BOBCAT

Bobcat Miner 300 USER MANUAL

Contents

1. Introduction

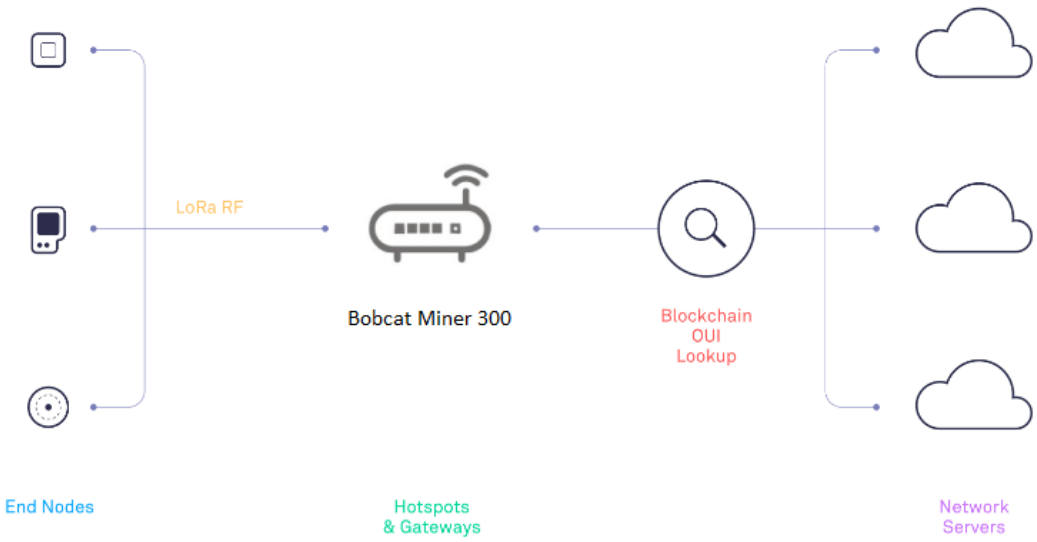
Bobcat Miner 300 is a Bobcat IoT hotspot device, which is compatible with Helium LongFi, which combines the leading wireless LongFi protocol and helium blockchain technology.

Bobcat Miner 300 is also compatible with all LongFi devices.

Bobcat Miner 300 operates with ultra-low power consumption (5W) and its signal range, can cover more than 10 miles, and provide connections to thousands of LongFi end nodes detected within its range.

2. Network Systems

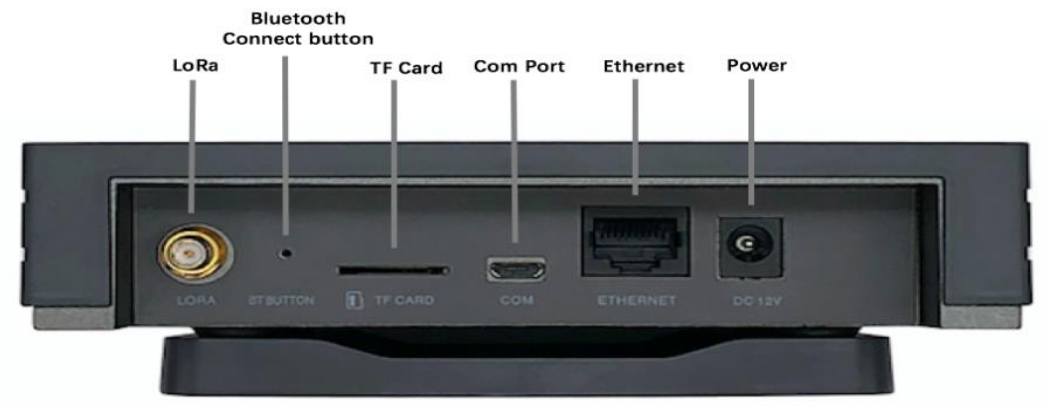
The hotspot of Bobcat Miner 300 integrates LongFi packet forwarde and Helium Miner. The hotspot does not send the received LongFi terminal data packet to the LongFi Network Server first, but forwards it to Helium Miner, and then forwards it to the Console (Network Server) via the Miner, and then pushes it to the application platform via the API interface.



3. Specifications

Model	Bobcat Miner 300
LongFi Specifications	
Frequency	US915:902-928MHz AS923:919-925MHz
Channel Capacity	US915: CH 09 AS923: CH 10
Work model	Half duplex
Output Power	≤50mW
Platform Configurations	
Flash	64GB eMMC 5.1
RAM	1GB DDR3
CPU	Quad-core A35
WIFI	802.11 b/g/n WLAN
BT	BT5.1/BLE+EDR
GPS	GPS1&BDS1
Connectors	
Antenna	LongFi,SMA-K
Ethernet	10/100M
Power	DC12V/1A
Buttom	Activate Bluetooth
Physical Description	
Dimensions（L*W*H）	141*141*47mm
Chassis Type	PC-ABS
Color	Dark Gray
Environmental	
Operating Temperature	0-60℃
Storage Temperature	-40-85℃
Relative Humidity	20%-90%,non-condensing
Heat Dissipation	Radiator Grille

4. Interface description



5. LED Indicator Description

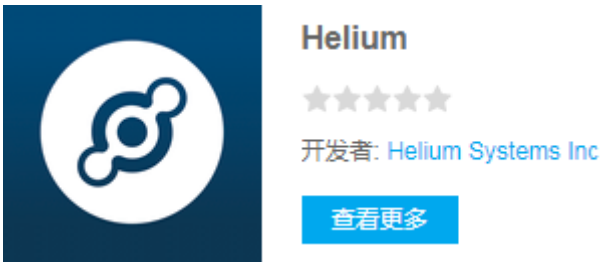
The different colors of the LEDs represent different working states of the gateway.

Indicator color	Indicator status	Description
Yellow	The gateway is in standby mode	The network is not connected
Red	The gateway power-on initialization status	
Green	The gateway is configured and operating normally.	The network connection is normal.
Blue	Bluetooth is activated, can be scanned and connected	Press BT BOTTUM for 5s to activate
---	Long off	The device is not powered on

6. Use guide

6.1 Download the mobile App

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



6.2 Configure network connection

6.2.1 Equipment assembly

Open the package, take out the device, power adapter and antenna, insert the SMA male connector of the antenna feeder into the LongFi antenna port of the device and tighten it.

6.2.2 Set up distribution network

Open the Helium App in your phone, register to enter, and select "Set up Hotspot".

Then select Bobcat Miner 300 equipment to enter, you can read the network configuration instructions first, or select "Skip" to operate step by step according to the prompts on the page.

Insert the AC plug end of the power adapter into the 220VAC mains socket, and the other end of the DC12V output plug into the power jack of the device, as shown in the figure below. After plugging in the power, the LED of the gateway turns red and then yellow.

1) Insert a pin into the BT BUTTON hole and press the button for 5 seconds, and then watch the LED turn blue to start Scan. After scanning the device, click to enter the next step;

2) If you use wifi connection, select the wifi router around Scan, select the name of the wifi router you need to access, and output the password.

3) If you use Ethernet connection, select "Use Ethernet Instead" at the bottom of the page and insert the network cable. Please note that the Ethernet connection currently only supports automatic IP acquisition.

At this step, the distribution network is completed, LED changes from blue to green.

7. Structure size

8. Package Content

9. Installation guide

Bobcat IoT hotspot devices support three conventional installation methods:

- Desktop type: Place the gateway and power supply on a horizontal plane and adjust the antenna direction, which is suitable for temporary demonstration and debugging.

- Wall-attached type: Hang the gateway on the wall through expansion pipes and screws for fixed installation, and adjust the antenna direction flexibly.

Precautions:

※ The product installation process must be handled with care, and there should be no violent collisions and drops;

※ Try to place it as close to the window or balcony as possible, so that it can receive GPS signals, and the LongFi antenna has a wide coverage;

※ The installation location of the product is on a flat wall with less dust and dryness and ventilation, and a location with rain, water seepage, and humidity cannot be selected.

FCC Caution.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Any 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.

RF warning for Mobile device:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.