

Bluetooth® Low Energy Tag

BLEVE 5830 nRF52



BLEVE is a compact BLE tag designed for high-volume tracking of small industrial assets in harsh environments. It features a non-replaceable coin cell battery with up to 3 years of operational life in typical applications.

PHYSICAL SPECIFICATION

Tag Material
PC

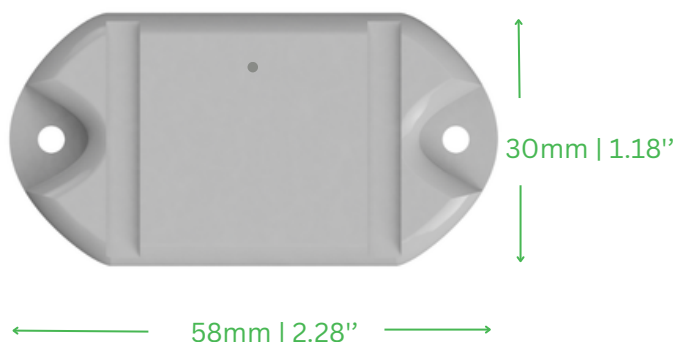
Tag Size
58 x 30 x 11mm | 2.28" x 1.18" x 0.43"

Adhesive (optional)
High performance adhesive with excellent adhesion to all surfaces

Delivery Format
Single

Tags in box
50 pcs per box (100% performance checked)

Weight
14.3g



Electrical SPECIFICATION

Device type
Bluetooth® Low Energy tag, Battery powered

Wireless interface protocol
Bluetooth® 5.3

Operational frequency
2.4GHz ISM: 2402 - 2480 MHz

IC
Nordic nRF52

Applicable Surface Materials
All Surfaces

Read range**
100m | 328ft Line of Sight outdoor

Battery Capacity
Non-replaceable coin cell CR2032 220mAh*

Sensors
Built-in temperature sensor (optional)
3 axis Accelerometer (optional)
High Brightness Red LED (optional)

ENVIRONMENTAL RESISTANCE

Operating Temperature
-10°C to +50°C | -4°F to +122°F

Installation Temperature
+10°C to +38°C | 50°F to +100.4°F

IP Classification
IP68, tested submerged at 1m for 5 hours

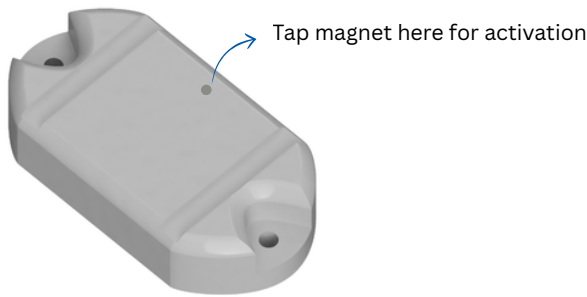
Chemical Resistance
No physical or performance changes in:
• 168h Motor oil exposure
• 48h Salt water (salinity 10%) exposure
• 48h Sulfuric acid (10%, pH 2) exposure
• 48h NaOH (10%, pH 13) exposure

ESD Immunity
±8 kV according to EN 61000-4-2 (air discharge)
±4 kV according to EN 61000-4-2 (contact discharge)

Expected lifetime
* 3 years with CR2032 at 1min UID advertisement interval

** The indicated read range values are measured in our laboratory testing environment. Different environments may exhibit different results.

PRODUCT INSTALLATION



1. High performance acrylic adhesive Mounting the tag with high performance acrylic adhesive can be used in most applications and surfaces. Clean and dry the surface to obtain the maximum bonding strength.

2. Mechanical fixing

- Using Cable tie

Plastic or metallic cable ties can be used for fixing the tag. The maximum width of a cable tie is 4 mm.

- Screws or Rivets

Mount using M3 screws or 3 mm pop rivets through pre-molded holes.

Ensure flush contact with the metal surface to avoid air gaps.

ACTIVATION INSTRUCTION

- Activation using Magnet

- Customisable Time delay activation setup. (optional)

Time delay can be in days, weeks or months

ORDER INFORMATION

Part Number

- BLE.5830.nRF52

Packaging

- 50 pcs per box

SUPPORTED FRAMES

BLEVE tag utilizes Eddystone™ Eddystone, an open Bluetooth® Smart beacon format and/or iBeacon protocol, ensuring straightforward implementation on a wide range of Bluetooth® Low Energy devices.

BLEVE is factory configured with customer-specific parameters to be used instantly with any third-party system. BLEVE can also be personalized with a custom branded label to ease tag identification in the field. Supported BLE advertisement beacon protocols:

- **Eddystone™-UID** frame broadcasts 16-byte Beacon ID composed of a 10-byte namespace and a 6-byte instance.

- **Eddystone™-TLM** frame broadcasts telemetry information (e.g. SoC voltage and temperature).

- **iBeacon®** frame type supported with advertising 16 bytes UUID, 2 bytes Major, and 2 bytes Minor.

- **Manufacturer Specific data**



Eddystone is a trademark of Google Inc.
iBeacon is a trademark of Apple Inc.

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