


Forte+ 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
- 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)

Antenna	
Type	Integrated meandered planar inverted F-antenna (PIFA)
Gain	2 dB (max)
Radiation diagram	Omnidirectional
Power	
Power supply	Battery
Replaceable	Yes
Type	CR17345 (3V, lithium)
Model	Panasonic Industrial CR123A (typical capacity 1500 mAh @ 25°C)
Sensors and interfaces	
Sensors	3-axis MEMS linear accelerometer
Interfaces	-
Mechanical specifications	
Material	Polycarbonate plastic
Color	Light grey RAL7035
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
Environmental specifications	
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)
Certifications	
CE, FCC	

Versions

NF



Standard version, without flanges
 Front cover allows an easy battery replacement.

Size: 50 x 52 x 35 mm

WF



Standard version, with flanges
 For fast and robust wall installations.
 Front cover allows an easy battery replacement.

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

Size w flanges: 50 x 80 x 35 mm