

# WASTE BIN SENSOR

## Overview

NETOP Waste Bin sensor is a long range wireless sensor which can be used for monitoring waste container’s fill level of waste bin/container by using highly optimized ultrasonic sensor. It enables an optimization in the route planning for waste collection and provides improved container management. This sensor is fully compatible with LPWAN technology by using NB-IoT(Narrowband-IoT). The standard version of this sensor is powered by three replaceable 3.6 V AA sized battery (included with purchase).

## Key Features

- Real plug & play
- Easy to mount & install
- Maintenance free – install & forget
- Excellent Extended Range in Buildings and Underground
- Easy deployment utilizing cellular system
- Micro SIM(default) or Chip SIM Card(depend on request)
- Ultra Low Power Consumption
- Certifications: CE, RoHS



## Communication Specs

- The sensor uses LPWAN technology; Narrow Band IoT (NB-IoT) for connectivity
- Supported bands including B1/ B2/ B3/ B4/ B5/ B8/ B12/ B13/ B18/ B19/ B20/ B26/ B28
- Internet Protocol Feature: Support IPv4/TCP/UDP
- Full duplex communication
- Extended Coverage: 10-15km with 164 dB maximum coupling loss (MCL)
- Antenna Types: Internal(default) or External(depend on request) Antenna

## Mechanics

- Housing: ABS
- Dimensions: 90 x 55 mm
- Operating temperature: -40°C to +85°C

## Data Security

- AES-128

## Power Supply

- AA Battery 3.6 V Li-SOCI2-Soft LS 14500 (Standard 3 pieces battery)

## Indicators

- RGB Status LED (on board)

## Sensor Specifications

Detection range	:	15-300 cm
Accuracy	:	± 1 cm
Data Transmission Period	:	Every hour(default)

## Certifications & Reliability

- CE
- EN 62479
- EN60950
- EN 301 489-1
- EN 301 489-17
- EN 300 328

## Applications

- Waste Bin level monitoring applications