BlueUp S.r.l.
Loc. Belvedere, Ingresso 2, 99, 53034 Colle di Val d'Elsa (SI)
Ph. +39 344 2030929 / +39 0577 043101
E-mail: info@blueupbeacons.com, Web: www.blueupbeacons.com
P.IVA/CF/VAT N. IT01373980521

Board/S

User manual

Introduction

BlueUp Board/S, henceforth identified with the terms “product”, “device” or “beacon”, is a Bluetooth Low Energy (BLE) beacon for proximity applications. BlueUp Board/S uses iBeacon(TM) technology and/or Eddystone(TM) format specifications (with full-support of Eddystone specifications, including GATT and EID). It also supports Quuppa Intelligent Locating System for accurate RTLS.
BlueUp Board/S is supplied in single-board version, for integration into third-party electronic devices. The board of the BlueUp Board is equipped with a power connector, which allows powering the device with a DC voltage with a value between 3VDC and 30VDC.

BlueUp Board/S has two different antenna options:

1. integrated antenna (cod. **BlueUp 06/ANT**). Antenna is a meander-line PIFA (Planar Inverted Folded Antenna) integrated in the PCB, with typical gain equal to 2dB;
2. UFL connector for external antenna (cod. **BlueUp 06/UFL**). The connector allows to use an external antenna connected to the beacon with coaxial cable. In this case maximum antenna gain is equal to 6 dB [see paragraph “Procedures”].

Before you start using a BlueUp device, verify that it is undamaged and carefully read the instructions in this user manual, particularly the indications in the "Safety" section.

BlueUp S.r.l. disclaims any and all liability if the devices are used in modes and environments incompatible for keeping the product intact, safe and in operation.

Procedures

Installation and antenna positioning

Use screws and plastic spacers to fix BlueUp Board, using the 4 holes M3 at the top of the board.

In case of beacon with integrated antenna (code **BlueUp 06/ANT**), position the beacon so that the antenna is placed at a distance of more than 3 cm from metal parts. Lower distances may impair performance in terms of the radio range of the device.

In case of beacon with UFL connector (code **BlueUp 06/UFL**), the following precautions are recommended:

- the beacon is equipped with a UFL-male type PCB connector. Use an external antenna equipped with a UFL-female terminal connector wiring;
- guarantee a perfect contact between two UFL connectors,
- ensure that any disconnection (due, for example, to impact or vibration) does not allow the connector to cause an accidental short circuit on the board;
- use an antenna with a maximum nominal gain of no more than 6 dB;
- Install the antenna at a distance of more than 3 cm from metal parts. In general, the presence of metal objects (plates, walls,...) near the beacon can alter the radio performance.

Beacon power supply

Provide power through the 2.54mm two-pole connector. The supply voltage must be continuous voltage (VDC), with a value between 3VDC and 30VDC.

Do not reverse the polarity of the power supply. Reversal of the polarity can irreversibly damage the device.

Use PS1 category power supply.

In any case, never power the device with modes and power sources other than those indicated.

Beacon use

Once powered, the beacon is immediately active and transmits the adverting frames according to the default settings. To modify beacon configurations, you can use the free **BlueBeacon Manager** app provided by BlueUp and available for iPhone / iPad (Apple Store) and Android (Google Play).

For information on configuration, on services and characteristics, and on all use aspects, please refer to the technical information in the BlueUp Docs web page at docs.blueupbeacons.com or contact technical assistance at support@blueupbeacons.com.

Credentials to login to BlueBeacon Cloud (cloud back-end for management, synchronization, monitoring and configuration of BlueUp beacons) may be requested at *info@blueupbeacons.com*.

Safety

These information are an integral and essential part of the product and must be delivered to the user. Read them carefully as they contain important information regarding the installation, use and maintenance.

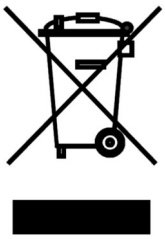
WARNINGS

The device is a professional device whose intended use is aimed at professions or industries and which is not intended for sale to the general public.
The product is a wireless device.
The product must be intended for use for which it was designed. Any other use is considered improper and therefore dangerous.
Operating conditions: temperature -30/+75°C; humidity 10-90%; altitude below 2000 m s.l.m.; degree of pollution 2.
Before you start using the beacon, verify that it is undamaged.

DO NOT use the beacon in potentially explosive atmospheres. The presence of flammable gas or fumes is a serious safety hazard.

The company BlueUp S.r.l. disclaims any liability for damages caused by an inadequate use of the device and the failure to observe the information provided herein.

Waste disposal



In implementing the Directives 2011/65/EU and 2012/19/EC on the restriction of the use of hazardous substances in electrical and electronic equipment and the disposal of waste.
The crossed bin symbol on the product, on the attached manual or on its packaging indicates that at the end of the product life, it must be collected separately from other waste. The user must, therefore, take the remote control to an authorized disposal center for collection of electronic and electrical waste, or return it to the dealer when purchasing a new similar appliance, on a one to one basis. Appropriate separate collection for the subsequent forwarding of the product sent for recycling, treatment and environmentally compatible disposal helps to prevent negative environmental and health effects and promotes the reuse and/or recycling of materials making up the equipment. Illegal dumping of the product by the user entails the application of administrative sanctions in the current provisions of law.
For more information about the collection systems, contact your local authorities.

In implementing Directive 2006/66/EC on the reduced use of hazardous substances in batteries and the disposal of the same.
The crossed bin symbol on the appliance or its packaging indicates that the batteries must not be disposed of with the rest of the household waste, as they may contain substances that are potentially harmful to the environment and health. Remove the old battery from the device and turn it in at the appropriate collection points.

Disclaimer

This manual is intended to provide a brief summary of our knowledge and some guidance regarding the use of the beacon and its parts, including the battery. The information contained herein has been provided by sources that BlueUp S.r.l. considers to be dependable and is accurate to the best knowledge of the company. This sheet is not intended to be an inclusive document on worldwide hazard communication regulations. The information is provided in good faith. Each user of this material needs to evaluate the conditions of use and define the appropriate protective mechanisms to prevent the exposure of persons, property damage or release to the environment.
BlueUp S.r.l. assumes no responsibility for injury to the recipient or third persons, or for any damages resulting from misuse of the device and its parts.

Warranty

Refer to BlueUp General Terms and Conditions of Sale available at www.blueupbeacons.com

Conformity

EU (ETSI)

Hereby, BlueUp Srl declares that BlueUp Board S (in all its variants) is in compliance with Directives 2014/53/UE (RED) and 2011/65/UE (RoHS 2) and 2015/863/UE (RoHS 3).

The full text of the EU declarations of conformity is available at the following internet address:
www.blueupbeacons.com

Frequency band: 2400 – 2482 MHz
Maximum radiated power: 2.5mW (+4dBm)

Contacts

BlueUp S.r.l.
Loc. Belvedere, Ingresso 2
IT-53034 Colle di Val d'Elsa (SI) - ITALY
E-mail: info@blueupbeacons.com
Web: www.blueupbeacons.com