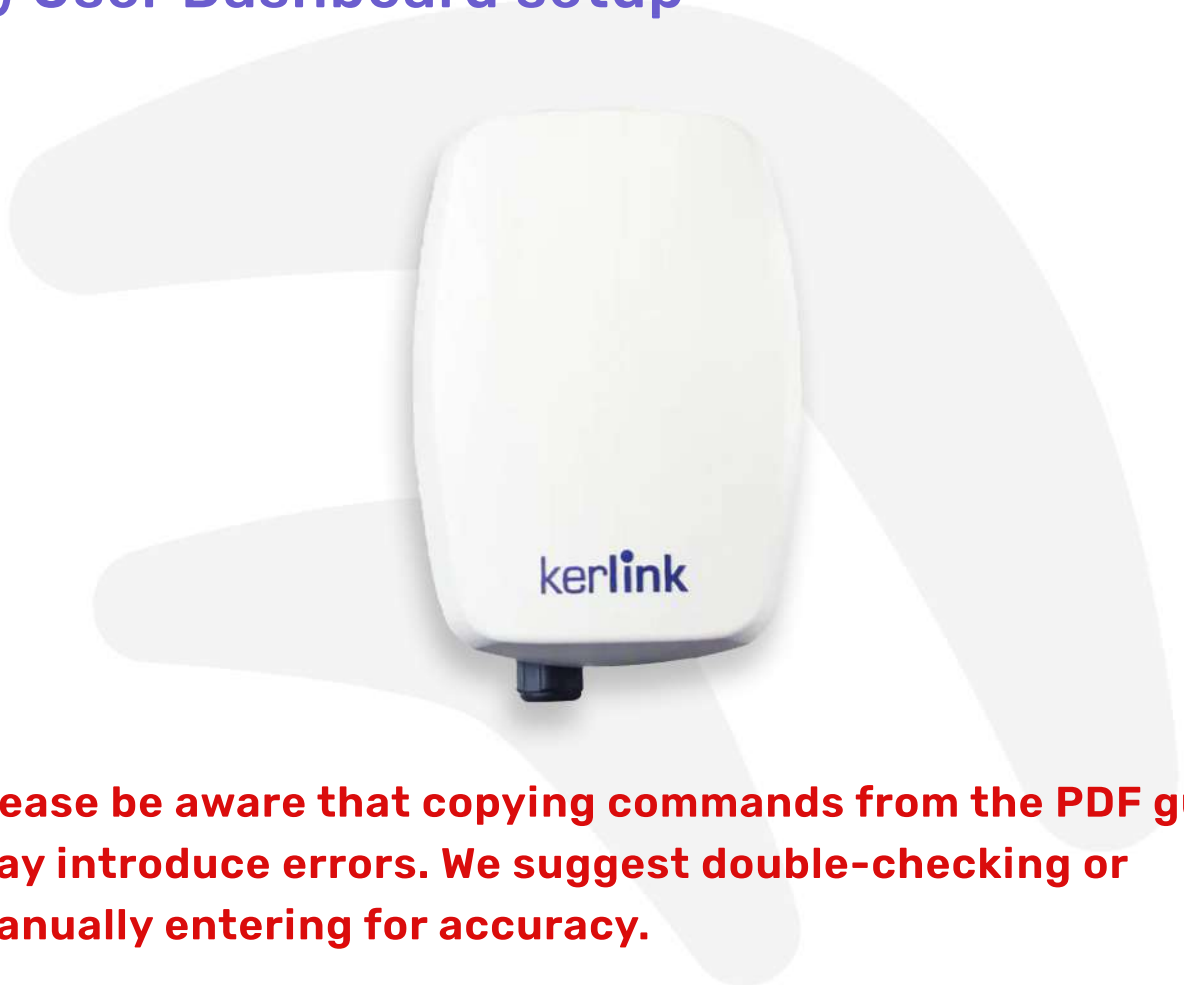




Crankk official guide for onboarding a Kerlink iSeries gateway

- 1) Install Crankk
- 2) User Dashboard setup



Please be aware that copying commands from the PDF guide may introduce errors. We suggest double-checking or manually entering for accuracy.

If you have purchased a Kerlink gateway for Helium, please note that you need to contact Kerlink support to unlock the software key of your device, allowing you to access it via SSH. You can reach out to Kerlink support at support@kerlink.com

If you haven't purchased your Kerlink device specifically for Helium, then you should already have SSH access enabled. In this case, you can proceed with the onboarding process by following the steps.

Prerequisites:

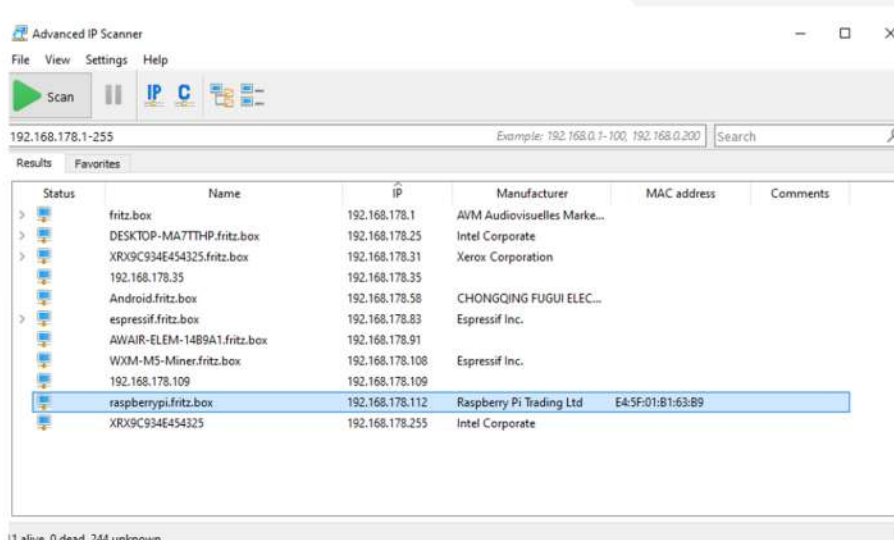
- Connect your **Kerlink** gateway via an Ethernet LAN cable to your local network and power it on.
- Ensure your PC/Laptop is connected to the same network.

1) Install Crankk

1. Connect to your Kerlink via SSH

To do so 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.



Open the Command Prompt/Terminal or PowerShell and log in via SSH:

```
ssh root@YourKerlinkIPhere
```

It will ask you for the root password.

Type it in (although it won't be visible) and press 'Enter'.

Type in "yes" if prompted to do so.

2. Download the script to your gateway

After logging in, enter the following command to download the script.

```
wget https://crkk1.spaces.crankk.net/kerlink/setup-crankk.sh -O /home/root/setup-crankk.sh
```

* It's a single command, so you can simply copy and paste it using the right-click of the mouse.

```
root@klk-wifc-090560:~ # wget https://crkk1.spaces.crankk.net/kerlink/setup-crankk.sh -O /home/root/setup-crankk.sh
Connecting to crkk1.spaces.crankk.net (104.18.13.192:443)
saving to '/home/root/setup-crankk.sh'
setup-crankk.sh 100% |*****| 761 0
:00:00 ETA
'/home/root/setup-crankk.sh' saved
```

3. Get permissions and configure the region

Execute the following command:

```
chmod +x /home/root/setup-crankk.sh
```

```
root@klk-wifc-090560:~ # chmod +x /home/root/setup-crankk.sh
root@klk-wifc-090560:~ # export REGION=eu
root@klk-wifc-090560:~ #
```

To set your region run the command:

```
export REGION=eu
```

If you're not in EU, just replace it with your region(us or au, use small letters only)

4. Install the script

Execute the following command:

```
./setup-crankk.sh
```

```
root@klk-wifc-090560:~ # ./setup-crankk.sh
GatewayID is 7076fffffe021f94
Activating LoRa packet forwarder...
Stopping lorad 2.0.1
Stopping lorafwd 1.2.0
Starting lorad 2.0.1
Starting lorafwd 1.2.0
lorafwd[14709]: <6> Parsing configuration file: /var/run/lora/gateway-id.toml
lorafwd[14709]: <6> Parsing configuration file: /etc/lorafwd.toml
Creating lorafwd.toml...
Restarting LoRa packet forwarder...
Done!
root@klk-wifc-090560:~ #
```

Please make a note of your GatewayID, as it will be needed later on.

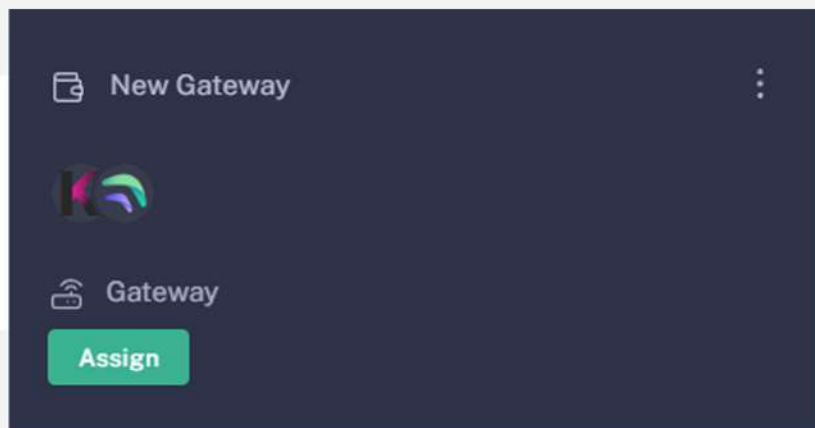
2) User Dashboard setup

5. Assign your gateway ID to a wallet in the User Dashboard.

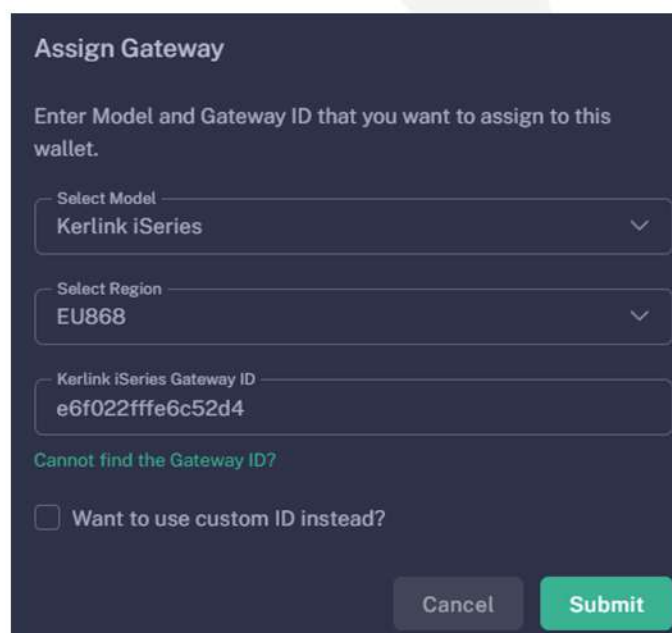
Visit <https://dashboard.crankk.io> and sign in into your account.

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.



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

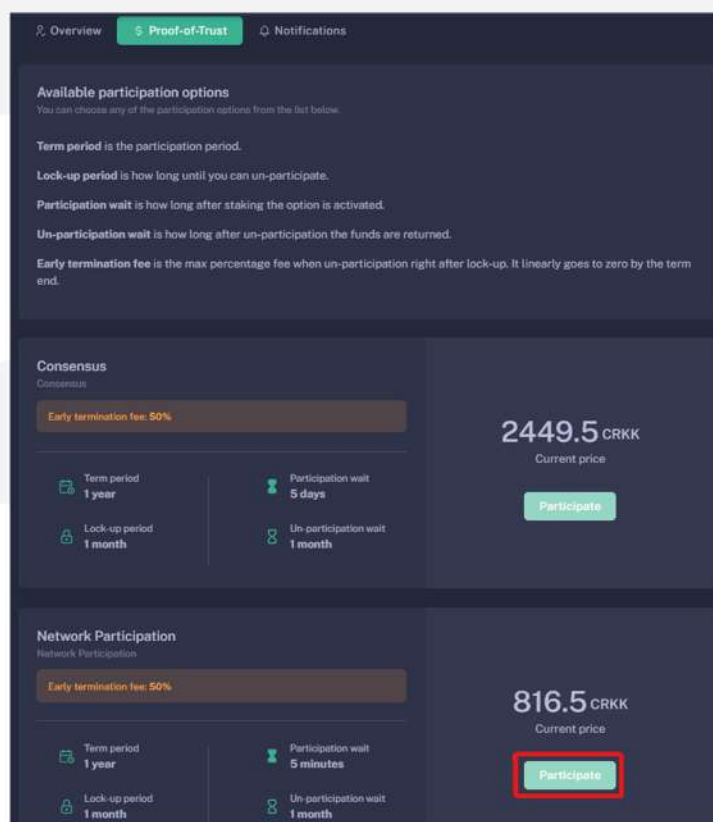
A dark-themed form titled "Assign Gateway" with the instruction "Enter Model and Gateway ID that you want to assign to this wallet." It contains three input fields: "Select Model" (dropdown menu with "Kerlink iSeries" selected), "Select Region" (dropdown menu with "EU868" selected), and "Kerlink iSeries Gateway ID" (text input with "e6f022fffe6c52d4" pasted). Below the fields is a link "Cannot find the Gateway ID?" and a checkbox "Want to use custom ID instead?". At the bottom are "Cancel" and "Submit" buttons.

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

6. Staking

Staking is a mandatory requirement for all gateways onboarded into Crankk, in order to receive rewards. It requires staking \$100 worth of CRKK tokens.

Those funds remain yours, and you can fully withdraw them after period of 1 year.

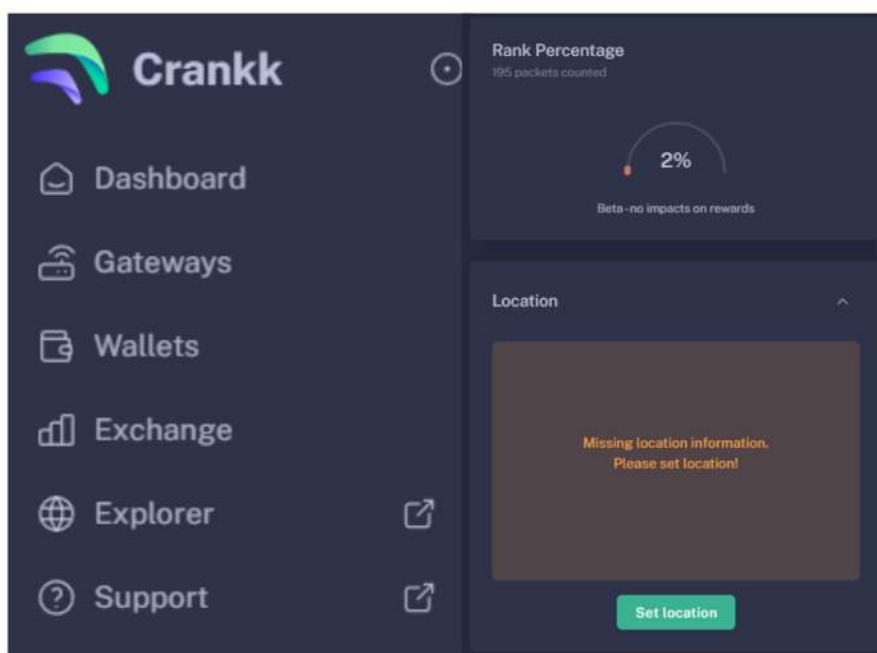


To complete this process:

- Log in to the **User Dashboard**.
- Navigate to **Gateways** and select your specific gateway.
- Click on **Proof-of-Trust**.
- Next to the "Network Participation" tab, you will find the current amount of CRKK tokens required for staking. Simply press the green **Participate** button.

It's important to note that the staking value remains constant at \$100. The only variable is the quantity of CRKK tokens that need to be staked. If you lack the necessary tokens for staking, our DEX offers the option to exchange KDA coins for CRKK tokens.

7. Set your gateway location



To set your gateway location you need to:

- Navigate to your gateway in the User Dashboard.
- Scroll down below the **Rank Percentage** section until you find the Location tab.
- Unlock your wallet by entering the correct password.
- Click on **Set Location**.
- Zoom out using the scroll wheel on your mouse.
- Select the desired gateway location.
- Click **Submit**.

Congratulations! You have successfully onboarded your **Kerlink iSeries** 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.