

BrainyBins Radar

The smart full detector for all types of bins and containers



- Operating costs will be reduced up to 50%
- Cost savings by optimising routes and hence fuel
- Filling status for waste bins and containers
- Emission reduction by optimising the routes
- Better service quality and waste disposal
- No overloaded waste containers

Precise reporting of waste containers with radar sensors

BrainyBins Radar is a fill level sensor that monitors the filling level in containers and waste bins. This is an IoT-solution where data is constantly sent via a cloud server to the BrainyBins platform. BrainyBins collects, processes and analyses the data from all bins equipped with and without BrainyBins sensors. In case the bin has no sensor installed, the data can be added manually via the BrainyBins App.

The data is accessible via a clear and user-friendly app and a web-based platform. This is the starting point for a better and data-driven basis for decision-making. The BrainyBins software itself comes with suggested emptying times and optimised emptying routes. You also have access to a comprehensive collection of historical data and analysis reports.

BrainyBins Radar



BrainyBin's radar sensors are used at recycling stations and in waste bins and containers placed in public spaces, on the beach, in the forest or in summer cottage colonies.

The BrainyBins Radar sensors are also used in metal waste containers or underground containers in the city or at waste recycling stations in residential areas.

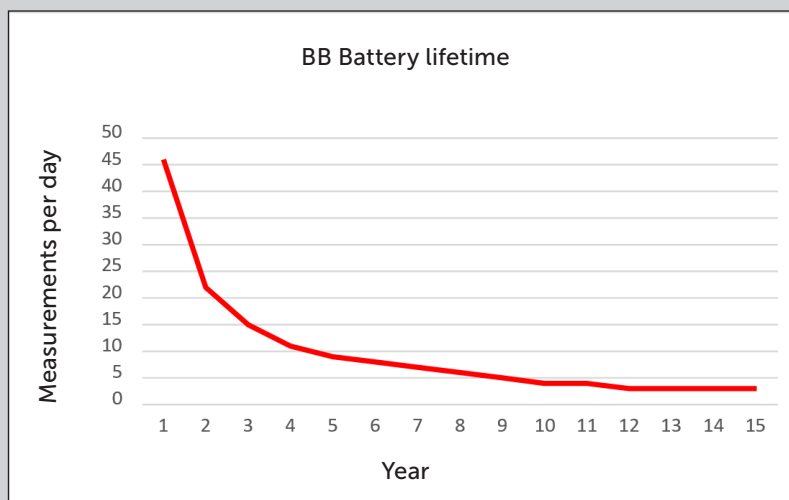
Data from full level detector

Filling level	Per cent
Detection from overturned containers	Alarm
Number of waste deliveries	Per day
Number of lid openings	Per day
Temperature measurement	°C
Battery level	Remaining battery lifetime
Number of measurements per day	6 (adjustable upon need)

Specifications

Sensor	Radar
Measurement range	10 cm – 300 cm
Cabinet	Water and dust resistant cabinet (IP67)
Material	ABS (recycelt plastic)
Measurements	82 mm x 65 mm x 32 mm (LxWxH)
Weight	125 g (with batteries)
Operational temperature	-20°C to + 60°C
Battery lifetime	8 years (6 measurements per day)*
Communication standard	NB-IoT
Antenna	Internal

* The actual battery lifetime will vary based on the number of network communications per day, climatic conditions, and the communication settings of the Internet provider.



Battery test

- 25.500 measurements/transmissions over 100 days.
- -20 to +60°C, average temperature 9°C.