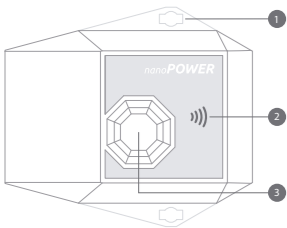


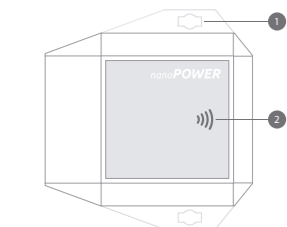
Welcome

Before using your nPZero SENTINEL device please read this user manual, the manual can also be downloaded from <https://nanopower.store/manuals>

Keep the documentation for later use.



1 Mounting holes \varnothing M3
Zip tie 5mm width (Optional)



2 NFC antenna
3 Sensors area

Prepare your phone

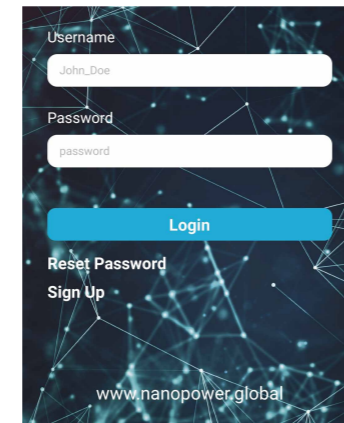
- An iPhone with iOS 14.5 or later, or a phone with Android 10 or later
- Bluetooth turned on (BLE 4.2 or later)
- Location Services turned on:
 - iPhone: Go to Settings > Privacy > Location Services
 - Android: Go to Settings > Location > Use Location
- Wi-Fi or cellular connection
- NFC functionality turned on:
 - iPhone 7 or later
 - Android: Go to Settings > Bluetooth & Device Connection > NFC

Install App

Nanopower is available for download from the **App Store** and **Google Play**



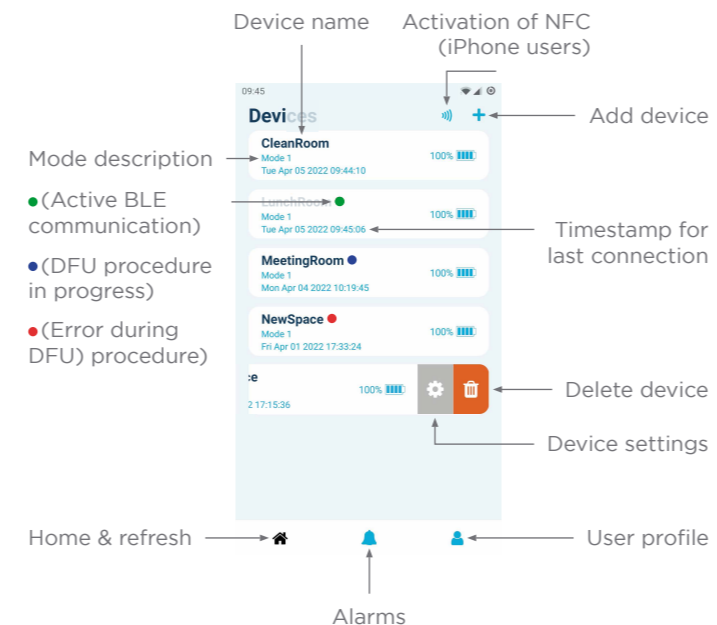
Signup



Tap **Sign Up** and fill in the blank fields to register

Login with your newly created username and password

Home



Device name Activation of NFC (iPhone users)

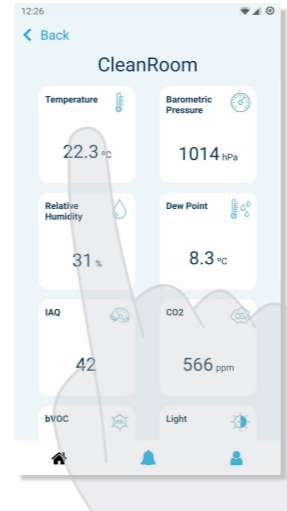
Mode description

- (Active BLE communication)
- (DFU procedure in progress)
- (Error during DFU) procedure)

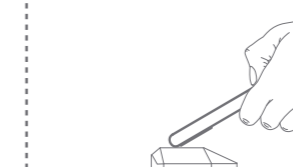

Home & refresh Alarms User profile

Read device data

- Tap on device
- Tap on a sensor to see more



NFC connection illustrations

- iPhone**
- 
- Hold the **iPhone** in an angle towards the top of the device
- Android**
- 
- Hold the back of the Android phone towards the top of the device *
- * Depending on phone brand and model, the location of the phones NFC antenna may have a different location then illustrated. Please see the phone user manual for exact NFC antenna location

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Great emphasis has been placed on the information in this book being as accurate and correct as possible. Nanopower is not responsible for any printing or typing errors


Assembled in Portugal

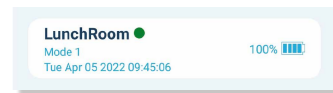
Add device to your account


The nPZero SENTINEL device is shipped in power-off mode. Follow the steps below to activate and communicate with the device.

- Tap **+**
- Hold the phone according to **“NFC connection illustrations”**
- Follow the instructions on the screen (iPhone users) 
- Give the device a name and tap **Add device**. The device is now assigned to your user account.

Power on device


- Tap icon  (iPhone users)
- Hold the phone according to **“NFC connection illustrations”**
- Hold for at least 3 seconds
- Follow the instructions on the screen (iPhone users)



The device will now boot in **Mode 1**. Every 5 minutes the device is ready to connect with the app. The connection is for short periods and indicated by green dot . See **Modes** to read more.

On demand communication

The device connects with the app at intervals, e.g., every 5 minutes (see **Modes**). Communication between these intervals can be performed by following these steps:

- Tap icon  (iPhone users)
- Hold the phone according to **“NFC connection illustrations”**
- Follow the instructions on the screen (iPhone users)
- After the phone is removed, the device wakes up and is ready to communicate with app.

Modes

For the most recent mode definition and more details visit <https://nanopower.store/app>



Mode description	Mode 1	Mode 2	Mode 3	Power Off
	Indoor Environment Sensor	Offline Data Logger	Logistics Tracking	
BLE communication	Every 5 minutes, and when triggered by NFC or alarms	When triggered by NFC	Every 5 minutes, and when triggered by NFC or alarms	Never
Rollover / overwrite time series	Yes	No	Yes	

Device settings

Slide device to the left, tap 

- Device name and additional information can be changed at any time, tap **Save** after making changes
- Device Group indicate if the device information is shared with other groups


Select mode

- Slide device to the left, tap  > Select Mode
- Tap 1-3 or  to select mode > Save
- The device will change mode next time it connects to the app. Until the mode is changed, the **mode description** states **Current mode > Desired mode** e.g **Mode 1 > 2**

Note: Next interval for communication is dependent on the current mode. See **Modes** or **On demand communication** for manual trigger of communication.

Alarms settings



If a value is outside the defined alarm settings, the device will store that value as an alarm.

- Slide device to the left, tap  > Alarm Settings
- Activate the alarm and drag the slider(s) to set threshold. Tap **Save**
- The device will change alarm settings next time it connects to the app. Until the settings are applied the **mode description** states **AS**





Note: Next interval for communication is dependent on the current mode. See also **Modes** or **On demand communication** for manual trigger of communication.

View alarms

New alarms are indicated by a red dot (with number) 

Tap  to view alarm log. Hold on a single alarm to acknowledge or tap  to acknowledge all alarms.

DFU (Device Firmware Update)

- Slide device to the left, tap  > Firmware update > “Select Firmware zip file”
- Tap on the most recent zip-file to download to phone
- Tap “Select Firmware zip file”
- Navigate to the location where the .zip file is stored on phone
- Tap on the most recent zip-file > Update Device Firmware
- The device will start the DFU process next time it connects to the app. Until FW is updated, the **mode description** states **DFU**
- During the next connection indicated by  (receiving all information over BLE), followed by a  (executing DFU). After a few seconds, the device will restart and connect with the app again, indicated by . The device is now updated.

-  indicates failed DFU process, repeat the procedure

Note: Next planned communication is mode dependent. See **Modes** or **ON demand communication** for manually trigger of communication.

Support

Submit a support ticket at https://nanopower.store/contact_us

Installation

The nPZero SENTINEL series is designed to be attached to other flat surfaces and objects. Ensure that both surfaces are clean and use screws / tie wrap or double-sided tape to fasten the device.

Indoor installation at any angle

Outdoor installation on a vertical and weather protected area to ensure sufficient drainage of water *

* The sensor for IAQ, CO2, and VOC estimation can report erroneous values if exposed to direct sunlight in the sensor area, condensing environment, and wind / fast changes in air pressure. The sensor needs time to adjust for its environment and is meant for installation in one location.

