

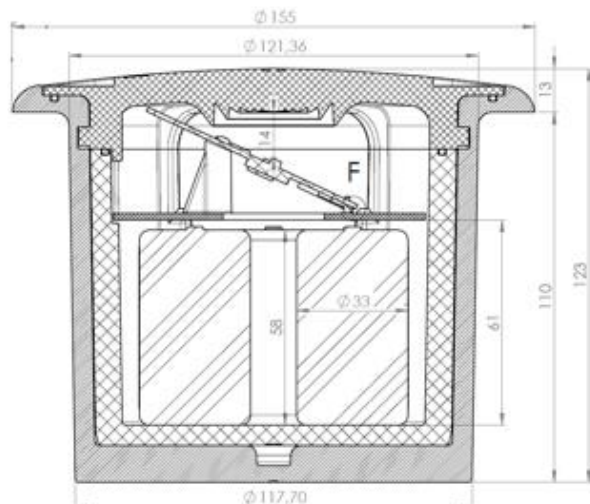
## oS300 Interactive Sensor

The Onesitu's "oS300" dual-detection sensor is the industry's most innovative and powerful sensor. It has been developed to tackle on-street parking and Smart City challenges.



This wireless and autonomous magnetic sensor - powered by a battery - is equipped with a radar and is built into the road or the pavement. As the sensor is built into the pavement, the LED indicator shows whether a parking space is occupied or not, or if parking time limit is exceeded.

It delivers high-value digital services via Bluetooth (BLE) connectivity.





## Features

## Detection method

- Dual detection - magnetic and radar
- Detection accuracy ≥ 99.5 %
- Measurement is made over 3 axes of the Earth's magnetic field
- Radar directional measurement 2.4 GHz
- Next-gen 32 STM mini controller
- Measurement frequency 3 Hz

## Communication

- Radio frequency 868MHz
- Exchange protocol   

- Radio range
  - ▶ LoRa modulation (semi duplex) ≥ 500 m
  - ▶ FSK modulation (full duplex) ≤ 250 m
- Remote configuration & calibration
- Remote monitoring software updates (OTA)

## Specifications

## Dimensions

Diameter	155 mm
Height	13 mm
Drilling diameter	125 mm
Drilling depth	130 mm
Total weight	950 g
Materials	PA12 30% GF
Attachment method	Built-in
Cover color	OER : Black OEI: Transparent

## Connectivity &amp; Interactivity

- ▶ RFID/NFC
- ▶ Bluetooth Low Energy (BLE), iBeacon
- ▶ Ultra Low Power RGB LED indicator with magnifying directional Fresnel lens

## Resistance to weather and external conditions

Temperature range	-30°C to +85°C
Resistance	water, snow and salt
Protection	IP67

High sealing and inviolability properties

## Mechanical resistance

Street sweepers, high-pressure cleaners  
Cars, buses and trucks (N1 - N2 - N3)<sup>1</sup>

<sup>1</sup> Definition of commercial vehicles category: 2007/46/EC modified: 385/2009



### Autonomy

- Parking bay counting  $\geq 5$  years
- Flow counting  $\geq 5$  years
- Battery type 4 3.6V lithium AA batteries  
Li-SOCl<sub>2</sub>
- Battery capacity 76,000 mAh



### Use cases

- Presence detection of all types of vehicles (cars, trucks, buses) for bay counting
- Presence detection for EV charging stations and on-street drop-off area modules
- All on-street parking use cases
- Vehicle identification and control
- iBeacon: push notifications sent to smartphones
- Remote space booking

### Key figures

$\geq 99.5\%$

Magnetic – Detection accuracy

$\leq 25$  m

BLE range for iBeaconing or beacon coupling

$< 5$  sec.

Sensor status update

### Installation

- Easy installation and commissioning, doable by any service provider
- Light road works
- No cabling required
- Number of connected bays can be expanded simply by adding extra sensors

### Maintenance

- Remote maintenance and diagnostics
- Battery life can be monitored
- Defects are identified automatically
- Maintenance takes place on site by a simple sensor swap
- No road works to replace batteries
- Easy swap of sensors, removed from base
- 2-year warranty on parts and labor

### French Fab

- ▶ Manufactured and assembled in French ISO 9001-certified plants.
- ▶ Compatible with European standards
- ▶ LoRa partners



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