Specifications

Super-Beacon

SKU: 4680038530654

General specifications

– **Name:** Super-Beacon
– **Size:** 55x55x33mm (55x55x65mm with 50mm antenna)
– **Weight:** - 59g (battey + antenna + housing)
– **Power:** 5V, supplied via Micro-USB cable
– **Radio frequency band:** 868/915MHz
– **Battery:** Li-Ion 1000mAh (soldered to the board)
– **Ports:** Micro-USB port

Tracking performance

	IA	NIA	MF NIA
Stationary beacon	✓	✓	✓
Automatic map building	✓	✓	✓
Mobile beacon	✓	✓	✓

– **TX frequency:** One of: 19, 25, 31, 37, 45kHz*
– **RX frequency:** Any of: 19, 25, 31, 37, 45kHz**
– **Distance measurement:** Up to 50m 1D / Up to 120m 1D (With Marvelmind Horn)
– **Coverage area:** Range of stable tracking of Super-Beacon + Super-Beacon is 20-50% bigger, than the range of Beacon HW v4.9 + Beacon HW v4.9 in the same conditions
– **Precision:** Differential: ±2cm, Absolute: 1–3% of the distance to the beacons
– **Additional sensors:** IMU - Accelerometer + gyroscope

Interfaces

– UART
– SPI
– Virtual UART via USB
– NMEA

Supported Accessories

– Antenna Full-Size
– Horn
– External Microphone-IP67

Overview

The Super-Beacon is a beacon for Marvelmind precise Indoor positioning and navigation system. It is a superior version of Beacon HW v4.9. It has a digital microphone which allows Super-Beacon to receive any frequency used in the Marvelmind system. Super-Beacon can be used in any Architecture. It also can be a stationary or a mobile beacon in any Architecture. Super-Beacon has an IMU on board which allows users to get information from gyroscope and accelerometer.

The system is used for autonomous robots, vehicles, drones, and people as well as for industrial applications requiring precise positioning and localization indoors.

Applications

– Industrial (Forklift/people tracking, factory automation)
– Healthcare (locate assets, patients & staff)
– Retail (security, navigation, customer analytics)
– Consumer (connected home, sports analytics)
– Distance measurement indoors

*depends on sensors pre-installed. Can not be changed in the settings

**digital microphone can receive any of frequencies we use in Marvelmind products, it can be switched automatically (IA/MF NIA) or manually (NIA)