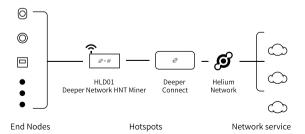
Deeper Network HNT Miner Helium LoRaWAN Dongle

Product Description

Deeper Network HNT Miner, Model HLD01 is an IoT device from Deeper Network that is compatible with Helium LongFi, combining the wireless LongFi protocol and Helium blockchain technology.

HLD01 operates with ultra-low power consumption (about 5W), the signal can cover more than 5 kilometers in an open environment, and it can be connected to thousands of LongFi terminal nodes detected within its range.

As a transmitting and receiving terminal, HLD01 must be equipped with Deeper Connect products. HLD01 sends the received LongFi terminal data packet to Deeper Connect via a USB connection, then to the Helium Miner via the Deeper Connect secure network. The Helium Miner will forward the data packet to the Helium Network Server, then the Network Server will push the packet to the application platform interface.



Instructions

1. Download the mobile APP

Android phone users can log in to the Google Play store, and iPhone users can log in to the App Store to download and install the Helium APP.



2. Deeper Connect device set-up

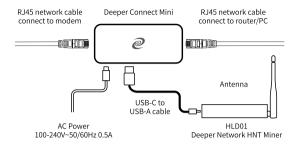
There are 3 ways to connect to the Deeper Connect devices. Please refer to the Deeper Connect instructions for details.

3. Network Connection Configuration

3.1 Device assembly

Unbox the package and take out the HLD01, a USB cable and an antenna, screw the SMA Female end of the antenna into the LongFi PR-SMA-K connector and tighten it. Use the USB cable to connect the HLD01 to the USB port of the Deeper Connect device, then the red light will turn on.

Note: For the Deeper Connect Mini with a Type-C port you will need a USBC to USBA cable. This cable is included in your Deeper Network HNT Miner order package.



3.2 AtomOS Dashboard

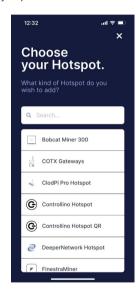
Enter into the Deeper Connect dashboard (please refer to the Deeper Connect device instructions for details), find the HNT page in the navigation bar, go to the "Software" page and click "Install", it will take about 5-20 minutes depending on the network environment. Please wait patiently for the Helium system installation to finish. After installation, the operating status of the device will be shown on the "Hardware" page. You can click "Advertise Bluetooth" to turn on Bluetooth broadcast then connect to the Helium Hotspot App on a mobile phone.



3.3 Establish App connection

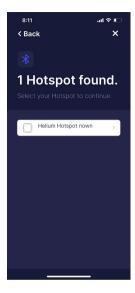
Open the Helium Hotspot App on your mobile phone, create an account and finish the registration, then click "Set up Hotspot". Select "DeeperNetwork Hotspot device" then read the network configuration instructions, or you can select "Skip" to follow the instructions on the page step by step.





 If no device is found on the search result, please click "Advertise Bluetooth" on the "Hardware" page then start scanning again. After you find the device, click the device's name to continue.





- 2) After a successful connection, follow the prompts to connect to the upstream network. Select the "Use Ethernet" connection at the bottom of the page. Now the network configuration is complete and you can click "Exit Settings".
 - On the "My Hotspot" page, you can check HNT earnings, nearby Hotspot users and other relevant information.

Size Description



Specifications

| Model | HLD01 | |
|---------------------------|--|--|
| LongFi Specifications | | |
| Frequency Plan | AS923/US915/AU915/EU868 | |
| Frequency Band | 923MHz/915MHz/868MHz | |
| Channel Capacity | 8-channels uplink, 1-channel downlink | |
| Operating Mode | Half-Duplex | |
| Output Power | ≤50mW | |
| Connection Specifications | | |
| Connection Cable | USB 2.0 power supply 5V/1A and data transmission | |
| Antenna Connector | LongFi,RP-SMA-K | |
| ВТ | BT4.0/BLE | |
| Button | | |
| Physical Description | | |
| Dimension | 90*42*20MM | |
| Chassis Type | Aluminum | |
| Exterior | Anodized silver | |
| | | |

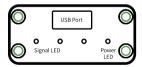
| Working Environment | |
|---------------------|---------------------------|
| Working Temperature | 0° to + 60°C |
| Storage Temperature | -20 ° to + 85 °C |
| Relative Humidity | 20% - 90%, non-condensing |
| Heat Dissipation | Aluminum Shell |

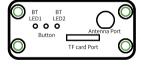
LED Indicator Light Description

LEDs of different colors represent different working states of the gateway.

| Indicator Color | Indicator Status | Instruction |
|---------------------------------|---|--|
| Power Light - Red | Gateway power-on initialization status | Device boot |
| Semaphore - Blue * 3 | The gateway is configured and operating normally. | Network connection is normal, signal strength |
| Bluetooth light - blue-green | Bluetooth is activated, scannable and connectable | Enable Bluetooth broadcast on HNT management page. |

Interface Description





What's in the Box

| Items | Description | Quantity |
|------------------|----------------------|----------|
| Device | HLD01 LoRaWAN Dongle | 1 |
| TF Card | 32GB TF Card | 1 |
| Antenna | KX-860-928-11 | 1 |
| Connection Cable | USB2.0 data cable | 1 |
| User Manual | Instructions | 1 |

Precautions

- ** The product must be handled with care during installation, and there must be no violent collisions or drops;
- ※ Try to place the device close to a window (not close to any metal mesh) or balcony, so that the LongFi antenna has a wider coverage;
- ** The product needs to be installed on a flat wall/desktop with little dust, dry and well ventilated. Avoid a location that is humid or exposed to rain or water seepage.

| Key Component Name | LongFi Antenna (1) |
|--------------------|--------------------|
| Model | KX-860-928-11 |
| Specification | KX-RP-SMA-11-1 |
| Antenna Type | External Antenna |
| dBi Rating | 3dBi |
| Antenna impedance | 50ohm |