to the iotspot power supply and USB.

If not possible to provide power socket within 70cm from device, please user a POWER (not USB) extension cable to provide power.

A hole needs to be drilled the size of the USB port if power is providded above the ceiling tiles, cable should never be squished in between ceiling plates as this will damage the cable.

The NFC door plate should be installed by sticking the plate onto the center of a door. (Figure 10 & 14).

Incorrect installations of product will void warranty

5. Activation

The product 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 specify and categorize the product to among others your 'logical' office layout, furniture types, desk or room identification. Once the configuration of the product is finalized, you commission the product by turning it to active in the setup-app. More detailed instructions about the iotspot setup app: https://iotspot.zendesk.com/hc/en-nl/sections/360004605360-Setup-App

6. Maintenance & Care

The device housing can be wiped for dust or cleaned with a damp cloth if needed. Do not use cleaning agents.

7. Disposal

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

Valued customer, iotspot has designed their hardware with an eye to recyclability and is willing to contribute to sustainability. Therefore, feel free to inform with iotspot, how we are willing to support you in disposing of our hardware.

EU countries only: under the current European Directive on Waste Electrical and Electronic Equipment and its implementation in national law, electrical and electronic equipment no longer suitable for use must be collected separately and recycled in an environmentally compatible manner.

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.

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iotspot LTE-M
Mounting options - Desk

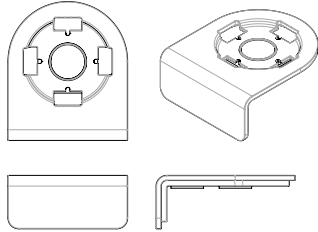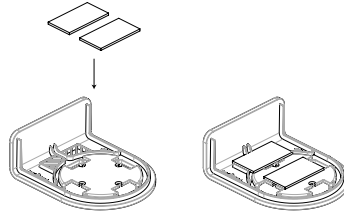## Mounting option A - Desk

Fig. 2 Desk clip

Fig. 3 Clip with double-sided tape
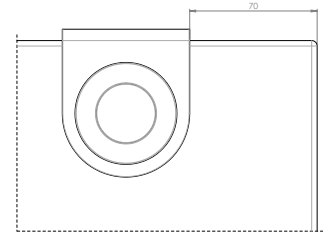
Fig. 4 Clip desk position

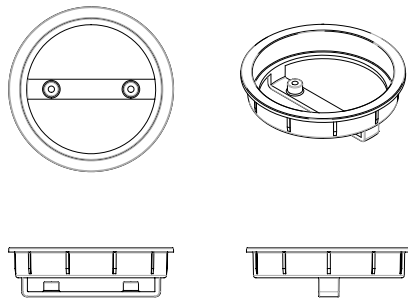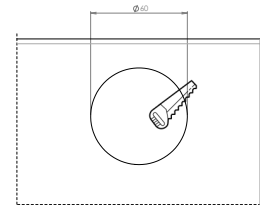## Mounting option B - Desk

Fig. 5 Desk adaptor ring

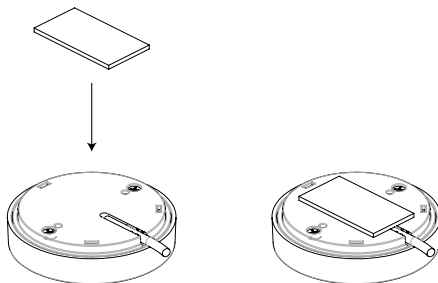**Fig. 6** Adaptor ring position

Mounting option C - Desk

Fig. 7 iotspot with double-sided tape

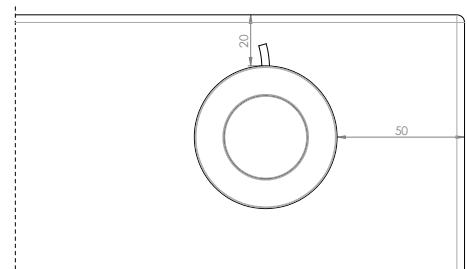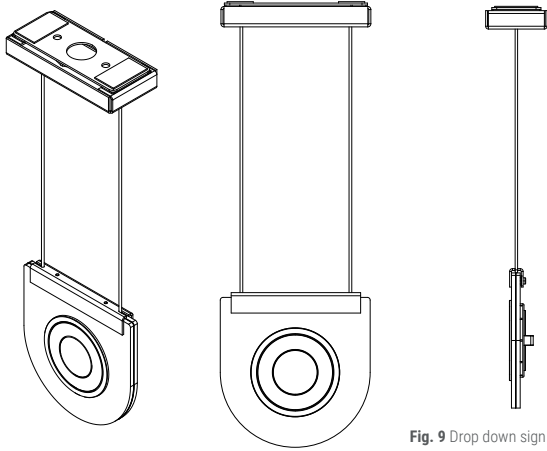**Fig. 8** iotspot mounting position

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Mounting option D - Room

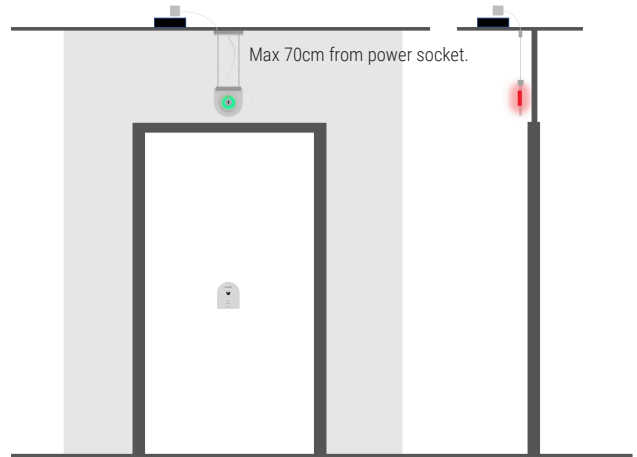
Fig. 9 Drop down sign

Max 70cm from power socket.

Fig. 10 Hanging sign + ceiling power
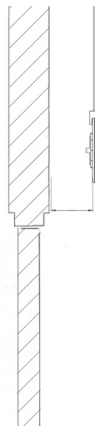
Fig. 11 iotspot mounting position

Mounting option E - Room Ceiling mount

Max 70cm from power socket.
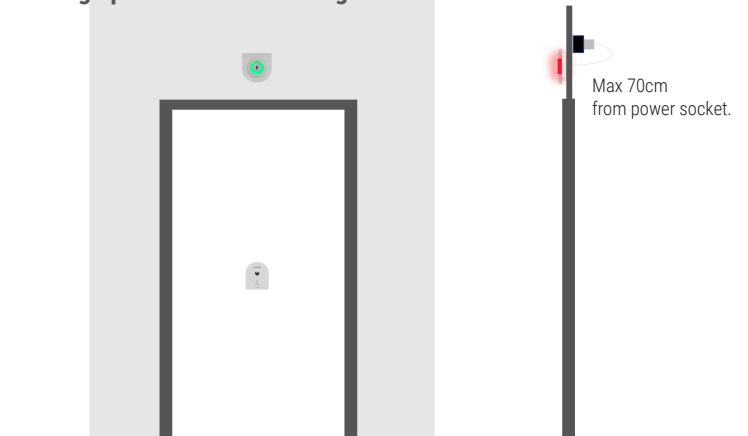
Fig. 12 Wall mount - Power through wall

Mounting option F - Room Wall mount

Max 70cm from power socket.
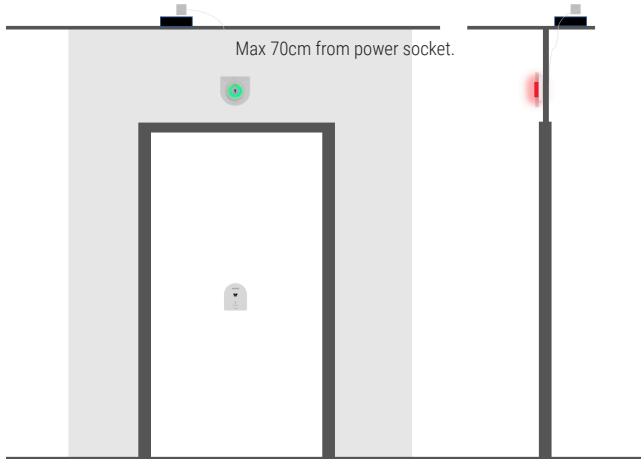
Fig. 13 Wall mount - Power through wall to ceiling

Butterfly

Tap & Book

Butterfly

Fig. 14 NFC Door Plate

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