



Bobcat Miner 300 User Manual



Brand Name: BOBCAT

Product Name: Bobcat IoT hotspot

Model Name: Bobcat Miner 300

Manufacture: Chengdu Just Do It Information and Technology Co., Ltd.

Supported services and functions:

BT5.1+EDR/BLE

Frequency band: 2402 - 2480 MHz

Antenna type: PCB Antenna

Antenna Gain: 1dBi

2.4G WIFI

Operation Frequency: 802.11b/g/n(20MHz): 2412~2472MHz

Antenna type: PCB Antenna

Antenna Gain: 1dBi

LoRa:

Operation Frequency: 863MHz~870MHz

Antenna type: External antenna

Antenna Gain: 4dBi

Max average out put power in Watt (TP)

BT:9.64 dBm=0.0092(W)

BLE: 9.6dBm=0.0091(W)

2.4G WLAN: 12.69dBm=0.0186(W)

LongFi: 12.88dBm=0.0194(W)

Introduction

Bobcat Miner 300 is a high-efficiency hotspot. It is compatible with the leading wireless LongFi protocol. The Bobcat Miner 300 is also compatible with all LongFi devices.

The Bobcat Miner 300 runs on ultra-low power consumption (5W) and its signal range can cover up to 10+ miles, providing connectivity to tens of thousands of LongFi end nodes detected within its range.

In previous tests, 100 deployed devices have proven sufficient to cover a city area of 10km x 10km, broadcasting the LongFi network.

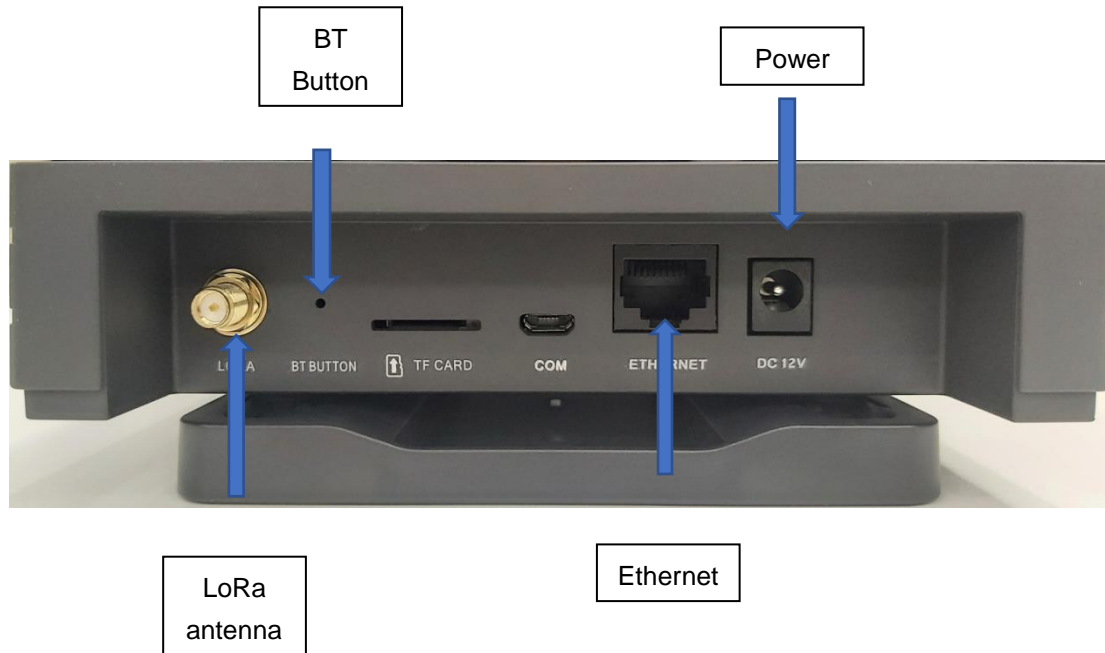
Features

- Rockchip RK3566 ARM Quad-Core Cortex-A55 1.8GHz
- Onboard 2GB LPDDR4/LPDDR4X and 64GB eMMC
- Integrated WiFi, Bluetooth and LoRa function
- Support Ethernet, RTC
- 1 x TF, 1 x USB2.0 OTG, 1 x UART

Precautions

- ✧ During the installation of the device, please handle it with care and no collision or fall to prevent the product from being damaged or the parts falling off, which may cause the device to work abnormally.
- ✧ When installing the device, please try to get close to the window or balcony to receive GPS signals as long as your personal safety is ensured, the Bluetooth connection between the mobile phone and the device is good, and the device network is well connected.
- ✧ It is recommended to install this device in a spacious environment to ensure good LongFi signal transmission and wide antenna coverage.
- ✧ The place where this device is installed must be stable, clean, and ventilated. Do not choose a place with water, rain or humidity etc.

Instruction



1. Take out the Bobcat Miner 300 and accessories from the package, install the LoRa antenna and hanger, you can put the device directly on a stable desktop or hang it on a solid wall.
2. If you will use a wired network on this device, please plug the network cable into the ETHERNET connector. If you use WiFi, please configure it in the mobile APP in the next steps..
3. Turn on the Bluetooth and GPS function of the mobile phone.
4. Search the Helium mobile APP from the Google Play store or Apple App store, download and install it. After the installation is complete, please register and log in.
5. Select setup "Hotspots" in login page and then select "Bobcat Miner 300". At this time, you can choose to consult the network configuration guide or select "Skip" and proceed to the next step as prompted.
6. Plug DC adapter into the Power hole, the indicator will light red and then yellow.
7. At this time, please insert the pin into the BT BUTTON hole on the back of the device and hold it for 5 seconds until the indicator light turns blue.
8. When the indicator light is blue, please click "Scan my Hotspot" on the mobile APP. When the Bobcat Miner 300 is scanned, click on the device and perform network settings. To use WiFi, please enter the SSID and password of the wireless network which will connect; if you use a wired network, please select "Use Ethernet Instead". If the network connection is successful, the indicator light will turn from blue to green.
9. After completing the above operations, the indicator light of the machine is green, which means that Bobcat Miner 300 has been successfully installed.

Dimensions



Package Content



Bobcat Miner 300

LoRa Enhanced Antenna

Power Adaptor

Screws

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.

IC Warning

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

This equipment complies with IC 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.

This radio transmitter [27477-MINER3002] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Key component name	LongFi antenna (one)	LongFi antenna (two)
Model number	AR113-3590-001-00	BGS-903D
Specification	Sucker antenna-RG 58(Black L: 1M) R.P SMA	902.3 – 915.1MHz(200KHz)external antenna 903 – 927MHz external antenna
manufacturer	WIESON TECHNOLOGIES CO., LTD.	shenzhen bogesi communication technology co.,Ltd.
Antenna type	External antenna	External antenna
Antenna Gain	4dBi	4dBi
antenna impedance	50ohm	50ohm