

TagX LED BLE

Bluetooth Low Energy asset tag

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
- IP67 enclosure
- High-visibility LEDs
- Flanges for flexible fastening options
- Powered by replaceable CR2477 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)

Radio specifications (cont.)	
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	CR2477 (3V, lithium)
Model	Panasonic Industrial CR2477 (typical capacity 1000 mAh @ 25°C)
Sensors and interfaces	
Sensors	3-axis MEMS linear accelerometer
Interfaces	2x LEDs (yellow, red)
Mechanical specifications	
Material	ABS plastic
Color	White
Size	77 x 46 x 16 mm (including flanges)
Weight	27 gr
Fastening	Screws (max. M3.5), cable-ties
Opening	Back lid with four screws
Protection	IP67/NEMA6
Flammability	UL 94 HB
Environmental specifications	
Operating temperature	-20°C to +60°C (battery operating life sharply decreases under 0°C)
Storage temperature	+10°C to +30°C (with battery), -40°C to +85°C (without battery)
Certifications	
CE, FCC	

BlueUp reserves the right to change product specifications at any time without prior notice.
 Bluetooth is a trademark of Bluetooth SIG, iBeacon is a trademark of Apple Inc., Eddystone is a trademark of Google Inc., Qu-
 uppa is a trademark of Quuppa Oy, ARM and Cortex are trademarks of ARM Inc.