

FreedomFi Gateway is the first omni-protocol miner for the Helium network. It will mine HNT for providing LoRa coverage, but is also expandable with a certified CBRS antenna (and later Wi-Fi access points) to mine cellular traffic. Firmware pre-loaded on the gateway combines Helium miner with control and user plane components of the cellular network core, based on the open source project Magma.



## Features

### Sync Instantly

With 4-core Intel CPU and 4GB RAM, FreedomFi Gateway is the most powerful Helium miner on the market, featuring the fastest blockchain sync times

### Ignite Open 5G Revolution

Expand your FreedomFi Gateway over time as the Helium blockchain evolves to support 5G and Wi-Fi by connecting certified cellular antennas and Wi-Fi Access Points

### Stay Up To Date

Zero-touch auto-update system ensures that the software on your FreedomFi Gateway will always run the latest version with no manual intervention required

### Mount on Wall or Ceiling

Wall/ceiling mounting gear, included in the packaging, makes it easy to securely install on any vertical or horizontal surface

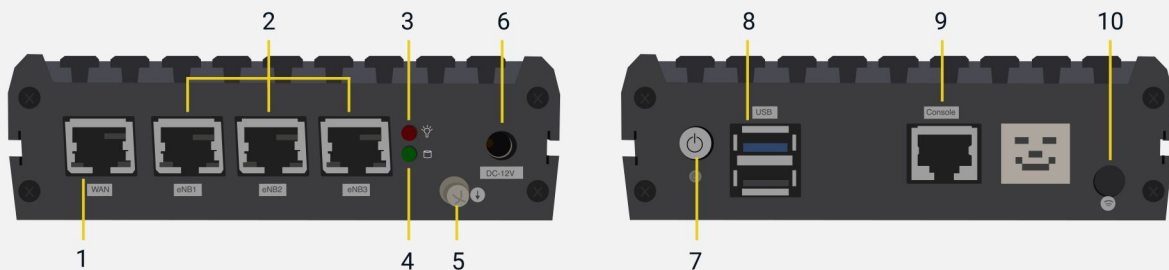
### Troubleshoot Locally

Local device status dashboard makes it possible to quickly troubleshoot and report issues, such as Internet connectivity problems

### Deploy Indoor or Outdoor

All-aluminum, fanless chassis looks beautiful and has been ruggedized for a variety of deployment scenarios, including outdoors using compatible IP-rated enclosures

## Interfaces



1. Gigabit Ethernet WAN Port
2. Gigabit Ethernet LTE/5G Small Cell or Wi-Fi AP Connectors
3. Power LED
4. SSD LED
5. Grounding Connector
6. DC-12V Power Input
7. Power Button
8. USB 3.2 Gen 1 (for external accessories)
9. RS323 (RJ45) Console Port
10. LoRa Antenna Rp-SMA Female Connector

## Hardware Specifications

- **CPU:** Intel J1900 (Quad Core, 2.42 Ghz)
- **Storage:** 2.5 inch mSATA 64Gb SSD
- **RAM:** SO-DIMM for DDR3L 1333 Mhz 4GB
- **Ethernet:** 4 x RJ45 Copper Gigabit
- **Console:** RS232 (RJ45 port)
- **Power:** 12v in (adapter provided), 20W max
- **Dimensions:** H x W x D: 45 x 135 x 130mm
- **Operating Temp:** -10° +50° C, +14° +122° F
- **Operating Humidity:** 0 – 95% relative humidity, non-condensing
- **Chassis:** Fanless, Aluminum, Grey
- **LPWAN Concentrator:** RAK 5145, 915 Mhz (US Only)
- **LPWAN Antenna:** 1.2dBi, HWR Series; RP-SMA Connector

## 3GPP Feature Specifications

- **3GPP Release:** 15 for LTE, 15 for 5G SA
- **4G Core:** MME, SGW, PGW, HSS-lite
- **5G Core:** AMF, SMF, UPF, UDM-lite
- **Stateless:** Stateless MME and S-GW allow for hitless service updates/restarts
- **User Plane T-put:** 1Gbps
- **Connected Users:** >600
- **QoS Control:** 3GPP standard Quality of Service Class Identifier (QCI)
- **CUPS Support:** native
- **Handover:** S1 & X2 handover