

TECHNICAL DETAILS

Waste Sensor for Solid Materials in Dumpsters

Overview

The container level sensor is engineered to deliver accurate measurements of waste container fill levels, even in demanding environmental conditions. Utilizing advanced ultrasonic sonar technology in combination with temperature and motion sensors, the device employs intelligent software to monitor fill levels and detect significant events such as container collections, deliveries, fires, and vandalism.

Enhanced algorithms ensure accurate readings, even with unevenly shaped surfaces, which are common in waste containers. Configurable measurement intervals, typically set to once per hour, allow for tailored data collection. This data is transmitted to servers via 4G low-power cellular networks.



Features

- Continuous monitoring of fill levels
- Automatic detection of collections and deliveries
- Compatible with retrofitted or pre-installed configurations for various large waste containers (e.g., FEL & REL dumpsters, skips, and other industrial-sized containers)
- Low-maintenance design
- Reinforced fixing structure for increased durability
- Operates independently with an internal power supply lasting over 10 years*
- Wireless communication and alert capabilities
- Facilitates remote configuration and software updates

Dimensions and Weight

- **Dimensions:** 91 mm (H) x 93 mm (W)
- **Weight:** 1.4 lbs (~635g)

Environmental Ratings

- **Ratings:** IP 69, IK 10
- **Temperature Range:** -40 to +185 °F (-40 to +85°C)

Wireless Connectivity

- LTE Cat-M1 (4G), GSM fallback (2G): 700 / 1700 / 1900 MHz
- GPS capability (outdoor environments)

Measurement

- **Range:** 160 inches (~400 cm)
- **Accuracy:** Typically ± 1 inch (2.54 cm)

Physical Characteristics

- **Body:** Proprietary polyurethane resin
- **Fixing Points:** Brass inserts for 2 x 1/4" (M6) fasteners

Power

- **Type:** 3.6V Lithium battery
- **Battery Life:** Exceeds 10 years*

*Battery life is estimated based on recommended settings under optimal conditions. Actual battery performance may vary due to factors such as communication frequency, wireless signal strength, and ambient temperature.

For more information, contact: **USA Environmental Services** info@usaenv.com 601-401-0619
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The details presented in this document offer general descriptions of performance characteristics, which may vary based on specific usage and product enhancements. Any binding performance commitments are subject to explicit contractual agreement.