



Crankk official guide for onboarding a Nebra Outdoor gateway

- 1) Flash the SD card with the Crankk image
- 2) Local Dashboard setup
- 3) User Dashboard setup



Onboarding a Nebra gateway can take some time, but don't worry, we're here to guide you through every step. So, grab yourself a cup of coffee, and let's get started!

Before we begin, you might need the following: tweezers, a screwdriver, and a SD card reader/Adapter.



1) Flash the SD card with the Crankk image

1. Download balenaEtcher and Crankk image

Follow [this link](#) to download the official Crankk image.

And [this one](#) to download balenaEtcher, which is needed to flash the image to the SD card.

While you wait for the downloads to complete, head over to your Nebra Outdoor gateway.

2. Open the gateway and take out the SD card

Okay, let's get started. First, remove the four screws on your Nebra device. Then take out the SD/eMMC card.



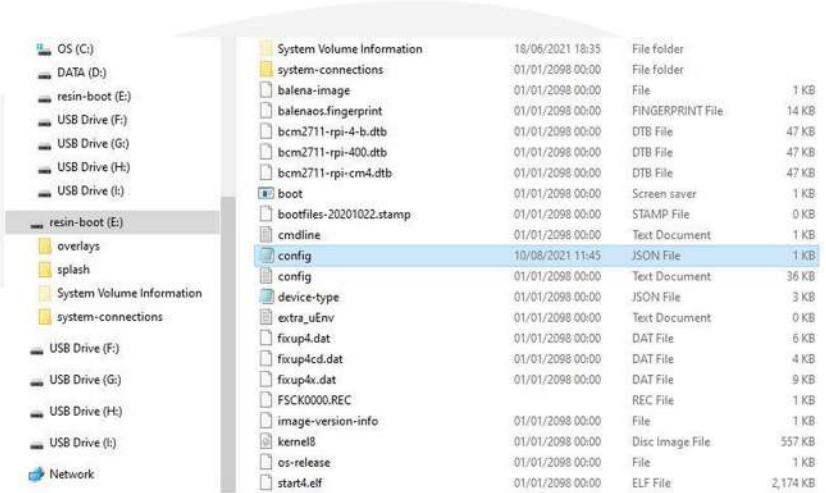
Once you open the lid and take the SD/eMMC card, slip it into your laptop or a SD card reader and let the magic happen.



A message **Format Disk** might appear on your screen. Please **DON'T** click on it, as this will **delete** all the information on your card.

3. Save config.json file

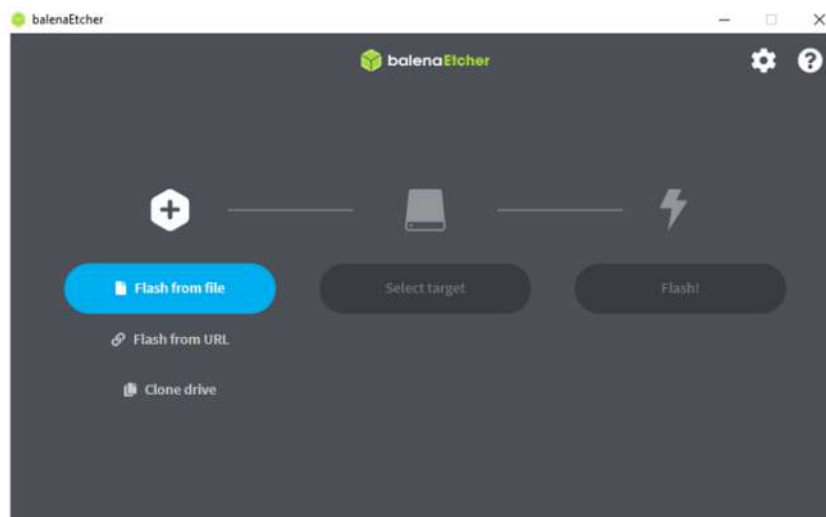
Now you will see a new removable drive named **resin-boot**. Open it and copy the config.json file to a safe location.



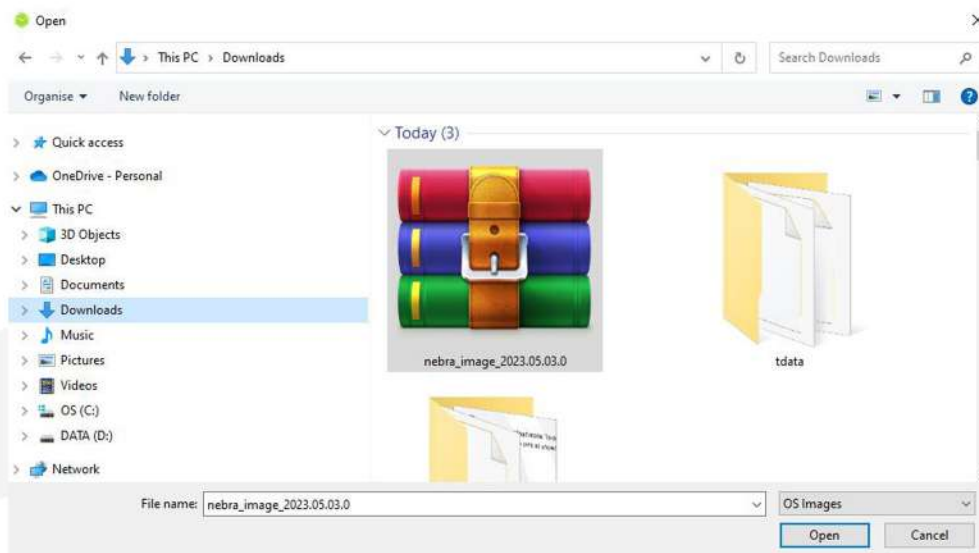
This file contains important information about your gateway and might be used as a backup if anything goes wrong.

4. Insert the SD Card into your laptop directly or via an SD card reader/Adapter.

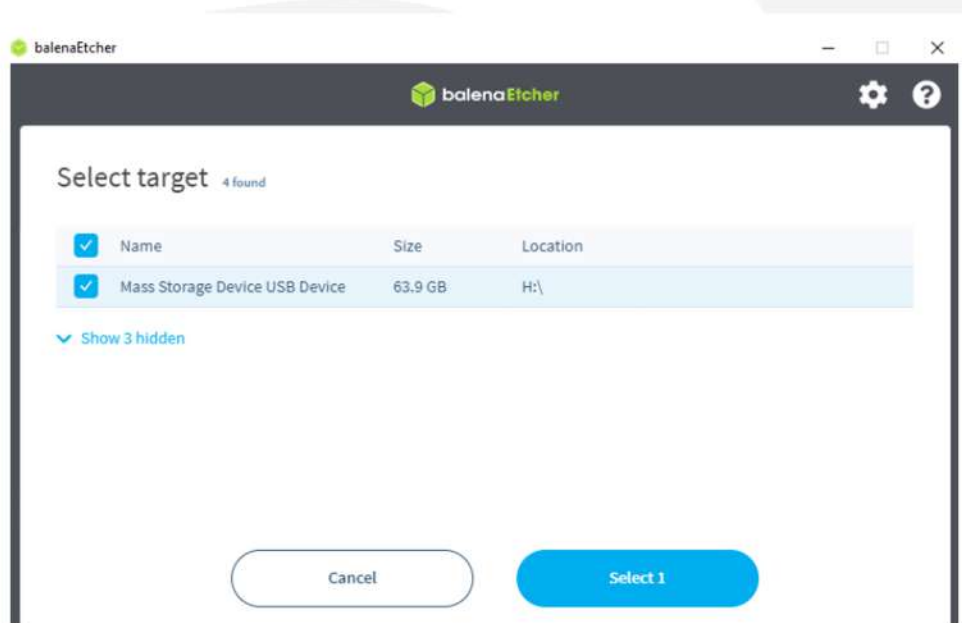
5. Install Balena and flash the SD Card



Use the option **Flash from file** and select the **Crankk Nebra image** file you have downloaded. It is not necessary to unzip the file, simply select it as is.



Okay, next pick your **SD card > Select > Flash**



The flashing process can vary, but it usually takes about 20-30 minutes.

Once it's done, insert the SD card back to the gateway, reassemble it, connect lan cable and power it on.

2) Local Dashboard setup

7. Log in to the Local Dashboard.

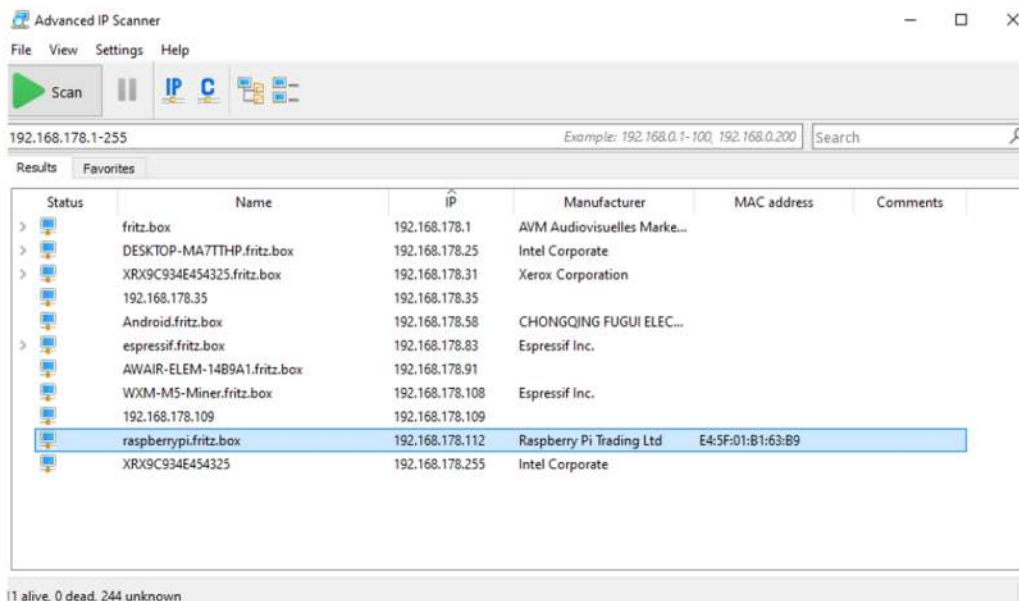
We have automated the process and you do **NOT** need to download the **Crankk Installer** anymore.

Instead, just log in to the **Local Dashboard**.

If you have any VPN enabled on your PC, please turn it off.

Now check your router to find the **gateway IP address**.

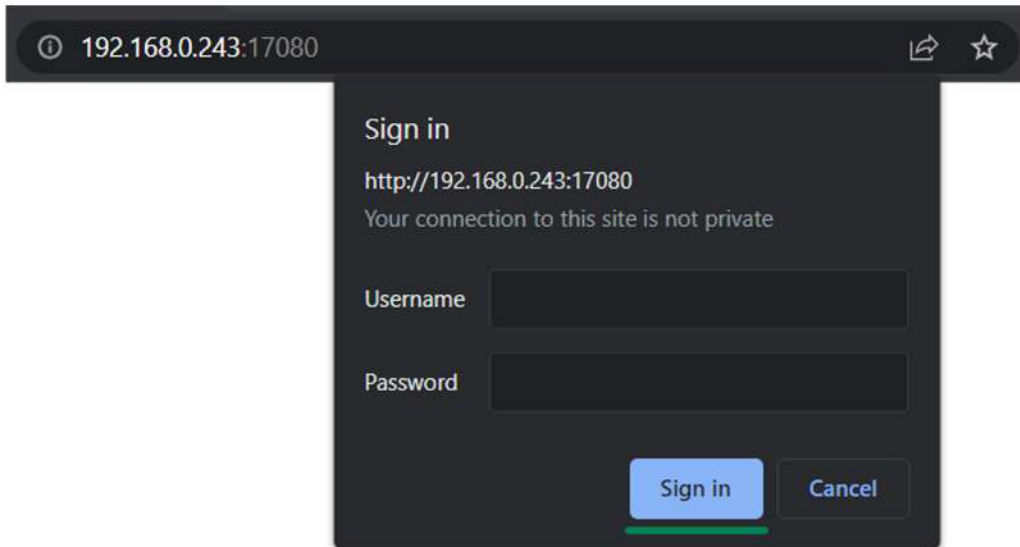
If you are unsure how to do this, you can use free tools like **Advanced IP Scanner** to help you out. Check the **MAC address** of your gateway to find the correct IP address.



Once you have the LAN IP address of your gateway, open a new browser tab from a PC on the same network and paste the IP followed by **:17080**

http://192.168.0.243:17080

When logging in for the first time, you do not need to enter any credentials, just press **Sign in**.



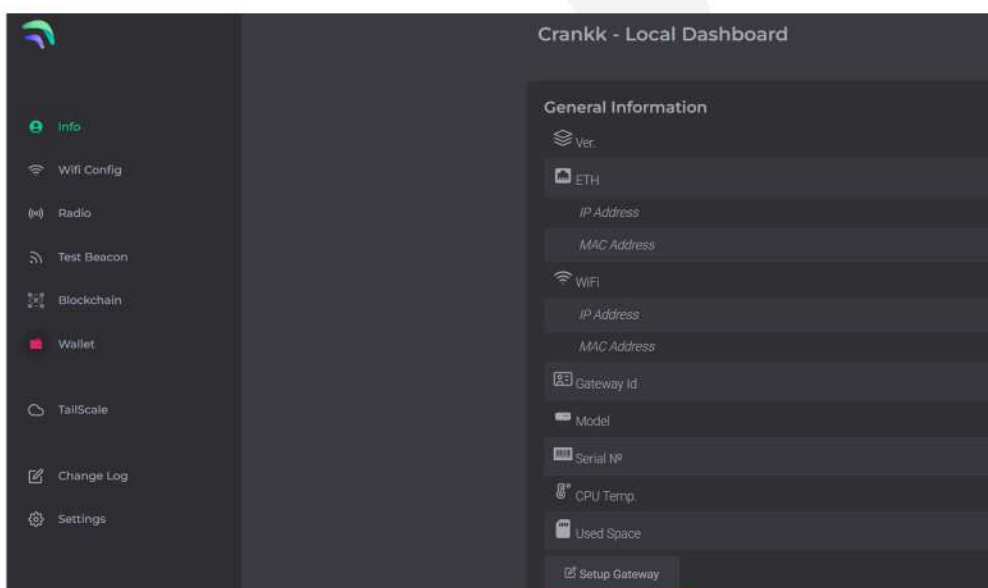
After setting up your gateway, next time you can log in with the following credentials:

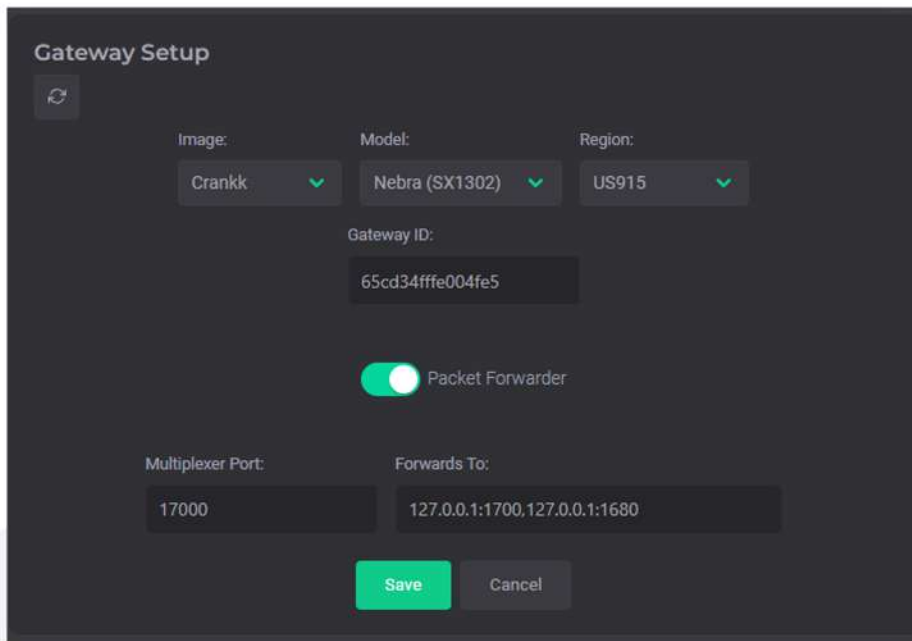
- Username: **admin**
- Password: **the last 6 symbols of the gateway's MAC address (e.g. B163B9)**

Please note that you can change the password in the **Settings** tab.

8. Set up the gateway.

Go to the **Info** tab > **Setup Gateway**





Copy your **Gateway ID**, as we will need it later.

Select the **Image** that is installed on your gateway (Crankk / Helium / Nebra), **Model** and **Region*** (EU868 / AU915 / US915).

If you followed the guide so far, you have to select **Crankk image**.

The correct model depends on the device chip, it should be **Nebra SX1302**.

Turn on the **Packet Forwarder**.

If you are currently mining or planning to mine Helium, leave the **Forwards to** box unchanged as shown in the screenshot.

If you don't wish to mine Helium, leave only **127.0.0.1:1700**

Hit **Save**.

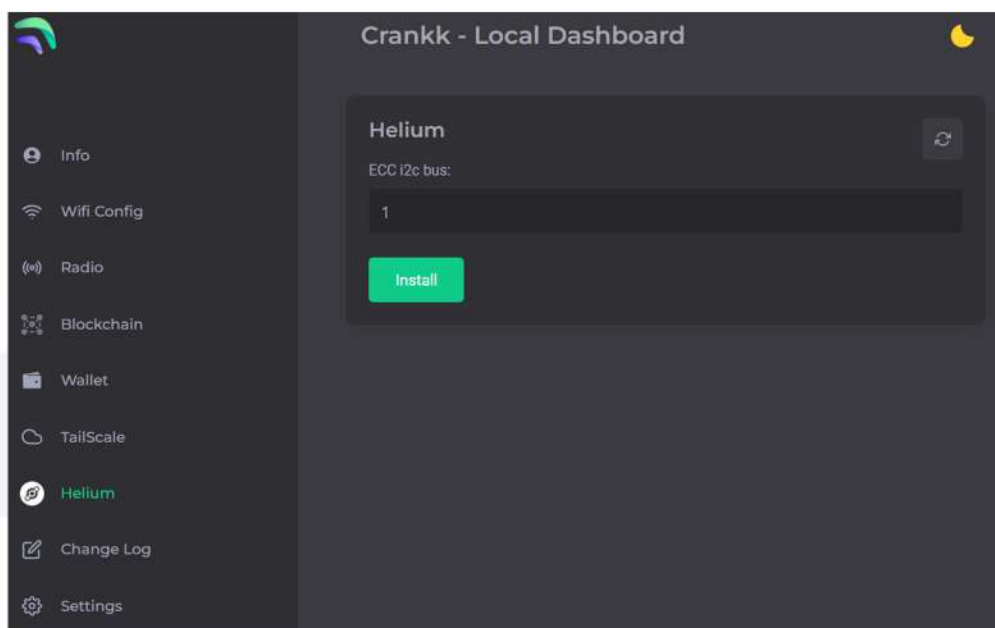
Your gateway will restart automatically. Please wait a few minutes while it loads.

However, if the Packet Forwarder does not start after completing the onboarding process, switch the model to **Nebra SX1301**.

Then, recheck if the Packet Forwarder is active.

9. Double mining.

If you want to participate in Double mining, you can install Helium from here:

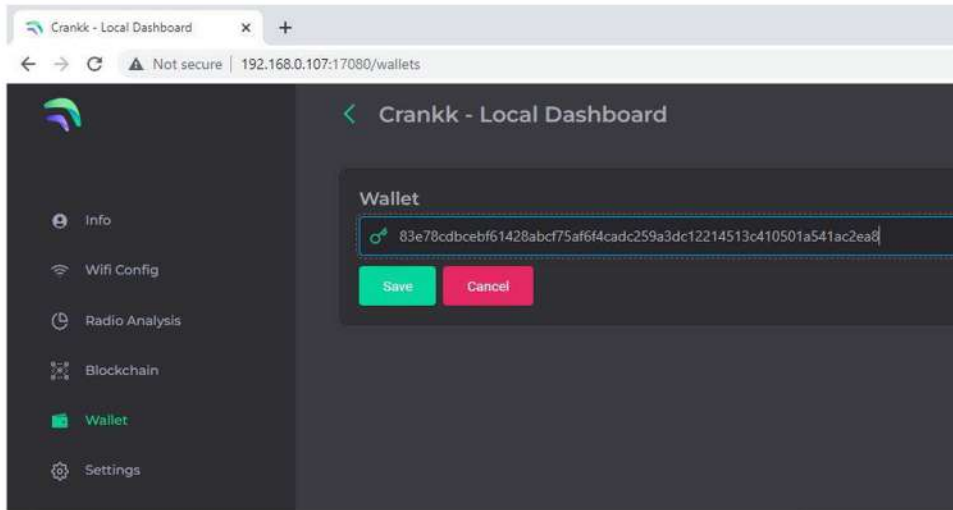


10. Import your secret key.

Hint: If you don't have your secret key saved, you can go to the **User Dashboard** > Wallets > find the correct wallet > use the three dots to reveal the secret key.

Navigate to the **Wallet** section in the **Local Dashboard** and enter your **secret key**, keeping the following in mind:

- Please ensure that you copy and paste the **secret key** exactly as it is, without any spaces or other symbols
- Please double-check that it is the correct **secret key** and that it does not belong to another gateway
- Please also note that your **secret key** is different from your **wallet address/public key** starting with k:



Hit **Save**.

If you have entered the correct secret key, then you will see your **k: wallet address** displayed in the **Wallet** field.

3) User Dashboard setup

10. Assign your gateway ID to a wallet in the User Dashboard.
Log in to the **User Dashboard**.

Navigate to the **Wallets** section and select the wallet that you want to use for your software license activation.

Assign your gateway ID to the chosen wallet by clicking on the **Assign** button. If you don't see such a button, it means you haven't purchased a software license for this wallet.

PUBLIC KEY	ALIAS	GATEWAY	BALANCE KDA	BALANCE CRKK
k:f54e8d0096a43bf9333d0761f870c7a548e3d0221822b25c8da82e3e70fa6fb1	test123	Assign	0.998 \$0.52	0 \$0.00

Select your gateway **Model** and **Region**, copy and paste your **Gateway ID** (please double-check that it is correct) and hit the **Submit** button.

Assign Gateway

Enter Model and Gateway ID that you want to assign to this wallet.

Select Model
Nebra

Nebra Gateway ID
65cd34fffe004fe5

[Cannot find the Gateway ID?](#)

Want to use custom ID instead?

Cancel Submit

Please wait a few minutes to allow the changes to sync to the blockchain.

Congratulations! You have successfully onboarded your Nebra Outdoor gateway on Crankk!

** Crankk currently supports the following frequencies: EU868 MHz, AU915 MHz and US915 MHz. It is essential to ensure that any hardware purchased from a third-party company for use with Crankk operates on the correct frequency for your region of residence. Crankk Inc. assumes no responsibility for any issues arising from the use of hardware with an incorrect frequency. It is the responsibility of the user to select the appropriate frequency for their region of residence.*

Please note that any modifications, updates or restrictions made by the gateway manufacturer that may impact the performance or functionality of the gateway on the Crankk network are beyond the control and responsibility of Crankk Inc. Users are advised to check compatibility and seek assistance from the gateway manufacturer for any gateway-related issues.