

HOOPOSENSE LORA DEVICE 502B1000-2A

User Manual

1 Table of Contents

2	<i>General</i>	2
3	<i>System Overview</i>	2
3.1	Mechanical	2
3.2	Electrical.....	5
4	<i>Connectivity</i>	5
5	<i>Radio Compliance Statement</i>	5
6	<i>Battery Installation/replacement</i>	7
6.1	Top Cover Removal	7
6.2	Batteries Installation.....	8
6.3	Top Cover replacement	11

2 General

This document describes the hoopoSense, 502B1000-XA, installation instructions.

3 System Overview

The hoopoSense devices are part of a tracking system that consists several FPX3 LoRa gateways and a cloud based application server. The hoopoSense device transmits various environmental and location parameters via LoRa or cellular communication channels.

3.1 Mechanical

3.1.1 hoopoSense mechanical outline

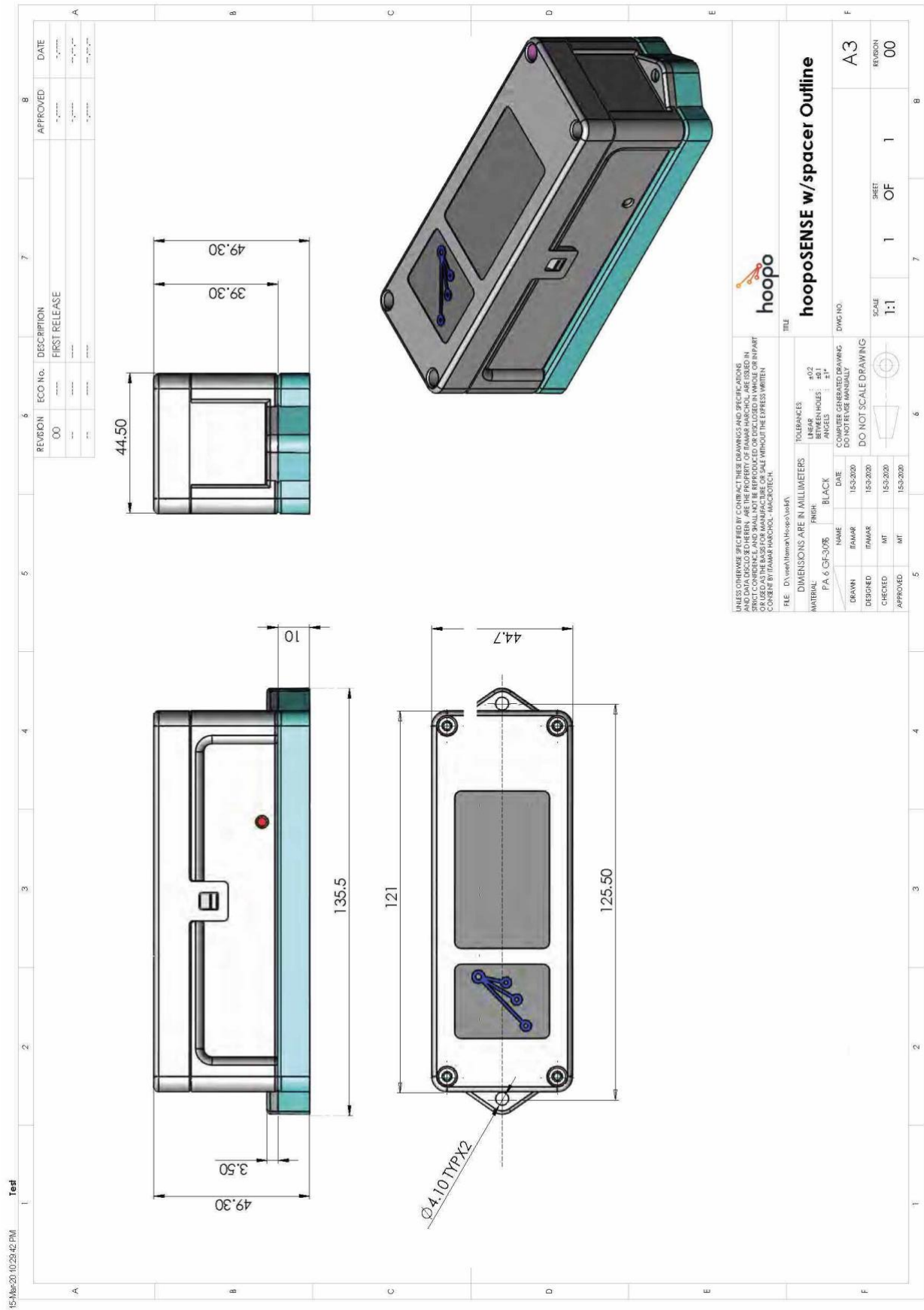


Figure 1: hoopSense with spacer outline drawing

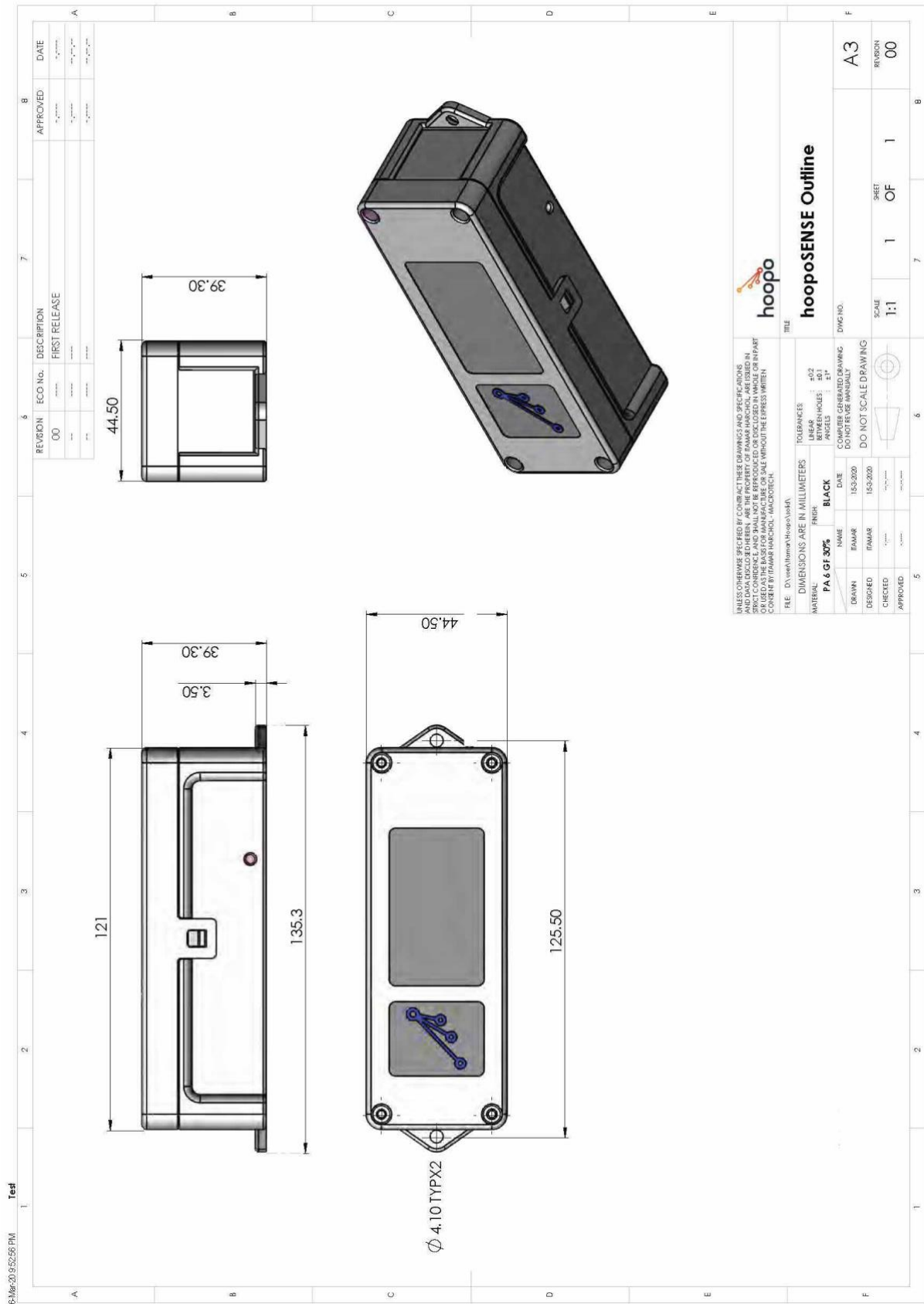


Figure 2: hoopoSense with no spacer outline drawing

3.1.2 hoopSense Installation Modes

The hoopSense devices shall only be rigidly installed/embedded as part of various logistics items; plastic pallets, various types of non-motorized ground support equipment, truck trailers, large garbage containers, large building materials recycle containers etc.

Note: When installed on-top metal surfaces the device must be mounted on-top the supplied plastic spacer.

3.1.2.1 *Plastic Pallets*

Attach the hoopSense devices with two 4 mm diameter screws. Do not exceed the 3.0 Nm closing torque. The type of screws shall be defined by each pallet manufacturer.

3.1.2.2 *Large logistics items*

Attach the hoopSense devices on top of the supplied plastic spacer using two 4 mm diameter screws. Do not exceed the 3.0 Nm closing torque. The type of screws shall be defined by each equipment manufacturer.

3.2 Electrical

The hoopSense devices are powered by two or four primary AA batteries.

4 Connectivity

The hoopSense devices communicate via LoRa or cellular channels.

5 Radio Compliance Statement

This device complies with FCC Rules Part 15 and with Industry Canada licence-exempt RSS standard(s). Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received or that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause

harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (hoopo Systems Ltd.) could void the user's authority to operate the equipment.

WARNING! To comply with FCC RF exposure compliance requirements, the device should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter.

6 Battery Installation/replacement

6.1 Top Cover Removal



6.1.1 Remove the four top cover screws with a #1 phillips screwdriver.



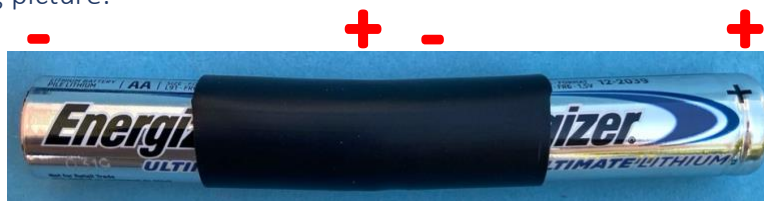
6.1.2 Release both side latches using a flat screwdriver.



6.1.3 Remove the top cover.

6.2 Batteries Installation

6.2.1 Group the batteries in pairs using the supplied plastic tubes as depicted in the following picture:

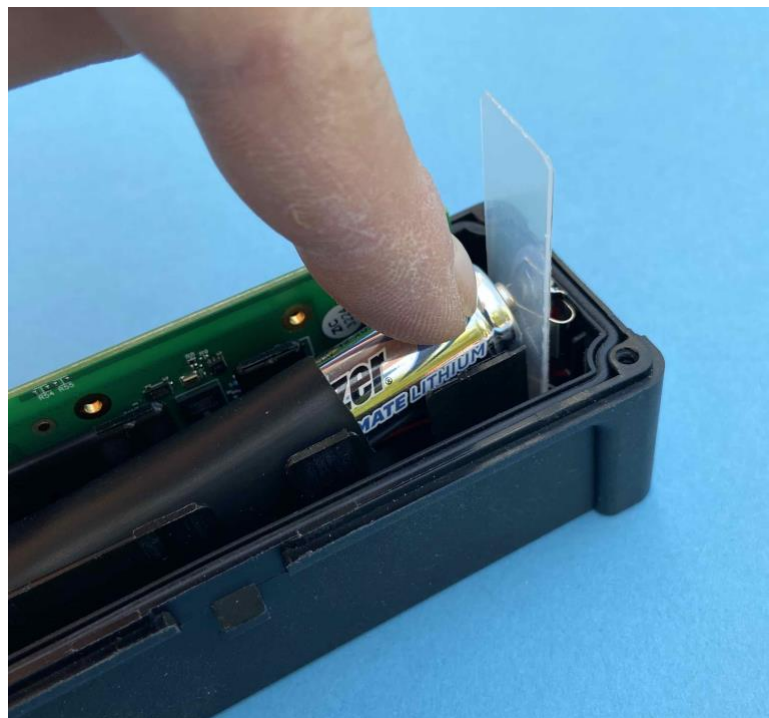


6.2.2 Please note the inscribed polarity on the bottom of the enclosure.





- 6.2.3 Place the nylon tab at the (+) pole.
- 6.2.4 Insert the bottom batteries pair; the (-) end first.
- 6.2.5 Press/slide down the batteries in-place as depicted in the following picture:



6.2.6 Place the top batteries pair; the (-) end first.

Note: Both batteries pairs are installed in parallel,
(-) on top (-) and (+) on top (+)



6.2.7 Press/slide down the batteries in place.



6.2.8 Pull out the nylon tab slider.

6.3 Top Cover replacement

6.3.1 Replace the top cover on the enclosure.

Note: The top cover is polarized and it fits in one direction only as depicted in the following picture



6.3.2 Place and tight the top cover screws. Do not overtight.

Note: Tightening torque 1Nm maximum

6.3.3 In case one or both of the side latches are not fully engaged as depicted below:



- 6.3.4 Apply pressure at the center of the top cover until it “clicks” in place, if needed repeat for both side latches.

