

# PRODUCT DATASHEET

## Viking Micro

HVIN: CFXBLE-303, CFXBLE-305, CFXBLE-347



Reliable industrial grade Bluetooth® Low Energy tag for industrial identify and locate applications.

### ELECTRICAL SPECIFICATION

#### Device type

Bluetooth® Low Energy tag, Battery powered

#### Wireless interface protocol

Bluetooth® 5.3

#### Compliance (Declaration of Conformity)

Europe (CE), UK (UKCA), USA (FCC), Canada (IC)

#### Operational frequency

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

#### Sensitivity / Max transmit power

-96 dBm / +5 dBm

#### Read range\*\*

Up to 100 m / 330 ft

#### Battery type (total capacity)

CFXBLE-303: CR2032 (220mAh) coin battery, non-replaceable

CFXBLE-305: CR2050 (330mAh) coin battery, non-replaceable

#### 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 can vary significantly depending on the mounting surface and environment.

### MECHANICAL SPECIFICATION

#### Housing material

High quality PC/ASA (15% recycled)

Color: white RAL9003, dark grey Pantone 433U

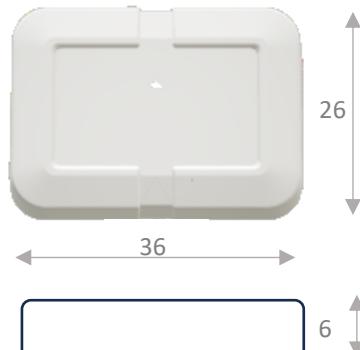
Flammability UL94 V2

#### Weight

7 g

#### Tag dimensions

36 x 26 x 6mm / 1.4 x 1.0 x 0.2inch



### ENVIRONMENTAL RESISTANCE

#### Operating temperature

-20°C to +60°C / -4°F to +140°F

#### Vibration resistance

EN 60068-2-6: 2008, Test Fc: Vibration, 10G

EN 60068-2-27: 2009, Test Ea: Shock, 20G

#### 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, alkalies, detergents, and cleaners.

Acetone should be avoided.

#### Expected lifetime\*\*\*\*

Typical 8 years at 10s advertisement interval and 0dBm.

\*\*\*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.

\*\*\*\* 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.

## SUPPORTED FRAMES



**Eddystone**



**iBeacon**

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

Confidex 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.

Confidex Viking™ Micro is factory configured with customer specific parameters to be used instantly with any 3<sup>rd</sup> party system. Confidex™ Viking can also be personalized with a custom branded label to ease the tag identification in the field.

Following Eddystone™ frame types are supported:

- **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.

## 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 Confidex Viking™ Micro at the center of the tag. Maximum width of a cable tie is 4 mm.

## ORDER INFORMATION

### 3004729 CFXBLE-303

- Dark grey, customer specific configured and label
- CR2032, 220mAh battery capacity

### 3004941 CFXBLE-305

- Dark grey, customer specific configured and label
- CR2050, 330mAh battery capacity

### 3005060 CFXBLE-347

- White, customer specific configured and label
- CR2477, 1000mAh battery capacity

Availability: Please contact Confidex Smart Industries Sales at [www.confidex.com/contact-us](http://www.confidex.com/contact-us)

For additional information and technical support, please contact us in [contact.BLE@confidex.com](mailto:contact.BLE@confidex.com)

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# **Federal Communications Commission (FCC) Statement (USA)**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules.  
Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and  
(2) This device must accept any interference received,  
including interference that may cause undesired operation.

# **Canada: Industry Canada (IC) Statement**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:  
(1) this device may not cause interference, and  
(2) this device must accept any interference, including  
interference that may cause undesired operation of  
the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :  
(1) l'appareil ne doit pas produire de brouillage, et  
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.