



## BriteBin™ Pro Fill Level Sensor for Smart Waste and Recycling Management

The **BriteBin™ Pro Fill Level Sensor** is a smart waste management sensor for monitoring the fill level status of all waste and recycling materials across a wide range of containers and bins.

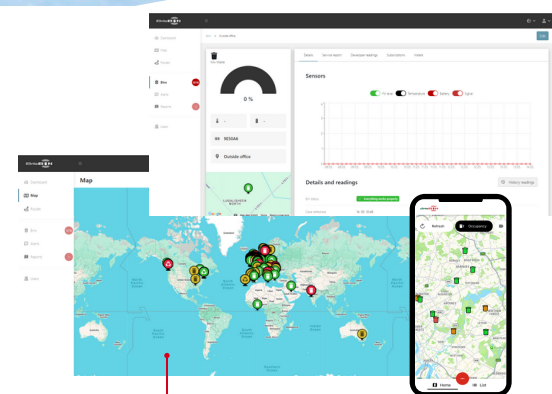
The dual optical sensor implementation provides accurate distance and fill level sensing capability, up to 5m. A robust enclosure includes a long lasting battery and cellular connectivity options for LTE CAT-NB1 and CAT-M1.

Used in conjunction with the **BriteBin™ Platform**, the sensor automates the monitoring, collection and transport of waste and recycling material.

Ideal for smart cities, commercial waste and recycling collectors, construction sites, estates and parks, campuses and shopping centres.

### Key Features

- ▶ Multi-technology distance sensing up to 5m
- ▶ Accurate, real-time fill level and temperature sensing
- ▶ Sensing suitable for containers and bins of various sizes, shapes and materials
- ▶ Multiple connectivity options - LTE CAT-NB1 or CAT-M1
- ▶ Long lasting, replaceable dual lithium-thionyl chloride (Li-SOCL<sub>2</sub>) batteries
- ▶ Emergency alerting system for high temperatures, tip and relocation
- ▶ IP66 rated for harsh waste environments



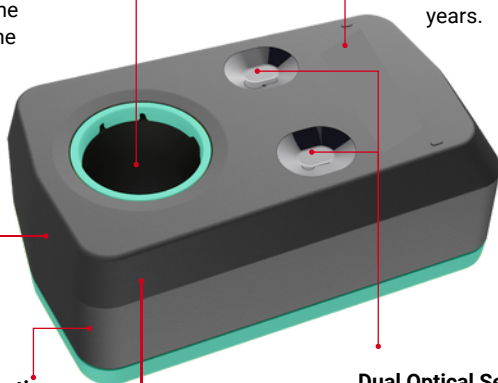
**BriteBin™ Platform** Ingest and manage all your asset data through the BriteBin™ Platform

**Ultrasonic Sensor\***  
Capture the topology of the contents in the container.

**Long battery lifetime**  
Up to 5 years.

**IP66 Rated**  
Enables submersion for short time

**Hardened Plastic Enclosure**  
Hardened plastic enclosure allows for robust installation in harsh environments.



**Multiple Connectivity**  
LTE CAT-NB1 or CAT-M1

**Dual Optical Sensors**  
For accurate distance and fill level measurements.

\*Ultrasonic sensor is available as an optional extra.

### Typical Applications



# Superfy Pro Fill Level Sensor

## for Smart Waste and Recycling Management

### SPECIFICATIONS

#### Sensors

|                            |   |
|----------------------------|---|
| Capability                 | Distance, Temperature                           |
| Distance measurement       | Optical / Ultrasonic*                           |
| Minimum / Maximum distance | Optical - 1cm / 500cm Ultrasonic* - 1cm / 240cm |
| Measurement calculation    | Multi measurement with weight approximation     |
| Temperature measurement    | Yes   |

#### Connectivity

|                        |                           |
|------------------------|---------------------------|
| Connectivity           | LTE CAT-NB1, CAT-M1       |
| Device class           | Class A                   |
| Adaptive Data Rate     | Yes                       |
| Downlink configuration | Yes                       |
| Measurement times      | Up to 48 readings per day |

#### Physical

|  |   |
|--|---|
| Weight (batteries included / excluded) | 358g / 165g                               |
| Dimensions                             | 129 x 74 x 50 mm (L x W xH)               |
| Turn on mechanism                      | Magnetic                                  |
| Cover                                  | Recyclable, polyamide with optical fibers |

#### Power

|                                |   |
|--------------------------------|---|
| Power supply                   | Up to 5 years (battery duration depends on local temperature, type and position of the bin, and frequency of measurement) |
| Batteries voltage and capacity | 3.6V, 2600 mAh  |
| Batteries type                 | Lithium-thionyl chloride (Li-SOCL2)   |
| Battery replaceable            | Yes, 2 batteries type LS14500 (2 x 54 grams)  |

#### Environmental

|                           |   |
|---------------------------|---|
| Temperature               | -30°C ~ 70°C (Test Standard: IEC60068-2-1 & 2)                    |
| Relative Humidity         | 25 ~ 55°C / 55 ~ 95% RH (Test Standard IEC60068-2-30)             |
| Storage Temperature       | -30°C ~ 60°C  |
| Storage Relative Humidity | 10 ~ 90% RH   |
| Shock                     | 15G, half sine, 15 ms (Test Standard: IEC60068-2-27)              |
| Vibration                 | 5 ~ 150Hz 1G acceleration operating (Test Standard: IEC60068-2-6) |
| IP Rating                 | IP66  |

#### Certifications

|                |                           |
|----------------|---------------------------|
| Certifications | CE, FCC, RCM, PTCRB, UKCA |
|----------------|---------------------------|

\*Ultrasonic sensor is available as an optional extra.

