

General specifications

- **Name:** Super-Beacon-Outdoor
- **Size:** 55x55x33mm (55x55x65mm with 50mm antenna)
- **Weight:** - 79g
- **Power:** 5V, supplied via Micro-USB cable
- **Radio frequency band:** 868/915MHz
- **Protection:** Compound sealed for dust/water protection
- **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: $\pm 2\text{cm}$, 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



Overview

The Super-Beacon-Outdoor 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 Super-Beacon-Outdoor is designed to be used in outdoor conditions and industrial applications. It also survives complete submersion into water.

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)