VIKING HYBRID

beontag

ⓘ Description

Reliable industrial grade Bluetooth® Low Energy and RFID tag for industrial identify and locate applications. Quick and robust mounting on steel wire mesh panel and easy to activate with a magnet.

Electrical specifications

Device type
Bluetooth® Low Energy tag, Battery powered RFID on-metal tag.

Operational frequency
BLE: 2.4GHz ISM: 2402 – 2480 MHz
RFID: UHF global frequency, 860MHz to 930MHz

IC options and memory configurations
BLE: IN100
RFID: Ucode 9xm (EPC up to 496 bits, User up to 752 bits, EPC+User in total 880 bits.)

EPC memory content
128/256/496 bits

Read range*
BLE: 70m at 0dBm / 230 ft
RFID: up to 6m mounted on mesh panel.

Applicable surface materials*
Cross of metal mesh panel

Wireless interface protocol
Bluetooth® 5.3

Battery capacity
non-replaceable coin cell CR2477 1000mAh

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

Max transmit power
+4 dBm

Compliancy (Declaration of Conformity)
Inform for added countries

Configuration
Configured at manufacturing

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

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

⚙ Mechanical specifications

63
26
47
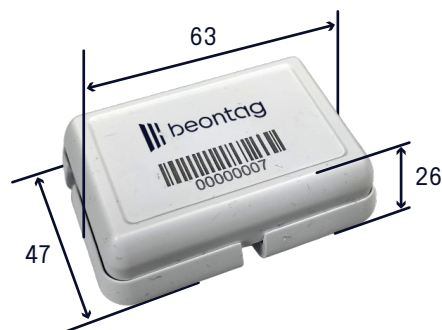
Tag materials
High quality PC+ASA
Color: white RAL9003

Weight
Tag + bracket: 52 g

Delivery format
The tag (front) and mounting brackets are packet separated.

Amount in box
100 tags in trays plus 100 mounting bracket in a bag together in box 520×270×260 mm.

Dimensions
68 x 47 x 28mm /
2.68 x 1.85 x 1.10 in

Including bracket

Personalization options

Data encoding
Encoding of RFID and BLE memory.
BLE is only one-time configurable

Personalized B/W data label
Customer specific layout including logo, text, numbers, barcodes etc.

Personalized laser engraving
Customer specific layout including logo, text, numbers, barcodes etc.

Environmental resistance

Operating temperature
–20°C to +60°C / –4°F to +140°F

Water resistance
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)

Storage conditions
At room temperature

Values in the table 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 Beontag for more specific information.

Supported frames

Eddystone

iBeacon®

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

Viking Hybrid 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.

Viking Hybrid 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 10 years at 6s UID advertisement interval, 0dBm

**** 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

Viking Hybrid is delivered in **2 parts**. Standard design is suitable for metal bars less than 5mm in diameter, for other dimensions please reach out to your Beontag contact.

Step 1: Attach back part to metal wire and align two guiding pins of top part as shown in the picture. Front and back parts can only be installed in one direction.
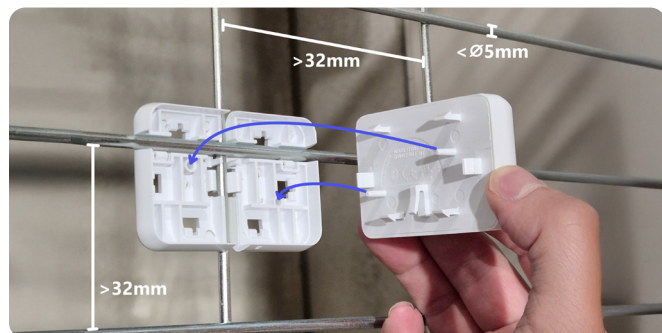
Step 2: Press the tag from both sides until you hear snaps closing. Make sure all four sides are well attached.

Activation

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

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

Order information

Product number:
3005504

Product Name:
Beontag Viking Hybrid default configuration

Eddystone 0dBm 10s interval
Beontag UID + TLM. RFID unique ID

B/W front label: Beontag branded
with QR code with MAC Address.

Product number:
3005579

Product Name:
Viking Hybrid custom configuration

Eddystone or iBeacon
with B/W front label

For other versions, additional information and technical support please contact Beontag.

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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 INFORMATION:
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