

# User Manual Mobilaris Companion™

a Multi-technology tag from Mobilaris AB

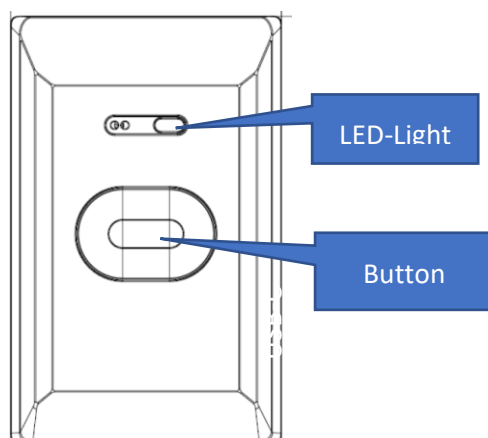
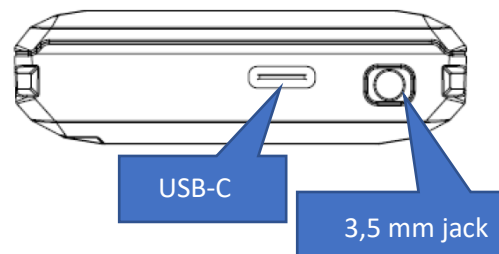
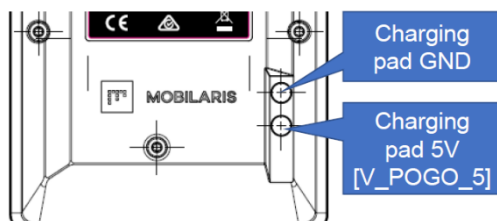


# Description

In this document Mobilaris Companion will be mentioned as “the tag”.

Technology	usage
GPS	For outdoor positioning
BLE	For indoor positioning via BLE beacons, and pairing to other BLE devices for data transmission
NFC	For tag configuration and access control
UWB	For precise distance calculation
Acc, gyro	For recognizing tag state and movement
Air quality sensor	temperature, humidity, barometric pressure and air-quality (VOC)
LTE (LTE-M/NB-IoT)	For data transmission to back-end server

Interfaces on the tag	usage
3,5 mm jack	For connection to Mobilaris proximity warning beam (to be ordered separately)  Note! No other items than Mobilaris approved should be connected to the tag.
USB-C	For charging via USB-C cable
Charging pads	For charging when placed in charging stand (to be ordered separately)



## First time use

Tag is delivered in “shipment mode” from the factory. The tag needs to be activated before ready to use. Follow these instructions to activate the tag and prepare it for usage:

**NOTE!** Make sure the tag is not damaged from transport, damaged tags may not be used and needs to be changed and returned to Mobilaris.

1. Charge the tag for 4 hours, by inserting USB-C cable, or place the tag in the charging stand
  - Battery status: *do not use a tag with battery level below 45%.*

LED light when charging	Battery level	Operating time
Constantly green	> 45 %	>12 hours
Constantly Red	< 45 %	< 12 hours

2. Press the button and release when buzzer response to start-up,
3. Wait until the LED is flashing in green, 3 sec on/3 sec off, the tag is then ready to be used.
4. If LED flashes in yellow, 1 sec on/1 sec off, the tag has no connection to the LTE-network
  - If possible, check if other tags used in the same location has connection to the LTE-network (to see if LTE-network is available at the location)
  - If LTE-network is available and LED is still flashing yellow, press the button for 6 sec and release when buzzer response to reboot tag.
  - If possible, change tag
  - If issue remains, please contact Mobilaris Support

## Daily use

- Make sure battery is fully charged according to table above,
- Remove the tag from the charger and wait for response according to feedback below,
  1. Wait until the LED is flashing in green, 3 sec on/3 sec off, the tag is then ready to be used.
  2. If LED flashes in yellow, 1 sec on/1 s off, the tag has no connection to the LTE-network
    - If possible, check if other tags used in the same location has connection to the LTE-network (to see if LTE-network is available at the location)
    - If LTE-network is available and LED is still flashing yellow, press the button for 6 sec and release when buzzer response to reboot tag.
    - If possible, change tag
    - If issue remains, please contact Mobilaris Support
- Place tag in your working clothes
- Return in charger at the end of working shift

**NOTE!** If LED on tag would get a constantly red light during daily operations you have less than 45% battery and less than 12 hours of operating time, please charge tag or change tag as soon as possible to ensure not having a tag without power.

**NOTE!** If one wants to know exact power consumption, please log in to Mobilaris Situational Awareness and click on the tag-board icon to find the tag and read the remaining power level.

## How to wear

Mobilaris Companion™ is designed as a body worn tag and should hang around your neck in a lanyard/ keychain or placed in your working clothes.

**NOTE!** Mobilaris Companion™ may not be permanently installed as a radio infrastructure device.

## Charging with charging stand

Mobilaris Companion™ can be charged with a separate charging stand, ordered separately. Simply connect a USB-C cable at the back of the charging stand and connect to an appropriate certified USB charger. Insert Mobilaris Companion™ with the push-button faced towards you, make sure the tag is pushed all the way down.

The charging stand can be fixed either to a wall or to a desktop/ table with screws, using the intended screw holes (two screw holes on the backside and two screw holes in the bottom).

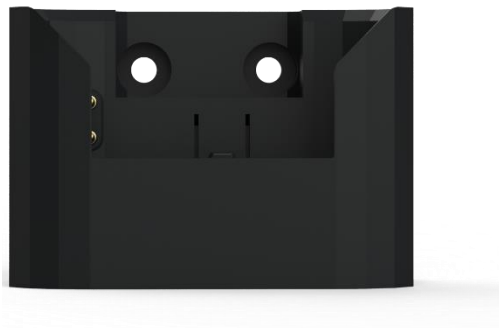


Figure 1. Charging stand for Mobilaris Companion™



Figure 2. Charging cable input



Figure 3. Insert direction when charging

# Safety

This product meets applicable national SAR limits:

- The SAR limit for EU and Australia is 2.0W/kg averaged over 10 g of actual tissue.
- The SAR limit for USA and Canada (FCC/IC) is 1.6W/kg averaged over 1 gram of actual tissue.

When carrying the tag or using it while worn on your body, maintain a distance of 0,5 cm from the body to ensure compliance with RF exposure requirements.

The tag is designed to be used at temperatures of -20 – +60°C. Coldness may impair the battery capacity. Do not subject the device to great temperature variation to prevent condensation inside the device.

This product includes an integrated rechargeable battery, which cannot be removed. You should not dispose of the device with household waste. Instead, return it to the place of purchase or to a recycling point. You can check the location of the nearest recycling point from the local waste management authorities. Do not attempt to remove or modify the battery, as this may damage the device and create a hazard.

Only use cables and chargers compliant with USB 2.0 or later and with applicable country regulations and international and regional safety standards. Charge the tag directly in the USB-C port or with the intended Mobilaris designed charging stand (sold separately). Avoid using excessive force when plugging the connector into the USB-C port.

Using damaged cables or chargers can cause fire, electrical chock, injury, or damage to the tag or other property.

The tag is equipped with a 3,5mm accessory jack. It is only permitted to plug in Mobilaris designated accessories in the accessory jack.

# Compliance

## EU Conformity

The radio systems used in this device complies with the radio equipment directive 2014/53/EU (RED).

This device also complies with the RoHS directive, restricting the use of hazardous substances in electrical and electronic equipment to protect the environment and public health.

## FCC statements

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.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## IC (Industry Canada) Statement

This device complies with Industry Canada license-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.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles pouvant causer un mauvais fonctionnement de l'appareil.

## Health Canada RF Exposure Warning Statement

This device complies with Health Canada's Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement. Information can be obtained at [http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio\\_guide-lignes\\_direct/index-eng.php](http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct/index-eng.php)

Cet appareil est conforme avec Santé Canada Code de sécurité 6. Le programme d'installation de cet appareil doit s'assurer que les rayonnements RF n'est pas émis au-delà de l'exigence de Santé Canada. Les informations peuvent être obtenues: [http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio\\_guide-lignes\\_direct/index-fra.php](http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct/index-fra.php)

## Explanation of icons on the product label



Conformity mark for Europe



Regulatory Compliance Mark  
for Australia and New Zealand



Dispose of the device in an  
environmentally friendly  
manner

## Revision history

Revision	Date	Description	Author
A	2021-03-30	First version	
B	2021-05-06	Added information for how to wear the device and how to use the charging stand.	
C	2021-05-11	Added information regarding fixation of the charging stand.	