PRODUCT DATASHEET
Confidex Viking™ Slim Wirepas

Confidex Viking™ Wirepas tags utilize the unique Wirepas Massive (WM) protocol and software stack which provides many benefits for enabling implementation of asset tracking and IoT applications in large scale. WM is easily scalable and can have large coverage as all Confidex Viking™ Wirepas tags are able to route data between the devices and back-end system.

ELECTRICAL SPECIFICATION

Device type
Bluetooth® Low Energy beacon, Battery powered
Wireless interface protocol
Wirepas Massive protocol v5.2
NFC: ISO/IEC 14443A
Compliancy (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: 2402 - 2480 MHz
NFC: 13,56 MHz
SOC
Nordic Semiconductor NRF52832
Memory configuration
512 kB FLASH, 64 kB RAM
Configuration interface
NFC interface for manual configuration
Self-provisioning remotely via Wirepas network
Sensors*
Built-in temperature sensor, LED and hall switch
Optional accelerometer
Sensitivity / Max transmit power
-96 dBm / +4 dBm
Read range**
Up to 100 m / 330 ft.
Battery type (total capacity)
Replaceable CR2477 (1000mAh) coin battery
Applicable surface materials
Can be attached to any surface

MECHANICAL SPECIFICATION

Housing material
High quality PC/ASA, white RAL9003 (15% recycled)
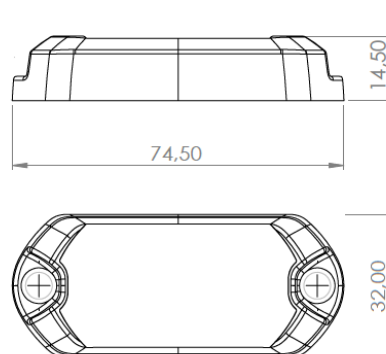**Enclosure IP class**
IP64
Weight
25 g
Tag dimensions
74,5 x 32 x 14,5 mm / 2.95 x 1.26 x 0.57 (M5 size hole)

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.

* 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.

***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
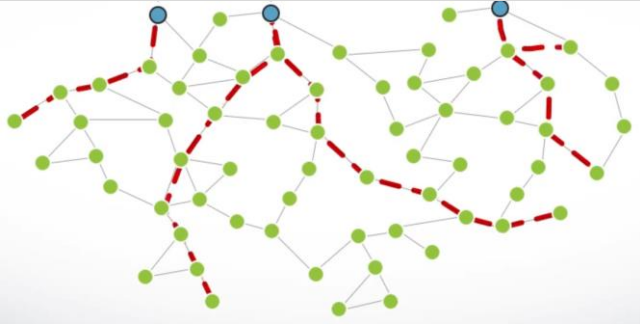
With Wirepas Massive, all devices can function as routers for other devices. Confidex Viking™ Wirepas tags can be configured to work in two modes – nodes or routers. Below described the main configuration parameters for Confidex Viking™ Wirepas devices.

Confidex Viking™ Wirepas comes with standard Wirepas parameters by default. Wirepas tags can be configured to self-provision and join to an existing Wirepas network. Tags can also be factory configured with customer specific parameters and 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

3003606 Confidex Viking™ Slim, no accelerometer
 - White, default configuration and no label

3003607 Confidex Viking™ Slim, with accelerometer
 - White, default configuration and no label

3004196 Confidex Viking™ Slim Sample Kit
 - Contains 5 pcs of item 3003607

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