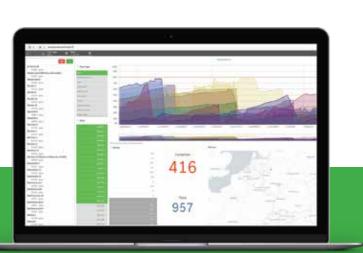
Sensoneo enables a world that is green, clean and free of litter.

#### Sensoneo Smart Waste Management System

The data from Smart Sensors is processed and stored in the Smart Waste Management. Smart Waste Management System allows you to setup and configure sensors, monitor real-time fill level in bins, see planned and executed collection routes, deal with reports from citizens and manage your waste smarter.

#### **Sensoneo Smart Analytics**

Truly understand your waste with Smart Analytics. Learn how much and how fast city or business produces waste, what is the separates and general waste ratio, how efficiently you use bins and collection routes. You can make data-driven decisions about capacity, separates and general waste ratio, and location of the bins.

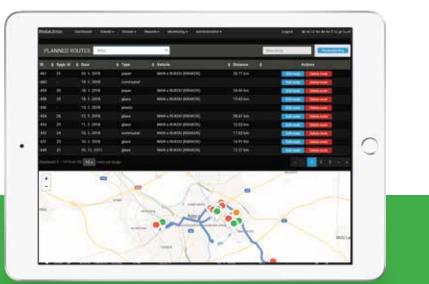


#### **Sensoneo Smart Route Planning**

Smart Route Planning enables an automated management of the waste collection routes based on detailed pre-defined data related to waste collection vehicles, depots and landfills.

This tool allows the operator to manage the collection routes by one click and utilize collection vehicles and FTEs the most efficient way in terms of time and costs.

Smart Route Planning navigates vehicles via shortest, completely safe and fully accessible routes.



#### Citizen App

Sensoneo Citizen App informs citizens of the nearest available empty bin and enables them to be more environmentally responsible. By providing real-time feedback, they can help reduce overflowing and messy bins, making the city greener, cleaner and free of litter.

Download Sensoneo Citizen App and get access to real-time data about the waste management in your area.



#### Who Do We Help

- Cities and municipalities
- Waste management companies
- Recyclers and consultants
- Circular economy consultation companies and experts
- Different businesses (Heavy, Logistics, Facility, Retail)



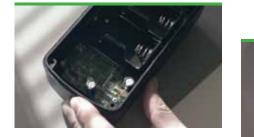
# Manage waste smarter

Smart Waste Management Solution for cities and businesses

## ((SENSONEO))

Sensoneo is a global enterprise-grade smart waste management solution provider that **enables cities and businesses to manage** their waste cost-efficiently, be more environmentally responsible and improve the wellbeing of people.

Through its unique smart waste management technology, Sensoneo is redefining the way waste is managed. The solution combines unique ultrasonic Smart Sensors that monitor waste real-time with sophisticated software providing cities and businesses with data-driven decision making.







Monitoring waste via ultrasonic IOT sensors

## **Smart Waste**

Configuration, monitoring and managing of waste



#### **Smart Route Planning**

Route optimization intelligence navigation & fleet, depots and landfills management

#### **Smart Analytics**

Understand your waste and make data driven decisions

**Smart hardware** 

**Smart Sensors** 

lifespan of over 10 years.

((S))

Smart hardware

((S))

### Smart hardware

((s))

**Benefits** 

#### **Smart Sensors**

## **Management System**

Sensoneo designs, develops and manufactures its own sensors. They are ultrasonic, robust, water and shock resistant, and have a

The sensors are fully functioning in a wide temperature range, and are set to measure from 15 cm to 400 cm. The sensors are flexible and can monitor any type of waste: mixed waste, paper, plastics, glass, clothing, bio waste, liquids, electronics, metal in containers of various types and sizes.

The sensors also monitor the temperature in the container, the GPS position, and are equipped with built-in BLE technology. If required, the sensors can be outfitted with a built-in fire alarm and a vertical position sensor, which indicates if the container has tipped over.











#### Single Sensor

Weight

Measurement Single ultrasonic beam Connectivity Sigfox / LoRaWAN

15 - 170 cm\* Measurement range Temperature - 30°C to +70°C Dimensions in mm (h/w/d) 50 / 120 / 54

165 g

Mounting options Screws / Clench / Rails

Power supply Up to 7 years

Battery replacement Yes

Mesh network Yes, as a slave

Tilt alarm Yes, mechanical type

Fire alarm Yes, microcontroller termostate

\*255 cm for high reflective commodities



Measurement Connectivity

Measurement range

Temperature

Dimensions in mm (h/w/d)

Weight

Mounting options

Power supply

Battery replacement

Mesh network

Tilt alarm

Fire alarm

Configuration

Four ultrasonic beams

Sigfox / LoRaWAN / GSM / NB-IoT

15 - 400 cm - 30°C to +70°C

68 / 200 / 85

550 g

Screws / Clench / Rails

Up to 7 years

Yes

Yes, both slave & master

Yes, accelerometer

Yes. microcontroller termostate

Remote via BLE



## **Environmentaly Responsible**

Reduce emissions and make businesess more eco-friendly.



#### **Save Costs**

Optimize logistics and make work processes more effective.



#### Reduce OPEX

Reduce costs related to fueling, vehicle wear and working hours.



#### Improve health & safety

Bring cleanliness and improvement of life for citizens.

