RockPi Indoor Helium Hotspot Overview

Figure 1: Indoor Hotspot Included

The Nebra RockPi Indoor Helium Hotspot is a compact & elegant solution to provide Helium LongFi coverage and start mining HNT with ease.

Quick Specifications

Specification	RockPi Indoor Hotspot
Dimensions	94x70x53 mm (Excluding Antenna)
Weight	353g
Power Requirement	12V 2.5A USB-C
Maximum TX Power	24-27dBm**
Network Connectivity	1GBit Ethernet, 2.4/5GHz 802.ac WiFii

Specification	RockPi Indoor Hotspot
Antenna Connection	RP-SMA Female
Rated Ambient Temperature	20-30C
Base SOM	ROCK Pi RK3399 Processor
CPU Specification	Dual Core Cortex A72 1.8GHz and Quad Core Cortex A53 1.4GHz
High Endurance Storage	32GB
RAM	2GB

* Average Power Consumption Measured At Mains,

** Maximum TX Power may be capped to a lower amount in some regions.

Package Contents

- 1 x Nebra ROCK Pi Miner
- 1 x 3db LoRa Antenna
- 1 x WiFi Antenna
- 1 x Universal Power Supply
- 1 x Ethernet Cable
- 1 x Hotspot $40 On Boarding Fee
- 1 x First $10 Location Assert Fee

Please note the above image is for illustrative purposes only, colours of some parts may change.

Block Diagram

TBA

Supported Regions

The Nebra Indoor Hotspot comes in three frequency versions:

Frequency	SKU
433 Mhz	NBR-0065
470 Mhz	NBR-0066
868 Mhz (EU868, IN865, RU864)	NBR-0063
915 Mhz US915, AU915, KR920, AS923-1/2/3/4	NBR-0064

The frequency is set upon initialisation by the Helium Network.

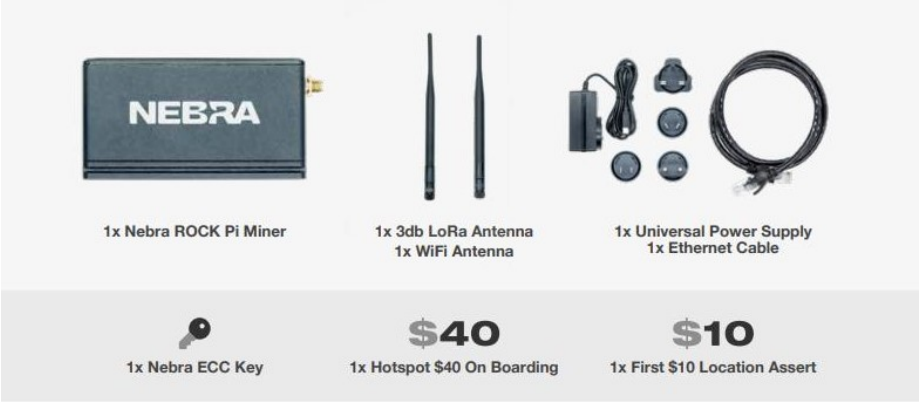

Figure 2: Indoor Hotspot Included

Antenna Specifications

Specification	470Mhz Model	868 & 915Mhz Models
Frequency Range	420-480	860-930 Mhz
Peak Gain	3 dBi	3 dBi
VSWR	< 2.3	< 1.8
Input Impediance	50 Ohms	50 Ohms
Length	17.2CM	20.7CM

Dimensions

The Nebra Indoor Hotspot is 94x70x53MM In size when nothing is connected.

Figure 3: Indoor Hotspot Connectors

Interfaces

Connectors

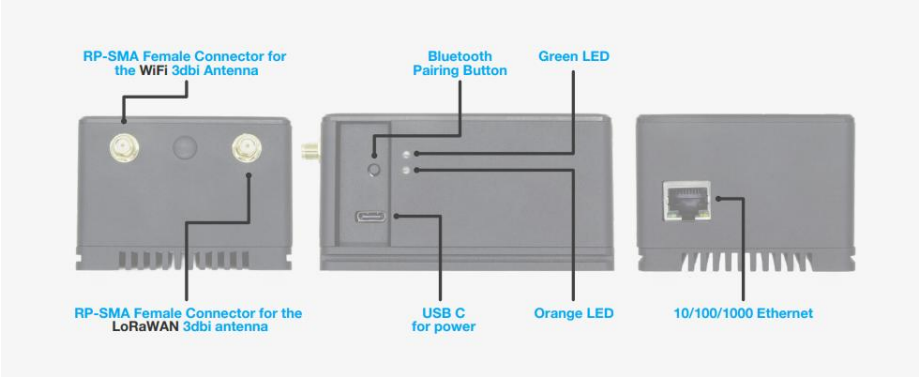

Figure 4: Indoor Hotspot Connectors

Firmware

The RockPi Indoor Helium Hotspot runs a customizd software to provide high reliability and ensure your units are as up to date as they can be.

Your hotspot will update approximately once a week in an automatic process, we will announce updates via various social media platforms when they happen.

The software is open source and available on our Helium Miner Software repo on GitHub.

Unit Information

Each unit has a sticker located on the base of the unit.

IMG NTB

This includes the following important Information:

- **FREQ**: Frequency of the Unit
- **ETH**: Ethernet MAC address
- **NSER**: Nebra Serial Number
- **RPi**: Raspberry Pi Serial Number

You will require some of this information when linking your unit to our remote management dashboard.

Certifications

We are working on getting the Nebra Indoor Hotspot certified in multiple regions. As we have results from the certification process we will post them here.

Certification List

Approval	Countries Covered	Hardware Frequency	Status	Frequency Plans
CE	European Economic Area	868 Mhz	Completed	EU 868
UKCA	United Kingdom	868 Mhz	Completed	EU 868
FCC	United States of America	915 Mhz	Completed	US 915

All certification related documents can be viewed in the certification folder for our indoor miner.

FCC Statement 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.
2. This device must accept any interference received, including interference that may cause undesired operation.

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B 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 generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: * Reorient or relocate the receiving antenna. * Increase the separation between the equipment and receiver. * Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. * Consult the dealer or an experienced radio/TV technician for help.