



Forte+

User manual

Introduction

BlueUp Forte+ (in all its variants), henceforth identified with the terms “product”, “device”, “tag” or “beacon”, is a Bluetooth Low Energy (BLE) beacon for proximity applications, asset tracking, positioning and localization. It is suitable for industrial applications and outdoor installations (weatherproof).

BlueUp Forte+ can be provided with different technologies: BLE, Quuppa, Wirepas Mesh 2.4GHz.

BlueUp Forte+ variants include:

- STD (standard): base version, to be used as mobile tag or fixed beacon/anchor
- LED: with high-visibility RGB LED, to used for visual identification
- BUZ: with high-visibility RGB LED and buzzer, to used for visual/audio identification
- BUT: with button, to be used as event trigger.

BlueUp Forte+ is provided with IP65/NEMA4 or IP67/NEMA6 plastic industrial casing enclosure. Casing can be provided in two alternative options:

- NF: enclosure without fixing flanges;
- WF: enclosure with fixing flanges.

BlueUp Forte+ is powered by a replaceable 3V lithium battery, mod. CR123A.

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

Beacon activation

If battery is inserted, beacon is already active. Otherwise, insert the battery into the battery holder, taking care of the correct battery polarity. For inserting or replacing the battery it is required a Phillips screwdriver.

Beacon installation

Place or install the beacon on the support where it is to be used. For fixing it is advisable to use silicone glue or double sided tape or to use the two holes on the back cover (ver. NF) or on the lateral flanges (ver. WF) for fixing screws .

Beacon use

When battery is inserted, beacon is active and works according to technology.

For technical details, please refer to the technical information in the BlueUp Docs web page at docs.blueupbeacons.com or contact technical assistance at support@blueupbeacons.com.

BLE standard

To modify device configurations, use free app **BlueBeacon Manager** for iOS or Android.

BLE bleenc

Device can be configured and managed with bleenc UI or API.

Quuppa

Device can be configured and managed with Quuppa Site Planner.

Wirepas

Device can operate either as anchor or mobile tag, depending on production configuration. Device can be configured and managed with Wirepas Network Tool, Gateway API or MeshCube.

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/+70°C; humidity 10-90%.

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.

Batteries

BlueUp Forte+ is powered by batteries, according to the following table:

Batteries				
Q.ty	Common name	IEC60086 name	Type	Nominal voltage
1	CR123A	CR17345	Lithium (LiMnO ₂)	3V

Battery replacement

Battery replacement must be performed by an adult. To replace the battery, follow the instructions below:

1. unscrew the 2 screws on the top cover (remove circuit in case of Forte+ HVL);
2. remove the battery from the battery holder;
3. insert the new battery in the battery holder, paying attention to the polarity indicated on the battery holder;
4. (insert circuit in case of Forte+ HVL and) screw the 2 screws on the top cover (nominal torque: 0.5Nm)

CAUTION



DO NOT power the device with other batteries.
Explosion hazard if battery is replaced with the wrong type.



DO NOT insert the batteries into the battery holder with the positive and negative contacts reversed.



DO NOT disassemble, puncture or damage the batteries.



DO NOT recharge the batteries.



DO NOT short the positive and negative contacts of the batteries.
DO NOT cause a forced depletion of the batteries.



DO NOT throw the batteries in fire.



DO NOT place the batteries in the following environmental conditions: in the vicinity of heat sources, exposed to direct sunlight, high temperatures, high humidity, extremely-low pressure, in contact with water.

 **DO NOT** handle the battery with metal objects (such as forceps, scissors,...). In general, avoid the metal contacts on the battery from coming into contact with other metal objects, including other batteries. This could cause a short circuit, damage the battery and cause overheating or explosion. If the battery is stored or thrown away, make sure it is covered individually with insulating tape.

 **DO NOT** swallow the battery.
Chemical burn hazard.

 This product contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns in just 2 hours and result in death.

 **Keep new and used batteries out of the reach of children.**
If the battery compartment does not close tightly, stop using the product and keep it out of the reach of children.
In the event of suspected ingestion of the batteries or their insertion into other body orifices, seek medical advice immediately.

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

US (FCC)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: 2ALP7BB1402

EU (ETSI)

Hereby, BlueUp Srl declares that BlueUp Forte+ (in all its variants) is in compliance with Directives 2014/53/UE (RED), 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

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E-mail: info@blueupbeacons.com
Web: www.blueupbeacons.com

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
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Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.