

## Superfy Mini Fill Level Sensor

### for Smart Waste and Recycling Management

The **Superfy Mini 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 **laser or ultrasonic sensor implementation** provides accurate distance and fill level sensing capability, up to 4.5 m. A robust enclosure includes a long lasting battery\* and cellular connectivity options for NB-IoT/Cat M or LoRaWAN.

Used in conjunction with the **Superfy Platform**, the sensor can enhance the operational and sustainability performance around 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 malls.

#### Key Features

- Mobile app for ease of use and configuration
- Long lifetime replaceable batteries of up to 7 years\*
- Robust waterproof enclosure
- Built-in 3-axis accelerometer sensor to monitor device tilt status
- Flame retardant enclosure

#### Laser or Ultrasonic Sensor options

##### Long Lifetime

Up to 7 years year battery lifetime\*

##### Laser Sensor

With 2-350 cm wide detection range

##### Ultrasonic Horn

With 3 to 4.5 m detection range



##### Robust Waterproof Enclosure

IP67 rated enclosure

##### Ease of Use

Simple configuration with Superfy App

##### Multiple Sensors

Temperature, Accelerometer

#### Typical Applications



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### SPECIFICATIONS

#### Sensors

<b>Capability</b>	Distance, Temperature, 3-axis Accelerometer
<b>Distance measurement</b>	Ultrasonic / Laser
<b>Minimum / Maximum distance (Ultrasonic)</b>	3 cm / 450 cm (Ultrasonic)
<b>Minimum / Maximum distance (Laser)</b>	ToF FoV 27° Detection Range: 2 ~ 350 cm Detection Accuracy: $\pm 2$ cm (-20°C ~ 70°C) Detection Resolution: 1 mm
<b>Measurement calculation</b>	Multi measurement with weight approximation

#### Connectivity

<b>Connectivity</b>	NB-IoT/Cat-M, GNSS
<b>Adaptive Data Rate</b>	Yes
<b>Downlink configuration</b>	Yes
<b>Measurement times</b>	Up to 48 readings per day

#### Physical

<b>Dimensions</b>	118 × 65 × 30 mm (L x W x H)
<b>Operational temperature</b>	-30°C ~ +70°C (-22°F ~ +158°F)
<b>Enclosure</b>	ABS + PC (Flame Retardant)

#### Power

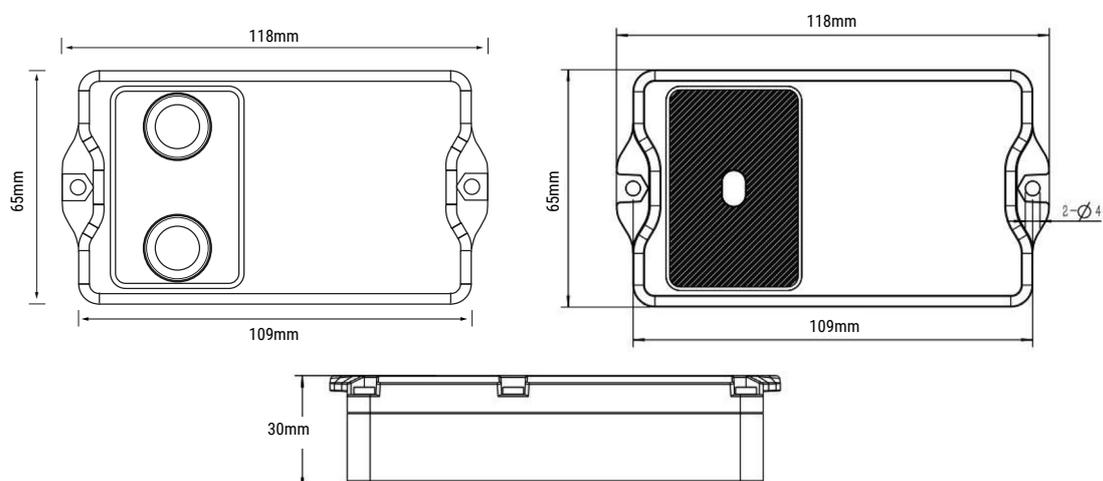
<b>Power supply</b>	2 x 9000 mAh ER26500 Li-SOCL2 replacable Batteries
<b>Battery life</b>	Up to 7 years (Estimated battery life, 4 Times Report per Day)*

#### Environmental

<b>IP Rating</b>	IP67
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#### Certifications

<b>Certifications</b>	CE, FCC, IC, EAC, ROHS
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\* Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more. In some circumstances these environmental factors can materially affect the expected battery life of a device.