

Antenna Report for 1201-M1 Antenna

1 Description

blukii Small MKII 1201 beacon uses a Metal internal antenna that is soldered on the main PCB. There is no option to connect any external antenna to the beacon.

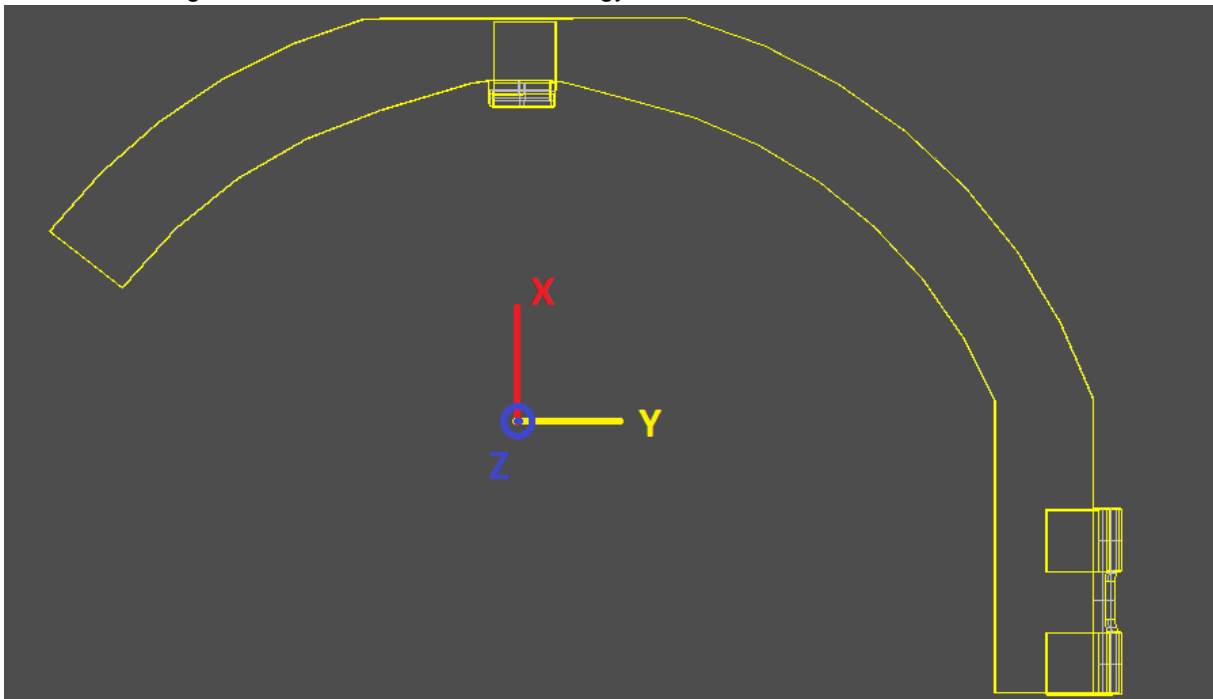
The antenna is an omni-directional antenna with circular polarization.

2 General Specifications

- Manufacturer: hard&softWERK GmbH in Bahnhofstr. 10 D-78112 St. Georgen, Germany.
- Model Name: 1201-M1 Antenna
- Material: C7521 Nickel Silver.
- Material Thickness: 0.2mm.
- Length: 17.4mm.
- Width: 9.45mm.
- Number of Ports: 2.
- Frequency of Operation (-3dB Band): 2.35 – 2.6 GHz
- Maximum Gain: 2 dBi.

3 Antenna Patterns 3D

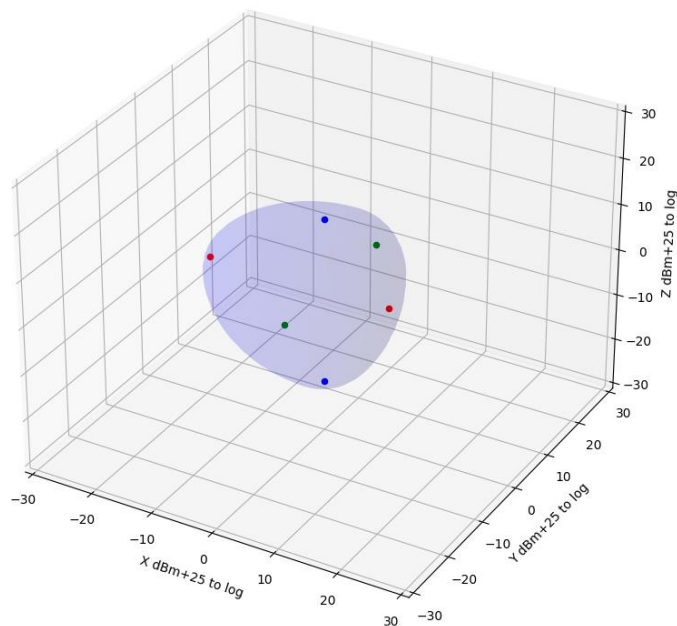
All patterns are plotted at a (2.402 - 2.426 – 2.480) GHz frequencies of Operation, as they represent the Main Advertising Channels for Bluetooth Low Energy.



2.402 GHz

The values are shifted by +25dB for better visualization

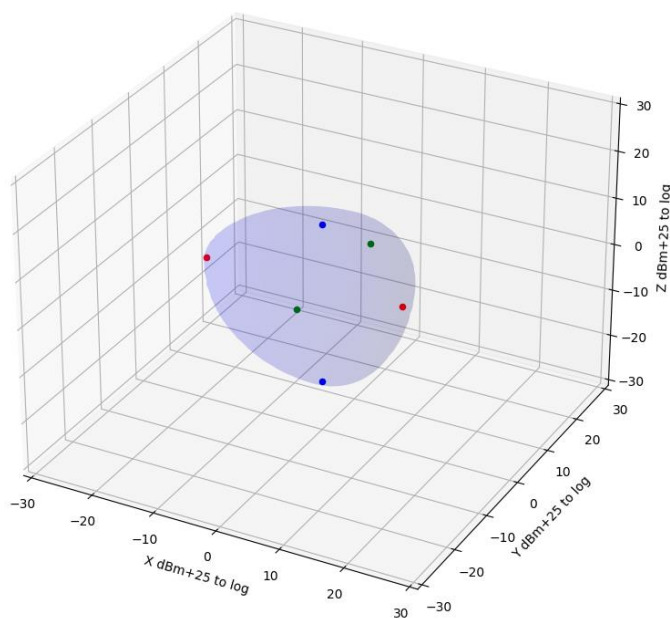
BLE Beacon Power (+25dB) at 2402.0 MHz



2.426 GHz

The values are shifted by +25dB for better visualization

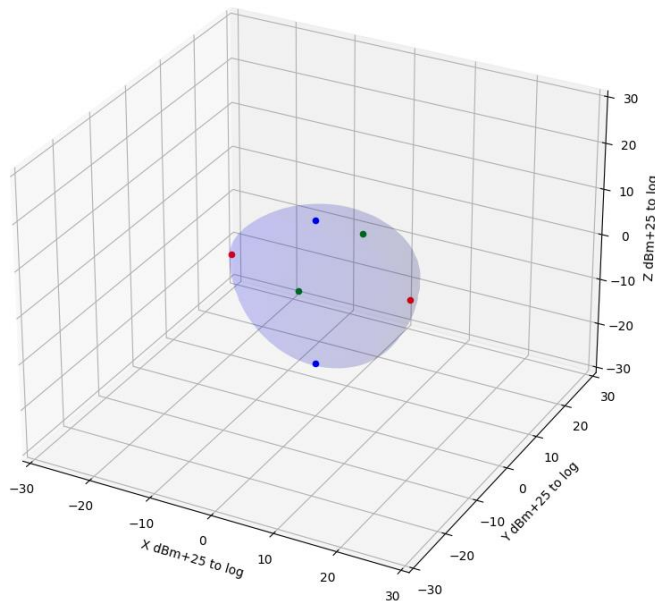
BLE Beacon Power (+25dB) at 2426.0 MHz



2.48 GHz

The values are shifted by +25dB for better visualization

BLE Beacon Power (+25dB) at 2480.0 MHz



4 General Notes

- All antenna plots were generated by testing inside CETECOM WTS-80 Box using Rhode&Schawrz RSV Signal Analyzer. The plots were generated based on 6 measurement antennas (1 in each direction) and the 3D blob is interpolated between these 6 points.
- All testing was done by hard&softWERK GmbH internally
- For more information about the antenna please contact: gnaser@hard-softwerk.com
- This document is not intended for general release.