



## PRODUCT DATASHEET

## NB-IoT 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).

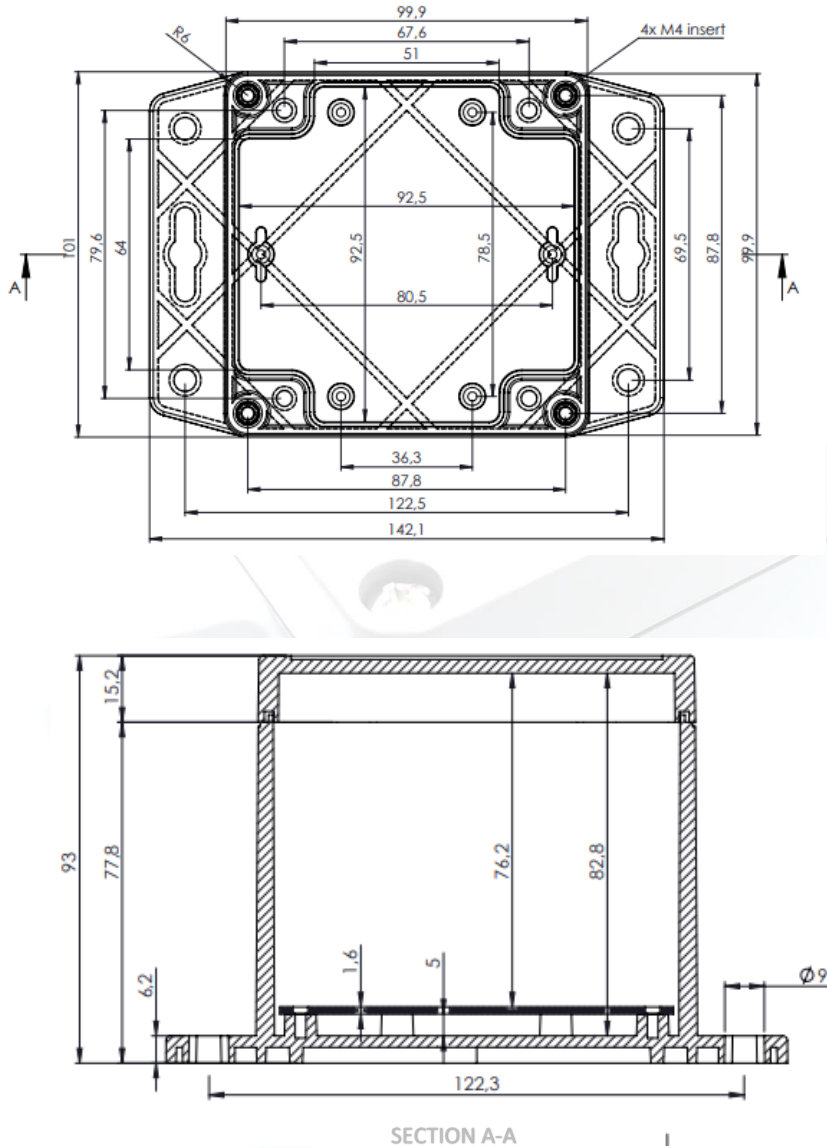




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TECHNICAL DRAWING

Heavy Duty Enclosure





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### KEY FEATURES

Real Plug & Play

Easy to mount & install

Maintenance free

Excellent Extended Range in Buildings

Easy deployment utilizing cellular system

Micro SIM (default)

Ultra-Low Power Consumption

Certificate: RoHS

### COMMUNICATION SPECS

Narrow Band IoT (NB-IoT) for connectivity

Supported bands including B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26/B27/B28/B66/B72/B73/B85

Internet Protocol Feature: Support MQTT

Extended Coverage: 10-15km with 164 dB maximum coupling loss (MCL)

Antenna Types: Internal (default) or External (depend on request) Antenna

### MECHANICS

Housing: ABS (IP65 or higher)

Dimensions: 142 x 100 x 93 mm

Operating Temperature: -15°C to +60°C



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## POWER SUPPLY

USB/ LIPO Charge / Non-Chargeable Battery

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## INDICATORS

Green Red Status LED (on board)

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## WASTE BIN SENSOR SPECIFICATIONS

Detection Range: 280- 4500 mm

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Accuracy: % 0.5

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## CERTIFICATIONS & RELIABILITY

EN 60950-1;2006/A2:2013

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ETSI EN 301 489-17 V3.1.1(2017-02)

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EN 55032:2015

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### INFORMATION

01: Selected slot.

1D: This slot determines the sensor type.

0123: Output data distance 291 as cm.

YYYY: Dummy data

012C: Sleep interval along 300S.

25: Data is live or not. Each measurement is incremented by degree.

01: When the sensor message 02 comes, it enters the interrupt.

12: Sensor firmware version 1.2

0DEF: Outputs the measurement in Volt (3.567V).