beontag

Reliable industrial-grade Bluetooth® Low Energy tag for industrial identification and location applications

Beontag Viking Micro, with its small form factor, is designed for high-volume, small industrial asset tracking use cases in harsh industrial environments using Bluetooth® Low Energy (BLE) technology. It has a non-replaceable coin cell battery offering a lifetime of up to 8 years in typical applications.

It supports Eddystone™ (UID, URL, TLM) and iBeacon™ open standard frame formats, ensuring straightforward implementation across a wide range of BLE applications.

DIMENSIONS

Viking Micro CR 2032 - 36X26X6 mm
Viking Micro CR 2050 - 36X26X8 mm

ASSET MANAGEMENT | **LOGISTICS AND SUPPLY CHAIN** | **INDUSTRIAL MANUFACTURING** | **AUTOMOTIVE**



RFIDCanada
Automating Identification

BLE TAG
Viking Micro

Product Datasheet

BEONTAG VIKING MICRO

Electrical specifications

Device type
Bluetooth® Low Energy tag, Battery powered

Wireless interface protocol
Bluetooth® 5.3

Compliancy (Declaration of Conformity)
Europe (CE), UK (UKCA), USA (FCC), Canada (IC)

Operational frequency band
2.4GHz ISM: 2402 - 2480 MHz

System-on-Chip
InPlay IN100

Configuration
One-time configured at ordering

Sensors
Built-in temperature sensor*, hall switch, battery Voltage

Max transmit power
+4 dBm

Read range**
70m at 0dBm / 230 ft

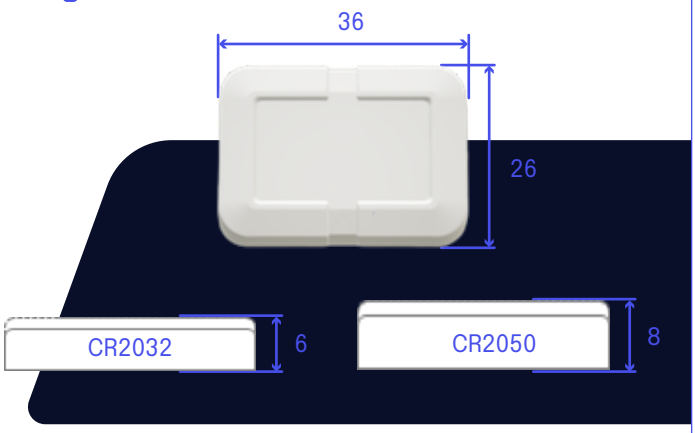
Battery capacity
non-replaceable coin cell
CR2032 220mAh
CR2050 380mAh

Applicable surface materials
Can operate attached to any surface

*Temperature sensor is located inside the housing, which limits real time measurement of the ambient temperature.

** Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may influence performance.

Mechanical specifications



Housing material
High quality PC+ASA

Color: dark grey
Pantone 433U

Weight
CR2032: 7g
CR2050: 9g

Packaging amount and box size
CR2032: 30 pieces in box 30x40x250mm

Dimensions
CR2032: 36 x 26 x 6mm / 1.4 x 1.0 x 0.2inch

CR2050: 36 x 26 x 8mm / 1.4 x 1.0 x 0.3inch

Environmental resistance

Operating temperature
-20˚C to +60˚C / -4˚F to +140˚F

Water resistance
IP68, tested submerged at 1m for 5 hours

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

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

Generally good resistance with moderate concentrations of acids, alcohols, alkalis, detergents, and cleaners.
Acetone should be avoided.

***Values are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Confidex for more specific information.

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Product Datasheet

BEONTAG VIKING MICRO

Supported frames

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

Viking Micro tag utilizes Eddystone™ open standard frame format and/or iBeacon protocol, ensuring straightforward implementation on a wide range of Bluetooth® Low Energy devices.

Viking Micro is factory configured with customer-specific parameters to be used instantly with any third-party system. Vikings 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**

Expected lifetime****
Typical lifetime at 6s UID advertisement interval, 0dBm:
6 years with CR2032
8 years with CR2050

**** Beacon lifetime is optimized for long term use, however highly affected by operating mode parameters and ambient conditions. Configured TX power level and advertisement interval have influence on lifetime

Installation instructions

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 - Cable tie**

Plastic or metallic cable ties can also be used for fixing Beontag Viking Micro at the middle of the tag. The maximum width of a cable tie is 4 mm.

Activation

The Beontag Viking Micro must be activated once by using a **magnet**.

To activate touch a magnet to the area on the front indicated:



Order informations

Product number: 3004729

Product name: Beontag Viking Micro CR2032 - Dark grey, customer specific configured and label. CR2032 coin cell

Product number: 3004941

Product name: Beontag Viking Micro CR2050 - Dark grey, customer specific configured and label. CR2050 coin cell.

For availability and additional information please write to contact@BLEbeontag.com

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About Beontag

From the science of graphic and label materials, RFID and wireless IoT enablers, we create solutions across the value chain to deliver digital transformation for businesses around the world.

Sustainability is at the core of what we do and we strongly believe that by substituting non-renewable materials and innovating through more sustainable and renewable products, we act as an ESG enabler for our customers' value chain.

Beontag is one of the world's leading providers of RFID and wireless IoT solutions, being present in more than 40 countries with 7 R&D centers and 2,000 employees, in constant development of technological and sustainable solutions designed to connect items, and gain efficiency and end-to-end traceability.

CONTACT US FOR MORE INFORMATIONS:

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