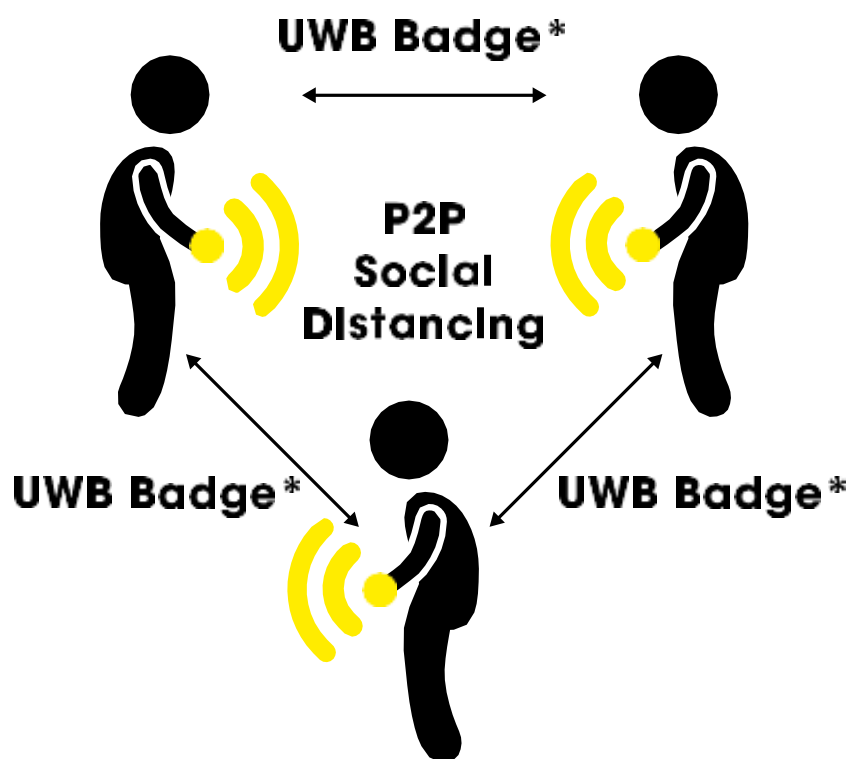




Social Distancing & Contact Tracing Solution

Guide for Installation and Setup



1. Introduction

This document explains step by step procedure for installation of UWB Badges for Peer-to-Peer (P2P) alerts and contact tracing.

2. Setup Equipment

S.No.	Item Description	Quantity
For P2P		
1	UWB Badges	x
	Other (required for OTA upgrade or cloud offload) – Shipped Already	
2	UWB Beacon (PoE only)	01
3	5-Port PoE Switch	02
4	CAT6 Ethernet Cable (Length – 2Meter)	03
5	Threaded Rod/mounting bracket	01-set

Table 1: Social Distancing & Contact Tracing solution Equipment.

3. Noccela Social Distancing and Contact Tracing

Badge operating principle

- Turn on: Device will turn on when pressing button for one second. (beep)
- When device ON, LED indicates idle with blinking blue.
- Turn off: Device will turn of when pressing button for four seconds. (bzzbzz)
- Silence: When alerting, tag can be silenced for 10 minutes by pressing button for one second.
- Power: Device have 750 mAh battery. Battery life is approx. 10 days. Device is recommended to turn off after workday.
 - Battery LED-indicator:
 - Battery state is indicated with LED light:
 - > 40% BLUE
 - 10%-40% YELLOW
 - < 10% RED
 - Battery charging time 2h. Device will be charged with USB-C cable.
 - During charging, LED is RED. When battery is full, LED is GREEN
- Device communicates with beacons for data offload and firmware updates.

4. Safe distances

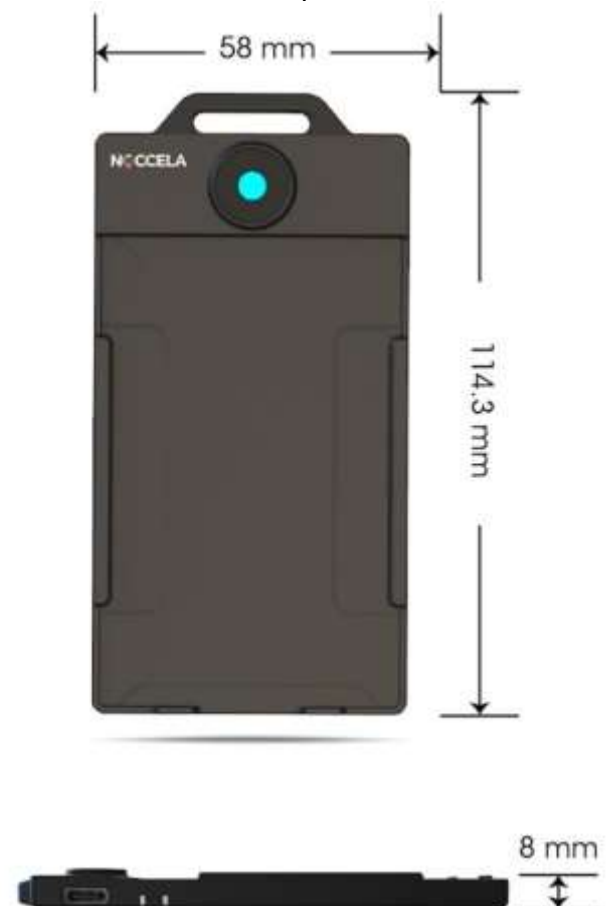
Badges are measuring the distances between each other. If the distance mittaavat etäisyyttä toisiinsa. If the specified distance is exceeded, the device will trigger alert sound and LED-light.

Alert occurs if:

- The distance between the devices is less than 1.5 meters:
 - RED LED indication
 - Frequent beeping (every second)

The above settings are customizable by the customer.

Note: The power saving feature is enabled in the latest software. The device goes to sleep if the device is stationary for 60 seconds. The device is activated again when the device detects movement (acceleration sensor). This is also customizable by the customer.



5. Beacon (for Over-the-Airupdates and Cloud Offload)

Beacons are NOT required for basic P2P proximity detection and alert. One Beacon can be installed away from working area for:

- Badge data upload to cloud (including contact history)
- Over-the-Air firmware upgrade of Badges.

Beacon installation can be ignored if OTA and / or Cloud offload are not required.

5.1. Beacon Installation Steps

1. Beacons are PoE powered, so a simple CAT6 Ethernet cable can be used for Data and Power connectivity with the Beacon



Figure 2: Beacon with CAT6 Cable on PoE Port

2. One end of the CAT6 cable will be terminated on Beacon, and other end of cable will be connected to PoE Switch.
Ports TCP 443 and UDP 1317 has to be open.



Figure 3: PoE Port of Switch, connected with Beacon

3. PoE switch in Power supply.



Figure 4: Power Switch

4. Ethernet Cable to be connected from Port 5 on PoE Switch to Customer's Network.
5. Once connections are made, turn on the power supply of the PoE switch. Blue LED on Beacon will light up.
6. Bringing Badge close to Beacon will allow Badge to transfer data to Cloud.
7. A laptop can be used to check if internet browsing is working on Switch.

5.2. OTA Upgrade Steps

For upgrading the Firmware of the Badges, follow the steps below:

1. Set up and power on the Beacon as per the steps defined in section 5.1
2. Bring the Badge(s) close to where the Beacon is placed.
3. Once the Badge(s) are in the range of the Beacon, the latest firmware will be automatically uploaded into them.



5.3. Cloud Offload and Contact Tracing Steps

For offloading contact data from Badges internal memory, follow the steps below:

1. Once the Badges are updated to the latest firmware (as per steps defined in section 5.2), bringing them close to the Beacon again will automatically upload the contact data to the cloud. The process is completely automated and contact tracing is available in the latest firmware. Once the data has been uploaded, contact tracing can be accessed via the web application.

2. Login to **<https://my.noccela.com/>** and use the following credentials: Username: Customer's email.

Password: Delivered by Noccela

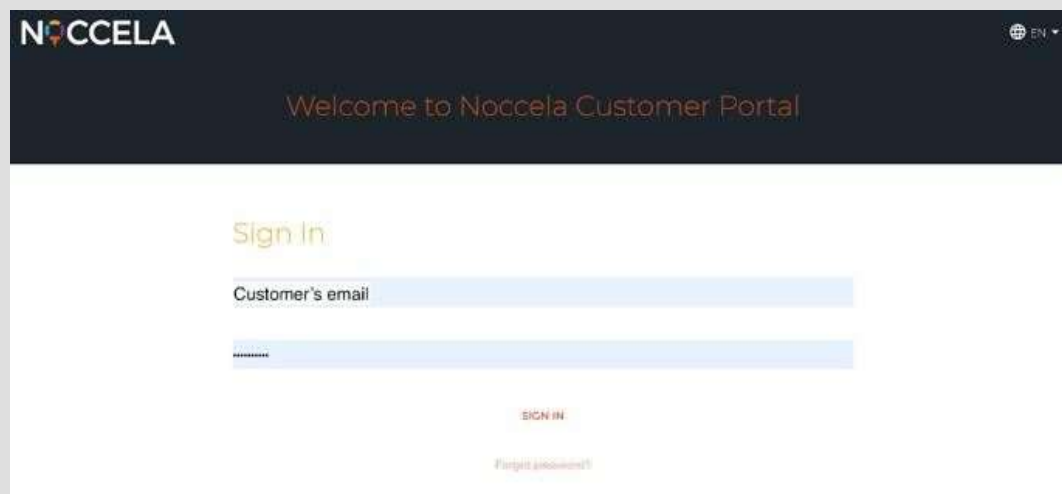


Figure 5: Web UI – Login

4. Once logged in, the “Choose Account” page will pop up.

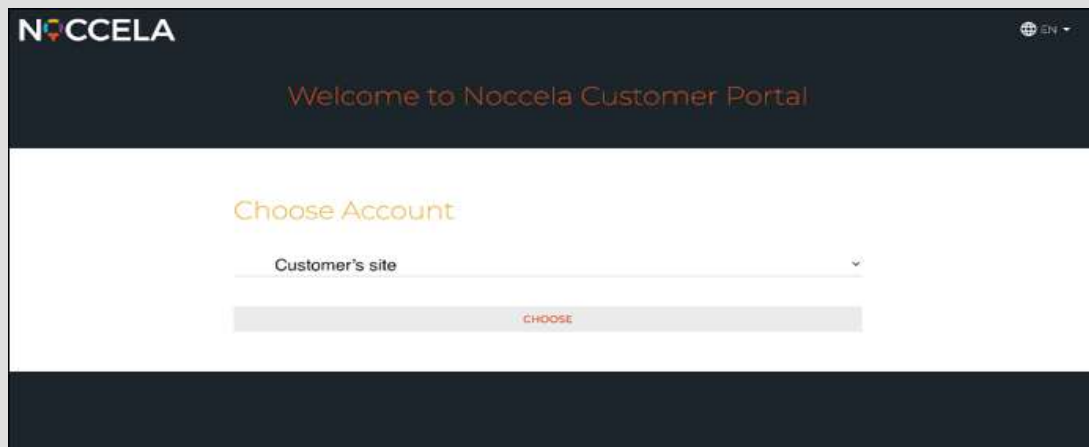


Figure 6: Web UI – Choose Account

5. A dashboard page will appear. At the left bar dashboard shows site's name and check box for show beacons. Beacon is green to indicate that system is online.

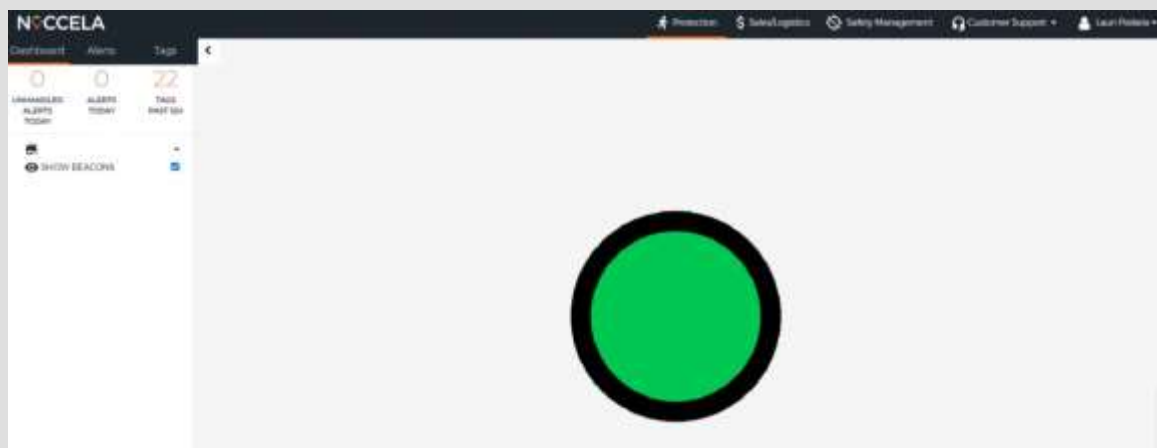


Figure 7: Web UI – Landing page

6. Click on the “Safety Management” tab. Left bar gives options Site Statistics, User Statistics, Configure

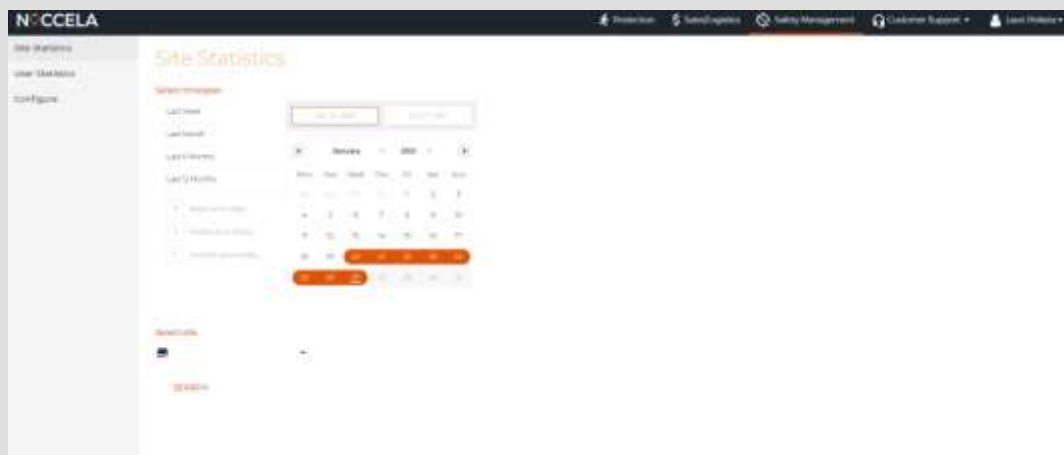


Figure 8: Web UI – Navigating in Contact Tracing page

7. Site statistics gives useful information regarding contacts in selected timespan at your site.



Figure 9: Web UI –Site statistics

8. User statistics gives you important data for contact tracing. Select timespan and search. You can filter tags and sort by with several options.



Figure 10: Web UI – User statistics

9. Configure gives you options for configure tag settings.

Zone 1

Range (cm)

Buzzer

Buzzer Volume

Led Blinking

Led Color

Alert Delay

Event Delay

150

FREQUENT BEEPING

HIGH

FREQUENT BLINK

RED

IMMEDIATE

IMMEDIATE

4'11"

Zone 2

Range (cm)

Buzzer

Buzzer Volume

Led Blinking

Led Color

Alert Delay

Event Delay

150

FREQUENT BEEPING

LOW

FREQUENT BLINK

RED

DISABLE

DISABLE

4'11"

Zone 3

Range (cm)

Buzzer

Buzzer Volume

Led Blinking

Led Color

Alert Delay

Event Delay

150

FREQUENT BEEPING

LOW

FREQUENT BLINK

RED

DISABLE

DISABLE

4'11"

Common

Sleep Delay

Not Moving Alert Time

Tx Power

15 MINUTES

DISABLE

TUNED / MAX



6. Safe use of UWB Badge

Extra caution should be followed when wearing Badge near objects that the device could stick to. Lanyard with safety breaker feature should be used only to avoid excess force to be applied against person.

To prevent possible damage, excess force against Badge enclosure should be avoided. Wearing product for example in back pocket of trousers is prohibited.

In case of broken enclosure use of product should be discontinued and Noccela Customer Support should be contacted for further advice.



Figure 12: UWB Badge – lanyard with safety breaker feature



7. Compliance



This product complies with Directives 2014/53/EU, 2014/30/EU, 2014/35/EU and 2011/65/EU.



FCC-ID: 2AVRO-BADGE-3

FCC regulatory information

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.

FCC Radiation Exposure Statement:

These equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. These equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

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

The installation of Noccela system is allowed only by authorized personnel. Any electrical or technical modification of device is prohibited.

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