

PRODUCT DATASHEET

Confidex Viking™ Quuppa



Confidex Viking™ Quuppa is supporting positioning system from Quuppa which is based on the latest Bluetooth technology and the angle-of-arrival (AoA) methodology. It is designed to work seamlessly with Quuppa developed locators and applications. Confidex Viking™ Quuppa have passed Quuppa's validation process and is accepted as Quuppa Approved product.

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 (2000mAh) 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

High quality PC/ASA, white RAL9003 (15% recycled)

Enclosure IP class

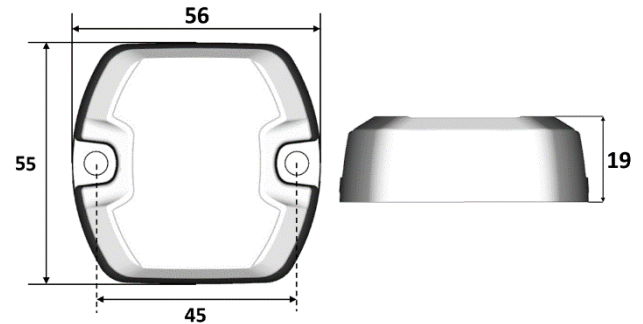
IP69K

Weight

45 g

Tag dimensions

56 x 55 x 19 mm / 2.20 x 2.13 x 0.75 in (M5 size hole)



ENVIRONMENTAL RESISTANCE

Operating temperature

-20°C to +60°C / -4°F to +140°F

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

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:

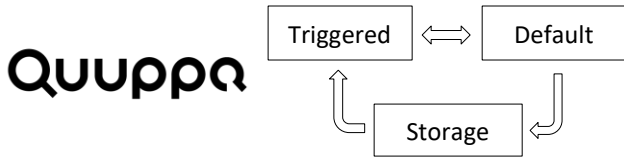
- 168h Motor oil exposure
- 48h Salt water (salinity 10%) exposure
- 48h Sulfuric acid (10%, pH 2) exposure
- 48h NaOH (10%, pH 13) exposure

Generally good resistance with moderate concentrations of acids, alcohols, 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.

SYSTEM DESCRIPTION



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

3003108 Confidex Viking™ Quuppa

- White, default configuration and no label

3003221 Confidex Viking™ Quuppa Sample Kit

- Contains 5 pcs item 3003108

Availability: Please contact Confidex Smart Industries Sales at www.confidex.com/contact-us

For additional information and technical support, please contact us in contact.BLE@confidex.com

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