

# PRODUCT DATASHEET

## Confidex Viking™ Tough Quuppa



Confidex Viking Tough™ Quuppa is reliable industrial grade Bluetooth® Low Energy beacon supporting Quuppa's advanced location system utilizing Bluetooth technology and the angle-of-arrival (AoA) methodology, and it works seamlessly with Quuppa developed locators. Confidex Viking Tough™ Quuppa passed testing and is Quuppa Approved.

### ELECTRICAL SPECIFICATION

#### Device type

Bluetooth® Low Energy beacon, Battery powered

#### Wireless interface protocol

Quuppa proprietary protocol (tag library v1.2)

#### Compliance (Declaration of Conformity)

Europe (CE), UK (UKCA), USA (FCC), Canada (IC), Australia/New Zealand (ACMA), South-Korea (KC), Japan (MIC), Ukraine (UkrSEPRO), Brazil (ANATEL)

#### Operational frequency

ISM: 2401 - 2482 MHz

Includes Quuppa Proprietary Channels (2401/2482 MHz)

#### SOC

Nordic Semiconductor NRF52832

#### Memory configuration

512 kB FLASH, 64 kB RAM

#### Configuration interface

Quuppa locators and Quuppa Site Planner software

#### Sensors\*

Built-in temperature sensor, hall switch and accelerometer sensor

#### Sensitivity / Max transmit power

-96 dBm / +4 dBm

#### Read range\*\*

Up to 100 m / 330 ft.

#### Battery type (total capacity)

2 x CR2477 (1900mAh) coin batteries

#### Applicable surface materials

Can be 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

Polyurethan casting, black

#### Enclosure IP class

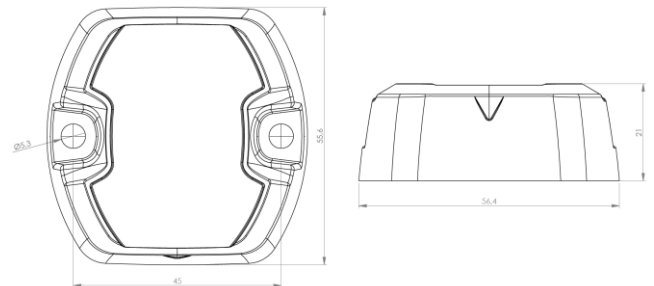
IP69K

#### Weight

70 g

#### Tag dimensions

56,4 x 55,6 x 21 mm / 2.22 x 2.19 x 0.83 in (M5 size hole)



### ENVIRONMENTAL RESISTANCE

#### Operating temperature

-40°C to +85°C / -40°F to +185°F

EN 60068-2-14: 2009, Test N: Change of temperature

#### Vibration resistance

EN 60068-2-6: 2008, Test Fc: Vibration, 20G

EN 60068-2-27: 2009, Test Ea: Shock, 40G

#### 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:

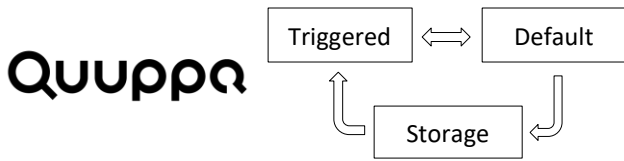
- 168h Motor oil exposure
- 48h Salt water (salinity 10%) exposure
- 48h Sulfuric acid (10%, pH 2) exposure
- 48h NaOH (10%, pH 13) exposure

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.

## OPERATING MODES



Confidex Viking™ Quuppa tag utilizes Quuppa proprietary frame formats and the functional logic consist of 3 different states of which it can operate and shift between: **Triggered**, **Default** and **Storage**.

Confidex Viking™ Quuppa tag is activated by shaking it, which changes the tags operational state from **storage** to **triggered**. After a defined timeout, if tag has not been active, it moves to a **Default** state, where it stays wake-up and moves back to the **Triggered** state, if activated again. After a longer timeout in **Default** state, the tag goes to power saving mode in the **Storage** state, where it can be triggered again by shaking it.

Confidex Viking™ Quuppa comes with storage settings by default. Before deployment, it must be configured with Quuppa Site Planner software, and it can be personalized with a custom label to ease the deployment and tag identification in the field.

## INSTALLATION INSTRUCTIONS

### 1. Mechanical fixing – Screw

Mechanical fixing is recommended to be used in every application that includes risk for high mechanical stress or low temperature during tag fixing. Screw size M5 is to be used for fixing.

### 2. Mechanical fixing – Cable tie

Plastic or metallic cable ties can also be used for fixing Confidex Viking™. Maximum width of cable tie is 4 mm.



### 3. High performance acrylic adhesive

When mounting the tag with adhesive, clean and dry the surface for obtaining the maximum bond strength.

## ORDER INFORMATION

### 3003220 Confidex Viking™ Tough Quuppa

- Black, default configuration and no label

### 3003639 Confidex Viking™ Tough Quuppa Sample Kit

- Contains 5 pcs of item 3003220

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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