Indoor Helium Hotspot Overview

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

Quick Specifications

Specification	Nebra Indoor Hotspot
RRP	£250 ex VAT
Case	Plastic (ABS)
Ingress Protection	IP40
Dimensions	150x150x50 mm (Excluding Antenna)
Weight	0.4 Kg
Power Requirement	9-16V DC @ 15W
Average Power Consumption	~8W*
Annual Power Consumption	~70kWh
Maximum TX Power	24-27dBm**
Network Connectivity	10/100 Ethernet, 2.4Ghz 802.11N Wi-Fi
Antenna Connection	RP-SMA Female
Rated Ambient Temperature	20-30C
Base SOM	Raspberry Pi CM3+
CPU Specification	Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.2GHz
High Endurance Storage	32GB
RAM	1GB LPDDR2 SDRAM

* Average Power Consumption Measured At Mains,

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

Package Contents

- 1 X Nebra Indoor Hotspot
- 1 X LoRa Antenna
- 1 X International 12V DC Power Supply
- 1 X 1M Cat 5e Ethernet Cable

Block Diagram

Supported Regions

The Nebra Indoor Hotspot comes in three hardware versions:

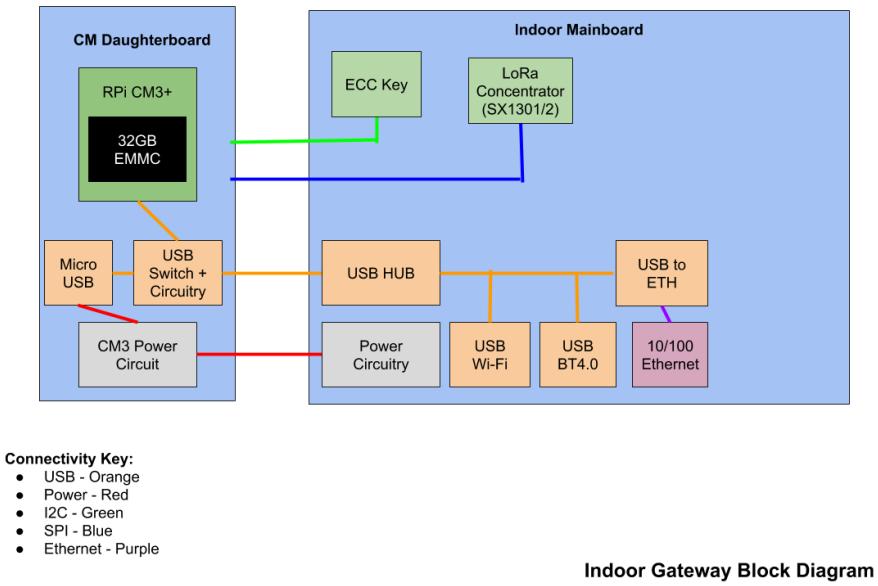

Figure 1: Indoor Hotspot Block Diagram

Frequency	Supported Regions
470 Mhz	CN470
868 Mhz	EU868, IN865, RU864
915 Mhz	US915, AU915, AS923, KR920

The frequency is set upon initialisation by the Helium Network.

Antenna Specifications

TBC

Dimensions

The Nebra Indoor Hotspot is 150x150x50MM In size when nothing is connected.

Approximatley 175x150x50MM space is required when accounting in space required for connectors.

Interfaces

Connectors

1. 9-16V @ 15W DC 6.5MMx2.0MM Barrel Jack
2. LED Indicator.
3. Interface Button
4. RP-SMA LoRa Connector
5. Ethernet Connector

Status Indicator

The Nebra Indoor Hotspot has a status indicator as shown above.

This is used to re-enable bluetooth pairing on the hotspot, hold the button in for approximately 15 seconds then release to start pairing. The top light should start blinking slowly if successful.

Firmware

The Nebra Hotspots run a customised software to provide high reliability and ensure your units are as up to date as they can be.

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

The software is open source at https://github.com/nebraltd/helium-miner-software

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.