iBeLink N3Mini Specification and Operation Guide

This document is mainly used for the configuration and usage of the iBelink N3Mini mining machine, and there are also some useful suggestions which may reduce your loss.

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Version Update Information

Date	Explain	Version

Packing List

Item	Component	Number	Introduction
1	Machine Box	1	Size 233 mm(L) * 150 mm(W) * 248 mm(H)
2	Technique & Manual	1	This document

0 Declaration

1. iBeLink does not assume any responsibility for any damage or loss caused by force majeure.
2. iBeLink does not assume any responsibility for any damage or loss caused by unauthorized modification of software and hardware.
3. iBeLink does not assume any responsibility for any damage or loss caused by artificially adjusted overclock (set the specification Frequency over the maximum) or improper temperature.
4. iBeLink does not assume any responsibility for any mining machines sold through unauthorized sales channels.
5. iBeLink does not assume any responsibility for the loss of hash rate caused by nonmainstream or abnormal ore pools.
6. iBeLink does not assume any responsibility for any loss caused by the price fluctuation of digital currency.

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1 Product Features

- Hashrate: 1.8TH/s ±5% | 1.3TH/s ±5%
- Power: 295W ±5% | 185W ±5%
- POW algorithm: Eaglesong | CKB
- Operatue temperature: 0°C to 40°C
- Network: Ethernet
- Power Input: DC 12V
- Size: 170 mm(L) * 88 mm(W) * 178 mm(H)
- Weight: 2.17KG
- Applies with the main stratum protocol
- Applies with restarting mining software or system using the web interface
- Able to monitor error with independent hashrate blades and also can use [**restart**] button to recover system automatically.
- Provides settings and automatic switching of the main mining pool and multiple backup mining pools.

2 Guidelines

Please first upgrade the miner to the latest firmware on the official website according to section 2.8. After connecting the network cable and power cord, power on the device (note that the output of PSU is left as GND and right as Positive of DC 12V, do not connect it in the opposite direction). The front panel lights up with two LED lights, one red and one green. After about One and a half minutes, the red light goes out and flashes green. At this point, the machine enters normal mining operation. If the red light remains on, please check if the network is normal.

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Fig. 1 Real Miner

2.1 Search Device

The MinerTool can be used to discover the miner within the LAN network. The MinerTool can be downloaded from the following link (Figure 2), https://en.ibelink.com.hk/xiazai/

Fig. 2 MinerTool

2.2 Login Miner

Using a PC in the same LAN network(within the same router), enter the IP address of the mining machine in the browser and press Enter to enter the login page (as shown in Figure 3). Enter the username and password: admin, and click the "Enter" button to log in to the mining machine.

Fig. 3 Login

2.3 Mining Status

After login the miner's web system, you can see the mining machine backend monitoring status homepage (as shown in Figure 4).

Fig. 4 iBeLink N3Mini mining status

The five areas on the monitoring status homepage as the following basic information of the mining machine:

1. iBeLink N3Mini console(status monitoring, mining machine panel, configuration, log management)
2. Current time, current user, miner's logout button.
3. Mining machine operation duration, real-time hash rate, average hash rate, rejection rate, fan speed, and hash rate curve.
4. Mining pool statistics information.
5. hash board number, number of chips, running time, running status, hash rate, number of accepted nonces, number of rejected nonces, chip temperature (high/low/average), running pll, voltage, and chip status.

2.4 Dashboard Information

The Dashboard information as Fig. 5

Fig. 5 iBeLink N3Mini Dashboard

The three areas on the dashboard of the miner:

1. Type of the miner, serial number, operating system, hardware version, kernel version, software version, version release time, runtime, and average load.
2. Memory (usage/availability/cache)
3. Network (Type/IP Address/MAC Address)

2.5 Pool Setting

1. Click on the Settings, Pool Setting to enter the pool setting homepage, as shown in Figure 6:

Fig. 6 iBeLink N3Mini Pool Setting

Add the mining pool URL, workername or coin address, and password in the mining pool setting interface in sequence. After completion, click the Config button to add the mining pool to the miner. Three pools can be added, one as the main pool and the other two as backup pools.

2. Click on Settings, Network Settings to enter the network configuration page, as shown in Figure 7:

Fig. 7 iBeLink N3Mini Networking Setting

The network settings are divided into wired connection and wireless network connection, which can be connected according to the actual connection method. It is recommended to use wired connection, and wireless needs to purchase a wireless network card that supports the 2.4GHz frequency band separately.

2.6 Hashboard Setting

On the hash board configuration page, you can configure the operating mode of the miner. The "efficiency mode" has lower hashrate and power consumption, but higher energy efficiency; The 'performance mode' has higher hashrate and power consumption, but lower energy efficiency. The configuration is shown in the following figure.

Fig. 8 Running mode of hash board

It should be noted that users should not modify the default frequency and voltage settings, otherwise it may cause the miner to malfunction or be damaged.

2.7 Other Setting

If the temperature of the chip over the temperature threshold setting, the miner will shutdown and restart. please do not modify this setting, otherwise it may cause damage to the mining machine.

Fig. 9 Temperature threshold setting

2.8 Logs and update

1. The kernel logs and miner logs are only for reference during device debugging, as shown in the following figure.

Fig. 10 the log of kernel

Fig. 11 the log of miner

2. Click on the Logs, Upgrade to enter the update homepage, as shown in Figure 12.

Fig. 12 iBeLink N3Mini update

2.1 Due to the possibility of bugs in the production testing version or subsequent firmware optimization, it is recommended that users check the consistency between the machine firmware version and the latest version on the official website as soon as they receive the mining machine. If it is lower than the official website version, they need to download the latest version on the official website and upgrade it.

2.2 You can upgrade through the management tool MinerTool (which can be downloaded from the official website). Search and select the miner to update, click "Update Machine" and click "SELECT FILE" to select the file from official web site(https://en.ibelink.com.hk/xiazai/), such as V4.10.18 on Figure 13. Click "Update" to update the miner. The miner tool will give update information on the left information window of the tool. Please refer to Figure 14 for details

Fig. 13 firmware of the website

Fig. 14 firmware update

3. Click on the password to enter password management, as shown in Figure 15.

Fig. 15 iBeLink N3Mini Password management

Enter the current password, enter the password that needs to be updated, confirm the new password, click Update, and the new password is successfully updated.

4. Click to Reset Device to enter the mining machine reboot page, as shown in Figure 16.

Fig. 16 iBeLink N3Mini Reboot

This interface Reboot button can reboot the mining machine (note: any changes made to the

mining machine will automatically reboot the mining machine)

3 FAQ

3.1 Can iBeLink N3Mini mining machine be over clocked?

No, don't do this. Overclock has a high possibility of causing permanent damage to the ASIC chip.

3.2 How to maintain the efficient operation of iBeLink N3Mini mining machine?

Keep this miner running at a cool ambient temperature as much as possible. Maintaining the ambient temperature below 25°C can achieve good efficiency.

3.3 Why can't my browser configure the miner's parameters?

It is recommended to use Google's Chrome browser to save the miner configuration.

3.4 Why does the mining software restart automatically?

The mining software supports automatic recovery from network or driver errors and has a hardware watchdog to monitor the entire system. When an abnormality is detected, the mining software automatically restarts to try to recover itself, so it’s normal that the mining software occasionally restarts automatically.

3.5 How to recover mining software from a crash?

Update the device as 2.8.

3.6 Why the hash rate results are different in different mining pools?

The mining software performs hash rate statistics based on the returned nonce. The difference in the difficulty of the mining pool will result in a different number of nonce, which will affect the hash rate statistics and lead to different results.

3.7 Why my worker is not in the main mining pool but in other mining pools sometimes?

When multiple mining pools are configured, the mining software will mine in the most important mining pool (main mining pool), but if the main mining pool loses connection due to the network

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and other reasons, the mining software will automatically switch to standby pool to continue mining.

3.8 Main Eaglesong/CKB pool

stratum+tcp://ckb.f2pool.com:4300
stratum+tcp://ckb.antpool.com:8018
stratum+tcp://ckb.ss.dxpool.com:6600

4 iBeLink N3Mini Technical Support Information

http://ibelink.com.hk/zhichi/
support@ibelink.com.hk

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