TACTILIS BADGE CARRIER

QUICK START GUIDE

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www.tactilis.com

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OVERVIEW

Tactilis Badge Carrier provides communication interfaces for applications to connect to and use the Tactilis Biometric Card. The Carrier has a slot for inserting and carrying the Tactilis Card. Applications can connect to the Carrier using USB, Bluetooth Low Energy (BLE) or Wi-Fi

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Figure 1: Tactilis Badge Carrier and Card

In addition, the Carrier also supports communication services to allow you to tap and get access to facilities (using Near Field Communication) and provide your location information (using GPS).
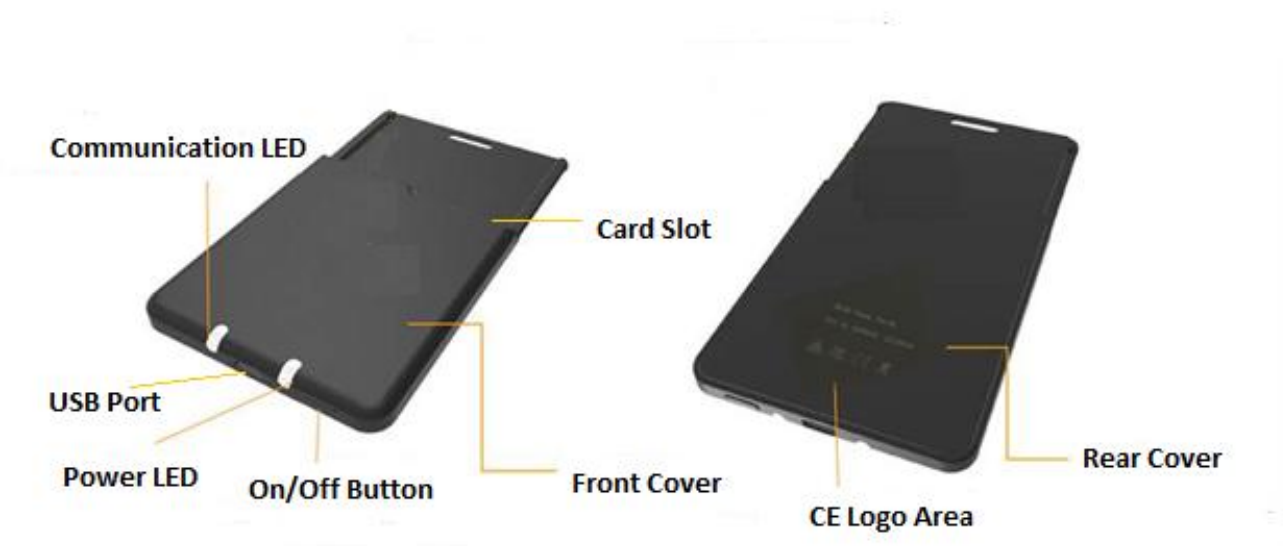

Figure 2: Tactilis Badge Carrier Diagram

TACTILIS BADGE CARRIER

On/Off Button: This is used to turn the Carrier on or power it off. (The exact behaviour depends on whether the card and/or USB is connected).

LED (Power):   Provides battery status including charging, charged and low/empty.

LED (Communication): Indicates the wireless connection status – connected or not connected.

USB Port: USB port is dual function a) to charge the carrier and b) for communication over the USB interface.

Card Slot: The Tactilis Card needs to be inserted in this slot to enable the Carrier functions.

Lanyard Slot: Lanyards can be passed through this slot to carry the unit.

Rear Cover: Displays Tactilis and certifications logos.

GETTING STARTED

Turning Carrier On
The Carrier is turned on when connected to a USB power source. If not USB-connected, then insert the Tactilis Card and briefly press the On/Off Button to power on the carrier.

Powering Off
Remove the Tactilis Card and long-press the On/Off Button, when not connected to USB. (The Carrier is active and powered on when it is connected to USB).

Charging the Battery
Connect the carrier to a PC or battery bank using a micro-USB cable. The Power LED will display the charging status.

Active and Standby Modes
After a timeout period, the carrier will automatically go to the Standby mode. In this mode the communication functions are enabled. If the card is removed, the carrier shuts down the communication functions. Standby modes do not apply when connected to USB power source.

Setting up the Carrier
Your service provider will setup the communication mode for your carrier. The communication options include:

Bluetooth Low Energy (BLE): this can be used to detect proximity and to communicate with the Carrier

Wi-Fi: Carriers can be wirelessly connected over Wi-Fi for data exchange.

USB: Carriers can be physically connected to hosts (PC/Mac) using a USB cable.

Carrier Services

Location Service:
The carrier can be configured to store and provide location services to your applications using GPS.

Access Service:
The carrier can use wireless (NFC) methods to authenticate you for accessing facilities and systems.

ENABLING WITH TACTILIS CARD

The Carrier works only when the Tactilis Card is inserted and verified.

Inserting the Card
Turn on the Carrier by inserting the card in to the card slot and firmly press it in. If the carrier was powered off, press the button to turn it on. If the Carrier was in sleep state, the card insertion will wake the carrier.

Enrollment
This process saves your fingerprint to the card. Enrol request is indicated by blue light on the card. Press your finger on the fingerprint sensor until the LED status indicates success. Normally this enrolment process will be performed when the card is issued to you.

Verification
This is the process of authenticating yourself to the system by providing the fingerprint press to compare with the stored template. If successfully verified the LED will indicate green.

Removing Card
Removing the card from the carrier will turn off the communication functions and power off the carrier (when not connected to USB).

STATUS INDICATIONS

Carrier LED Status

Communication/Carrier LED

Purple (Solid):   Carrier is in update (bootloader) mode. This is a momentary state.

Green (Blinking):   Carrier is awake and running.

Red (Solid):   Carrier is about to timeout and go to sleep.

Power LED

Green (Solid):   USB cable is connected and carrier is being charged.

Green (Blinking):   Battery is above 20% capacity (USB is not connected).

Red (Blinking):   Battery is below 20% capacity (USB is not connected).

Blue (Solid):   Ready to power off, you can unplug the USB cable.

Buzzer Notifications

The Carrier provides some buzzer-based notifications automatically. The Service Provider applications can also programmatically play patterns.

Automatic Buzzer Indications

Enrolment: When the carrier is requesting enrolment, it will generate a buzzer note.

Verification: When verification is successful, the busser note is played

Programmatic Notifications
Your Service Provider will provide you with information on their use of the buzzer notification.

CARRIER CERTIFICATIONS

Federal Communication Commission Interference Statement

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Innovation, Science and Economic Development Canada (ISED) statement:

CAN ICES-3 (B)/NMB-3(B)
This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

EU Declaration of Conformity

Hereby, TACTILIS PTE LTD declares that the radio equipment type, Badge carrier, Model: 300-00004, 300-00009, 300-00010 & 300-00011 are in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.tactilisltd.com/

The frequency band and the maximum transmitted power in EU are listed below:

2400MHz - 2483.5MHz: 13.5 dBm (EIRP)

Caution: Exposure to Radio Frequency Radiation

This product complies with EU requirements regarding restriction of exposure of persons to radio-frequency energy (RF) emitted by telecommunication and radio devices as it is designed and manufactured in such a way as not to exceed the exposure limits indicated by the European Union Commission. The permitted SAR limit for the general population is 2.0 W/Kg. This limit guarantees an ample safety margin that protects all persons regardless of age and health condition. The highest SAR level recorded for this model was equal to 0.49 W/kg.

Waste Electrical and Electronic Equipment-WEEE

NOTE: This product is covered electronic equipment under the European Union's Waste from Electrical and Electronic Equipment ("WEEE") Directive (2012/19/EU). The WEEE Directive requires that covered equipment be collected and managed separately from typical household waste in all EU member states. Please follow the guidance of your local environmental authority or ask the shop where you purchased the product for collection or recycling options.

TACTILIS PTE LTD

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