

Wireless Garbage Bin Sensor

(Family-IoT)

Product Description:

BC-300 is an intelligent product from Vighnaharta which perfectly suits the requirements of a smart city solid waste management. It is a garbage bin fill level sensor integrated with GSM and GPS connectivity with a host of other useful features. It consists of three sensors that can be used to determine the fill levels of three garbage bins at a time. It is configurable to use with single or dual bins as per user requirement.

Another unique feature of Bin-Connect is that it connects to the cloud-based application over GPRS connectivity. The Bin-Connect has an inbuilt GPS module that can be used to track the position of mobile bins. Additionally, it has an in-built temperature sensor. All these parameters are made available on the cloud.

BC-300 is a battery-operated device. Frequency of data transmission to cloud is user configurable. Whenever the bin is full or empty, data is transmitted immediately. Bin-Connect comes with IP65 grade enclosure making its operation waterproof.



Application:

- Smart city
- Commercial property
- Factory
- Smart washroom

USP:

- Accurate sensing
- App notification
- Tamper indication
- Easy installation on any kind of Bin

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Product Features:

1. Level Sensor

- Ultrasonic technology with 1cm resolution
- Range: 30cm - 400cm
- Two levels of fill percentage reporting (20%&80%)

2. Temperature Sensor

- Range: -10°C to +70°C
- Accuracy: ± 1°C

3. Communication

- GPRS over GSM: 850/900/1800/1990 MHz
- Network: internal SIM card
- Built-in GPS
- Compatible to NB-IoT & LoRa
- LoRaWAN™ class A protocol for LoRa connectivity

4. Interface

- Optional RS-485 interface (for integration with weighing scale output)

5. Data Management

- Accessibility: 24x7 access through Bin-Connect web portal
- Data Type: container fill level, GPS coordinates, temperature & weight (optional)

6. Power

- Battery: 3.6V high performance primary lithium battery
- Battery Life:
 - 5 years with 1 transmission per day
 - 2 years with 4 transmissions per day
- Rechargeable battery (optional)
- Solar charger interface for rechargeable battery (optional)

7. Environmental Specifications

- Enclosure rating: IP65
- Operating temperature: -10°C to +70°C
- Storage temperature: -20°C to +80°C

