

### OVERVIEW

The **NODIX CEN-1** is a bi-directional BLE anchor relay designed to deliver accurate room-level visibility in complex indoor environments where traditional BLE RTLS systems struggle with signal overlap and inaccurate zone detection. Designed for high-density deployments, it enables precise localization without requiring one gateway per room. It can also be deployed in passageways and gates to enhance coverage and ensure smooth, reliable tracking between zones.

With high operational reliability, simple installation, and a replaceable high-capacity battery, the **NODIX CEN-1** significantly reduces deployment complexity and maintenance overhead. By minimizing the need for multiple RSSI gateways, it provides a cost-efficient and scalable RTLS architecture, making large-scale implementations both practical and sustainable. Seamless integration with existing systems and intuitive configuration tools allows for fast deployment and effortless system expansion.



### BLUETOOTH RADIO

**Type:**  
Bluetooth Low Energy 5.x

**Advertisement:**

- iBeacon
- Eddystone (UID & TLM)
- sBeacon (Sentrax Proprietary)

**Advertisement Interval:**  
100 ms to 10.2 seconds

**Scanning Accuracy:**  
2-3 meters

**Scanning Interval:**  
1000 ms to 5 seconds

**Frequency:**  
2.4GHz

**Transmit Power:**  
+4dBm to -20 dBm

**Antenna Type:**  
PCB antenna, Omni-Directional

### BATTERY

**Battery type:**  
ER14505 x 2, 4800mAh, Replaceable

**Battery Life:**

(Advertisement Rate)	(Battery Life)
1000ms (Adv. Interval)	1 year 1 month*
1000ms (Scan Interval)	
5000ms (Adv. Interval)	2 years 2 months*
5000ms (Scan Interval)	

### SENSORS AND INTERFACES

Motion sensing	3 Axis Accelerometer (optional)
Temperature	Internal Temperature Sensor
Button	User interact-able button
LED	1 Red LED

### CERTIFICATIONS

CE, FCC\*\*

### ENCLOSURE

<b>Material:</b>	<b>Color:</b>	<b>Weight:</b>
ABS	White	72g

**Dimensions:**  
70.95 mm (Dia) x 26.20 mm (H)

**Accessories:**  
Double-sided tape, Mounting Screw

**Protection Class:**  
IP54

### FEATURES

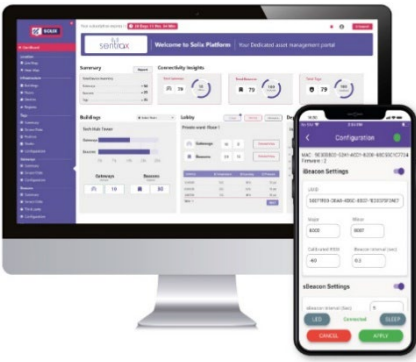
- Bi-directional BLE operation (scanning + broadcasting)
- Room-level accuracy with minimized signal overlap
- Reliable entry and exit detection between zones
- Reduced infrastructure (no gateway per room needed)
- Replaceable high-capacity battery
- Configurable through gateways

### OPERATING ENVIRONMENT

Temperature Range	-20°C to 70°C
Operating Humidity	90%

\* Battery life is estimated when sBeacon and iBeacon are enabled only.  
\*\* Pending

## SENTRAX DEVICE MANAGER



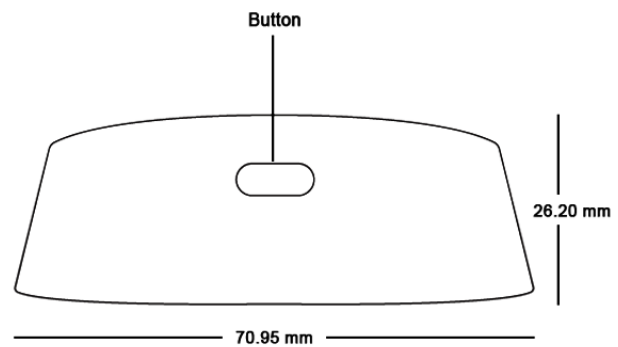
The [Sentrax Device Manager \(SDM\)](#) app allows you to manage Nodix Anchor. You can discover nearby beacons, check their battery levels, view their current settings, and modify them with a protected 4-digit settable PIN.

For security, beacons can only be configured within 15 minutes of a new battery installation or by manually activating configuration mode. Using advanced settings, the configuration window can be extended to up to three weeks.

## MECHANICAL DRAWINGS



NODIX CEN-1



## APPLICATION AREAS

- Indoor localization,
- Indoor navigation-based services
- Asset & person positioning

## CAUTION



- Risk of Explosion if an incorrect type of battery.
- Dispose of used batteries according to the instructions
- Glue should be used to close the enclosure if opened by use

## RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means the product must be handled in accordance with European Directive 2012/19/EU to ensure it is recycled or dismantled, minimizing its environmental impact.

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