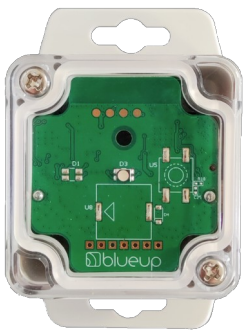




## Forte+ LED BLE

### Bluetooth Low Energy beacon

### *Data sheet*



#### Key features

- Suitable for outdoor and industrial applications
- Based on Nordic nRF52832
- Simultaneous support of iBeacon and Eddystone
- 3-axis accelerometer for motion detection
- High-visibility RGB LED
- Rugged IP67 enclosure
- Powered by replaceable CR123A lithium battery

#### GATT and advertising

Full support for specifications Eddystone Configuration GATT Service by Google	
Up to 4 slots configurable for Eddystone frame types: UID, URL, TLM, EID	
Up to 4 slots configurable for the following frame types: iBeacon, Quuppa (emulation mode), Sensors	
TX power	-40, -20 to 4 dBm (with 4 dB steps). Programmable for each slot
Advertising interval	0.1 to 60 secs. Programmable for each slot
Global configuration options	non-connectable mode, anonymous mode, programmable time period, locked/unlocked mode, change password
Firmware update	OTA (Over-the-Air) firmware update

#### Device specifications

##### Electrical specifications

Core module	Nordic nRF52832 SoC (MCU and radio transceiver)
MCU core	ARM Cortex-M4 32-bit CPU
Current consumption (25°C)	Radio TX: 7.1 mA (0 dBm TX) Radio RX: 6.5 mA Idle mode: 3 µA Idle mode with accelerometer ON: 7 µA

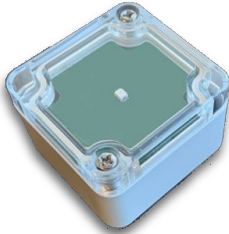
##### Radio specifications

Standard	Bluetooth 4.2 Bluetooth Low Energy (compatible with BLE 5.x)
Frequency band	2.402 to 2.480 GHz (according to Bluetooth 4.0 specifications)
Advertising channels	CH37 (2.402 GHz), CH38 (2.426 GHz), CH39 (2.480 GHz) (according to Bluetooth 4.0 specifications)
Channel spacing	2 MHz (according to Bluetooth 4.0 specifications)
TX power	Conducted: +4 dBm (max) EIRP (Equivalent Isotropic Radiated Power): +6 dBm (max)

<b>Antenna</b>	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
<b>Power</b>	
Power supply	Battery
Replaceable	Yes
Type	CR17345 (3V, lithium)
Model	Panasonic Industrial CR123A (typical capacity 1500 mAh @ 25°C)
<b>Sensors and interfaces</b>	
Sensors	3-axis MEMS linear accelerometer
Interfaces	RGB LED
<b>Mechanical specifications</b>	
Material	Polycarbonate plastic
Color	Body: light grey RAL7035 Lid: transparent
Size	50 x 52 x 35 mm (version without flanges) 50 x 80 x 35 mm (version with flanges)
Weight	60 gr (version without flanges) 67 gr (version with flanges)
Fastening	Screws (not included), silicone glue, double side tape
Opening	Front cover with two screws
Protection	IP67/NEMA6
Flammability	UL 94 HB
<b>Environmental specifications</b>	
Operating temperature	-30°C to +70°C (battery operating life sharply decreases under -10°C)
Storage temperature	+10°C to +30°C (with battery), -40°C to +85°C (without battery)
<b>Certifications</b>	
CE	

## Versions

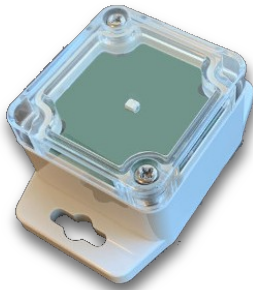
### NF



Enclosure without flanges.  
 Front cover allows an easy battery replacement.  
 Transparent front lid for high-visibility LED.

Size: 50 x 52 x 35 mm

### WF



Enclosure with flanges.  
 Front cover allows an easy battery replacement.  
 Transparent front lid for high-visibility LED.

Size w/o flanges: 50 x 52 x 35 mm  
 Size w flanges: 50 x 80 x 35 mm