

User manual CONTROLLINO Hotspot

Get Started with your Hotspot

First of all, thank you for your trust in Controllino and for purchasing a Controllino Hotspot! We hope that you will have a pleasant experience with it and earn some good amount of HNT! Please read this guide carefully to get your hotspot running as quickly as possible.

Prepare your Hotspot

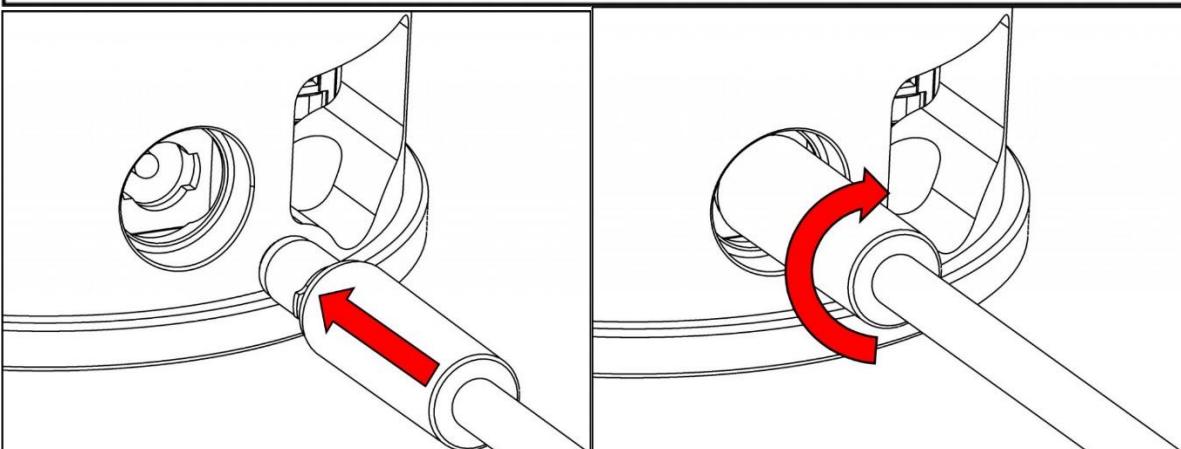
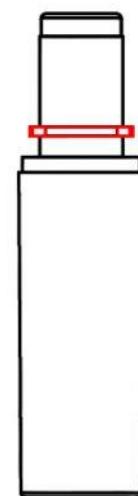
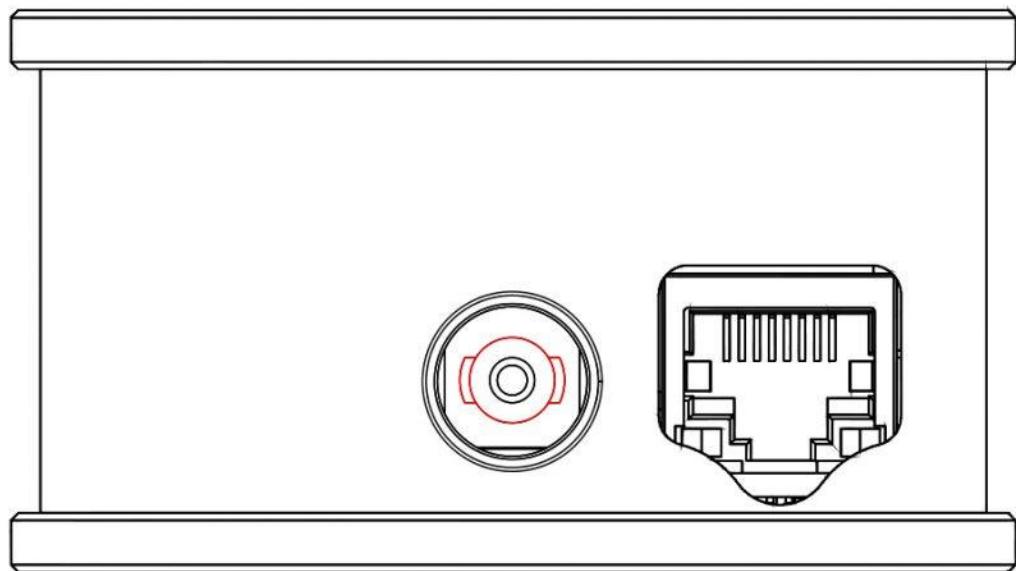
Please take out Controllino Hotspot of the packaging box and screw the antenna on it.

Next, plug in a LAN cable into your internet router and then into the Controllino Hotspot.

Plug your Hotspot into the power outlet

Now, it's finally time to plug your hotspot into the power outlet. Please follow the instruction images carefully.

As you can see, we are using a DC plug with locking mechanism. This ensures that the cable connection always remains stiff and stable and reduces chances that the cable gets loosened or unplugged accidentally.



Wait for 45 minutes

Wait at least 45 minutes after plugging your Hotspot to the power outlet. Just let it sit there and grab a coffee or tea in the meanwhile. This is needed to give your hotspot some breathing time to fully boot up, start the syncing process and download any updates that were released while it was on the way to you.

While you wait, you can dive in deeper into the official [Helium Docs](#) to learn and understand how the network works, how your earnings work and many more.

Onboard your hotspot

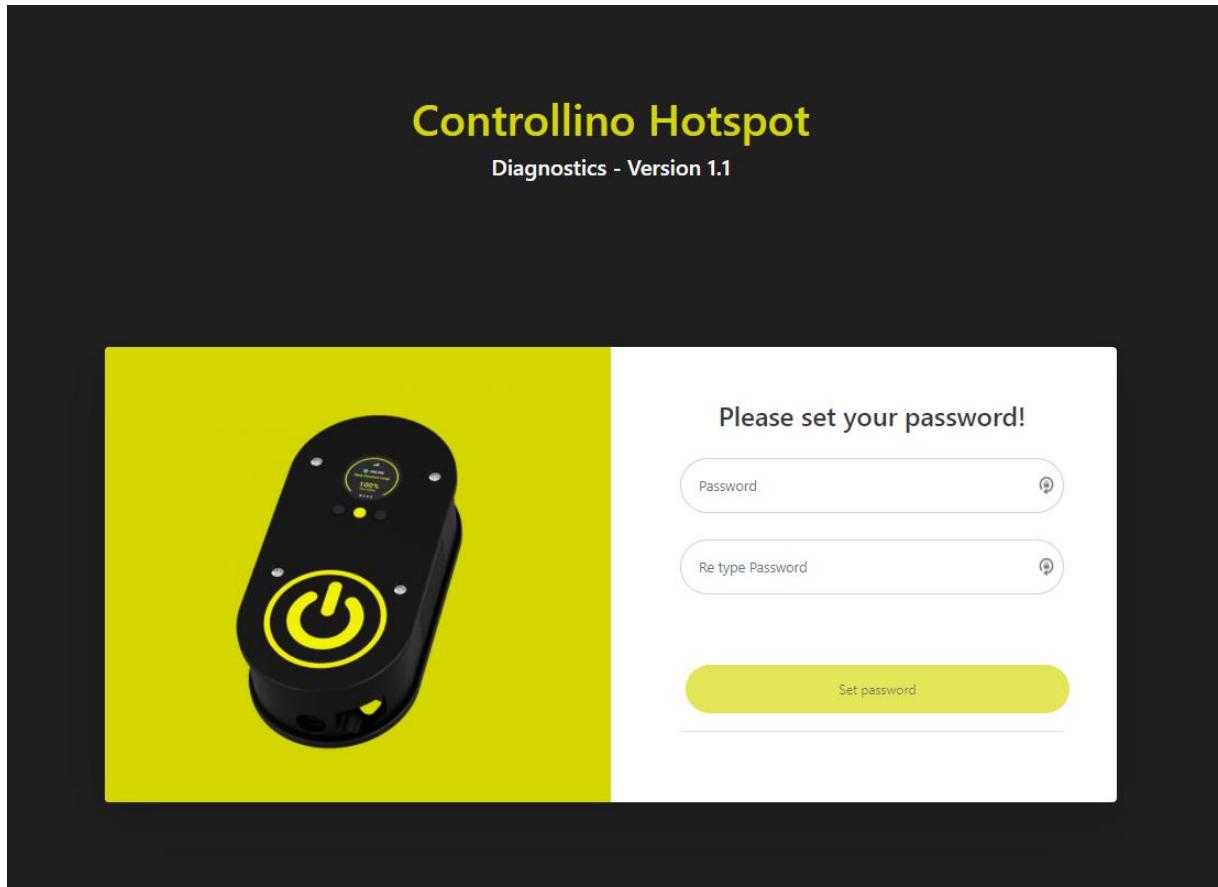
Now that you waited for 45 minutes, it is finally time to link your Helium Wallet with the Hotspot. This process is called "onboarding". During onboarding, you will link your wallet with the hotspot and you will set the location, height and antenna settings.

Step 1: Visit Diagnostics Dashboard

Next, find out the IP address of your hotspot in your network and enter it in your browser.

*Hint: The IP Address can be found in your internet router dashboard. Most of the times, there is a sticker on the back of your internet router. There, you will see a login IP or login domain, a username and password. Use these credentials to login into your internet router dashboard (enter the IP in the browser, as you would do with a website). Then, try to find a list of connected devices and see if you can find a device called "**controllinohotspot**". The IP address for "controllinohotspot" is the one that you need to login into the Diagnostics Dashboard.*

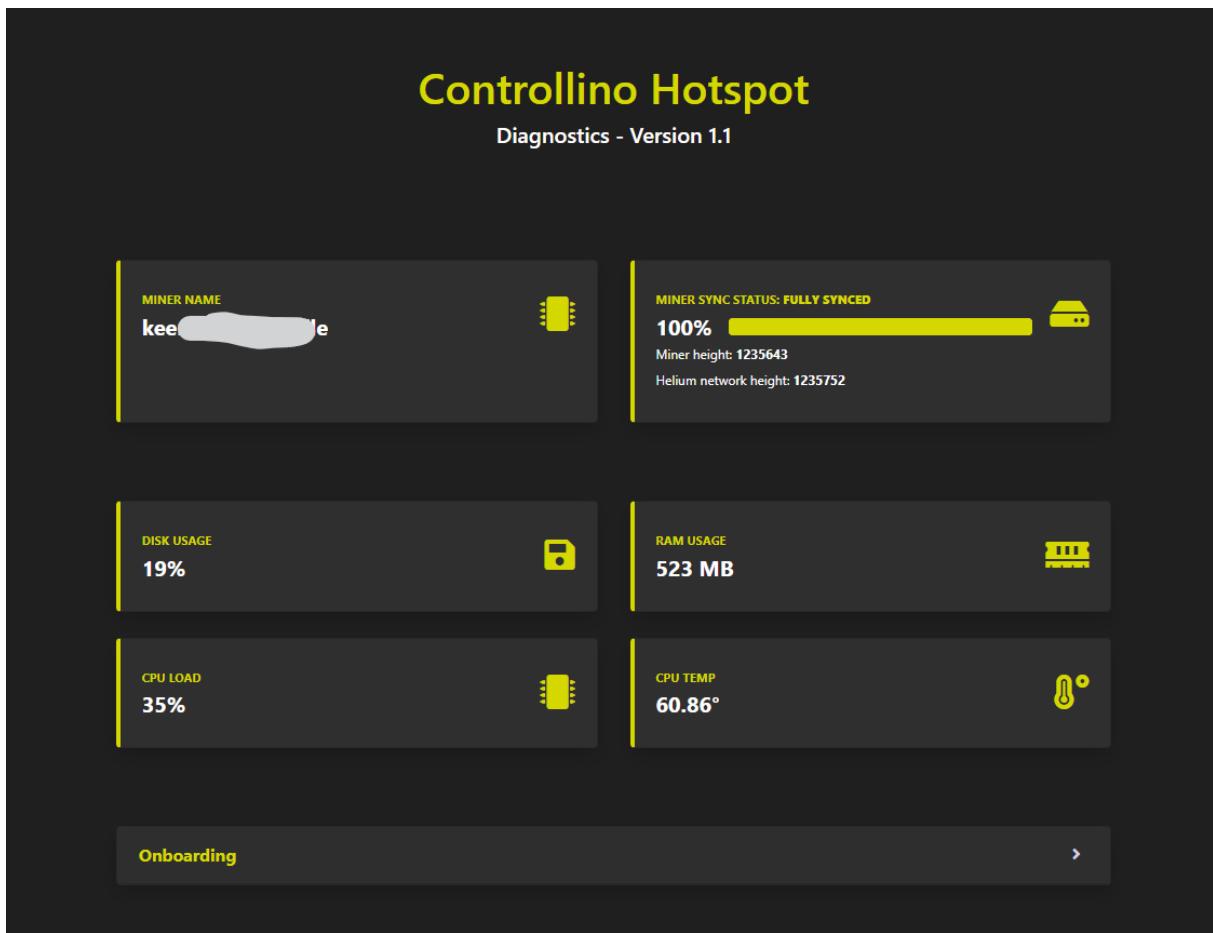
Now you have entered the dashboard. If this is your first time, you will need to set a password.



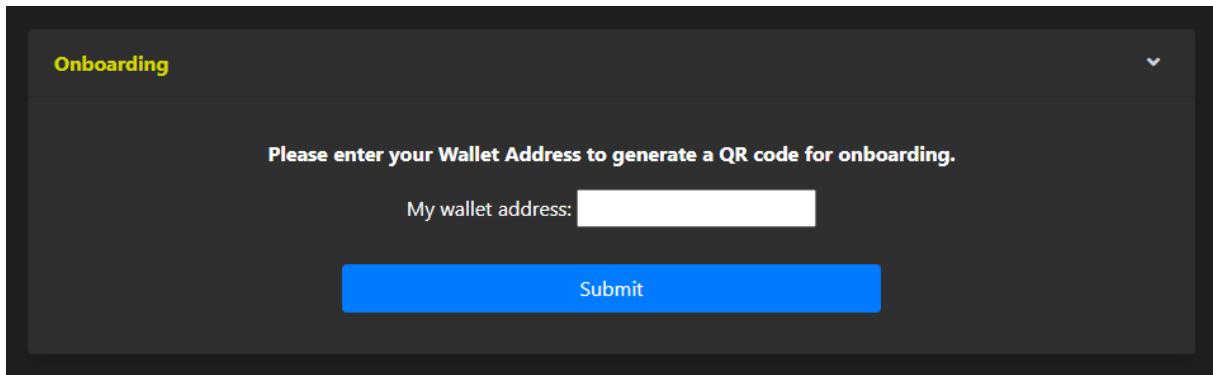
Remember it carefully! You can only reset it when you are logged in. If you are logged out of the dashboard and forgot your password, you will need to contact support, so they can reset it for you.

Step 2: Generate a QR Code

Wait until the dashboard shows your miner name and miner height info. This can take a few seconds and sometimes up to a minute.



After that, open the "**Onboarding**" tab.



Here, you need to enter your wallet address of Helium App. You can find your address in the **Account** tab in the Helium App on your phone or tablet.



There, you can click on the green **Copy Address** button:

Welcome to your wallet

Your balance is zero.

You can send HNT to the below address/QR or
deploy a Hotspot to start learning.



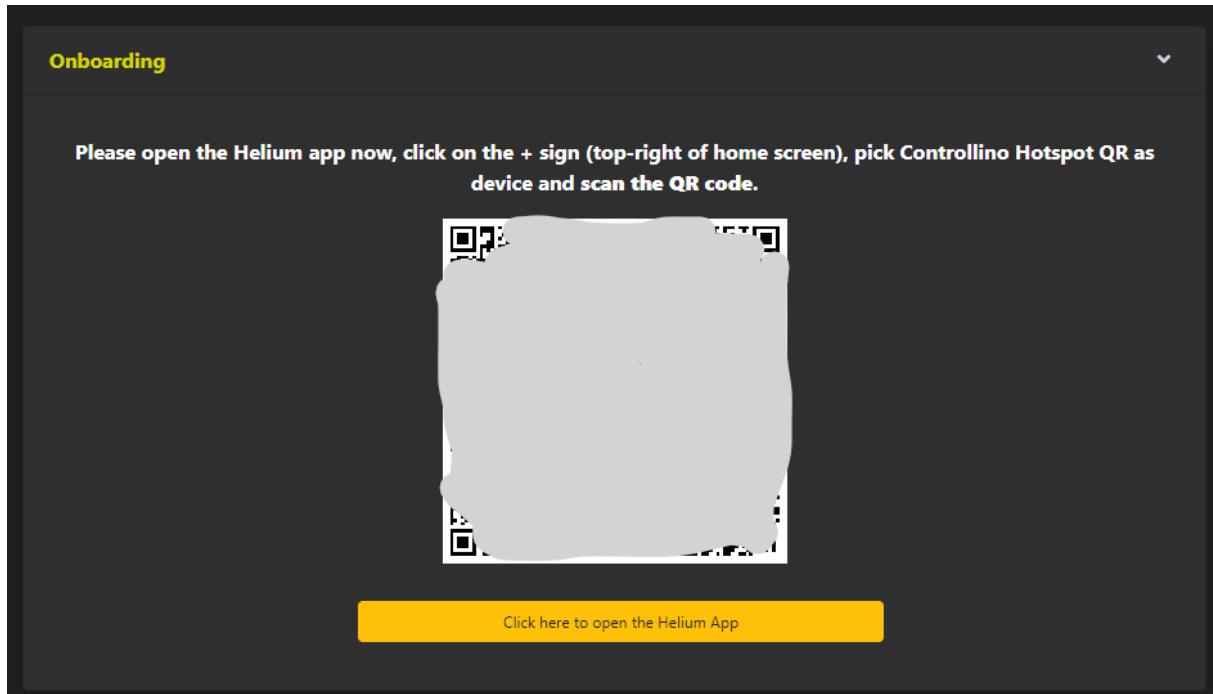
 Copy Address

 Share

Copied 14E5HavB...MbdHk8La to clipboard

Copy your address into the "My Wallet address" input field and click on **Submit**.

Wait a few seconds until the page reloads and open the "Onboarding" tab again. You will see your QR Code and can move to the next step.



Step 3: Scan the QR Code in Helium App or click the yellow button

You can now scan the QR code with the Helium app, or (if you have the dashboard open on your phone where you have your Helium App installed) click on the "Click here to open the Helium App" yellow button.

Note: if the QR code crashes the Helium app or it throws errors, try to clear the QR code with the dashboard button and regenerate it after 2 minutes.

Now, please follow the instructions in the Helium app. If you see a screen where it asks you to choose your network, click on **Use Ethernet** instead on the bottom. Then, assert your location. Your Hotspot will be asserted and you will see a "Registering your Hotspot" screen. After a few seconds, a button will appear to close the message and go to your wallet.

Now, the hotspot will be connected to the Helium Network, which can take a few minutes and sometimes even up to a few hours.

During this time, it is possible that the Helium app or Explorer doesn't show your hotspot, or it shows "No Location asserted" in your list of hotspots, or it doesn't list your hotspot in the list at all. **That's normal, let it propagate for a few hours and you will see it online.**

Now you are done and your hotspot will start doing actions within the next few hours!

Compliance: Important information

FCC ID: 2A4GOHS21915

Brand: Controllino

Model: HS21-915

Power supply: 5V VDC 3A

Transmission frequency: 902-928 MHz

The device complies with part 15 of the FCC Rules. Operation is subjected to the following 2 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 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 has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device is to be used in accordance with the current guide. Any hardware modification on the device will void the certification.

The antennas used must be one of those indicated by the manufacturer and the output power must be set as required by the present document.

For the specific FCC certification, the list of allowed antennas are indicated below. The use of any other antenna is permitted only with a FCC Class II Permissive Change.

The module can only be used with the antennas specified in the following table and the power setting must not exceed those indicated in this table for each antenna and operative area (CE or FCC).

Antenna code: **EMB-ANT915-RD**

Antenna type: **Rubber duck RP-SMA Antenna**

Antenna gain: +2 dBi

NB: In the standard use of the device a minimum distance of 20 cm between the radiant element and the human body has to be maintained.

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