KAS KS7 LITE

MANUAL

ICERIVER®

Table of Contents

1.General Guide

We recommend reading this manual thoroughly before operating the product, and retaining it for future reference.
For more information, please refer to https://www.iceriver.io/tutorial/.

1.1 Installation Guide

1. Check whether the packaging appearance is deformed, whether the server appearance is deformed or damaged, check the fan and cable, and check whether the server has any abnormal noise. Please do not disassemble the server by yourself, otherwise the server warranty will be invalidated.
2. Before installing the server, check for any physical interference causing damage to the machine and be cautious of the risk of electric shock.
3. Please refer to the installation manual before connecting the power supply https://www.iceriver.io/tutorial/.
4. The socket should be installed near the server and easily accessible.
5. Use stable voltage.
6. Before powering on, please check if the cable connections are securely connected and correctly aligned, and pay attention to electrical safety.
7. The server should not be directly connected to a primary power source, and power should be obtained through double insulation or reinforced insulation safety isolation transformers or equivalent devices (only applicable to equipment without power supply).
8. The server uses web login, with the default account being “admin” and password being “12345678”. Please change the server password after the first startup. After completing the password change, you need to log in again with the new password.

1.2 Operating Environment

1. Due to the high surface temperature of the server during operation, avoid covering the server surface or placing flammable or explosive materials around it, and ensure that the ventilation holes are not blocked.

2. Do not place the server near water or expose it to humid environments. Please keep the environment clean to prevent dust, hair, willow catkins and other foreign objects from entering the server and causing damage. Do not insert any objects into the slots of the server. This may damage circuit components, leading to fire or electric shock. Do not splash liquids onto the server.

3. The server should be placed in an environment below an altitude of 2000 meters to operate. High altitude can lead to thin air and reduce heat dissipation efficiency, increasing the risk of

power breakdown. At the same time, it will accelerate the aging of the fan, affect stability, and shorten the lifespan of the equipment.

4. Leave some space around the server. The recommended operating temperature for the server is 0-40 °C, and the humidity is below 90% RH. Be careful to avoid condensation at lower temperatures.

5. The server should be placed in a secure location. Falling or dropping may cause damage.

6. This server is not suitable for places where children may be present.

1.3 Maintenance

1. If the server emits strange smells, sounds, or smoke, please immediately unplug the power cord and contact the service center.

2. Unauthorized replacement of the power supply is prohibited. Any server malfunction caused by unauthorized power supply replacement will not be covered by the warranty.

3. Do not allow hands or fingers near moving fan blades.

4. Unplug the device during thunderstorms or if it will not be used for an extended period. This will protect the server from damage caused by power surges.

5. Do not overload the power outlet or power cord, as this may cause a fire or electric shock.

6. Do not open the server to avoid the risk of electric shock. For safety reasons, only professional service personnel are authorized to open the server.

7. Never hit or drop the product under any circumstances.

8. When a new firmware update is released on the official website, it can be downloaded and updated via the web interface.

9. If the server experiences abnormal conditions, you can restore it to factory settings using the reset button.

10. If you need to clean the server, disconnect the server from the power source before cleaning. Do not use any liquid or aerosol cleaners. Only use a dry cloth or brush. Ensure no cleaning agents leak into the product. Any issues caused by improper cleaning will not be covered by the warranty.

1.4 Basic Troubleshooting

1. If any of the following conditions occur, the server must be inspected by professional service personnel:

- The power cord or plug is damaged
- Liquid has seeped into the server
- The server has been exposed to a humid environment
- The server has been dropped or damaged
- The server shows obvious signs of damage
- The server does not operate normally or as described in the manual

2.The server will not power on after connecting the power and switching it on:

- Check if the power connector is loose or disconnected, and ensure the power cord is securely plugged in.
- Verify that the input voltage is within the specified operating range.

3.The network port light is off:

- Check if the network cable is properly plugged in

4.The server is overheating:

- Check if the ambient temperature is too high
- Check if the inlet and outlet of the fan are blocked

1.5 Machine Repair

1. All sales are final. Returns and exchanges are not accepted, except where required by applicable consumer protection laws.

2. A 180-day warranty is provided starting from the shipping date. According to the ICERIVER warranty policy, if the server needs to be returned for repair within the warranty period, contact customer service to submit a repair ticket. ICERIVER will cover the return shipping cost for repaired equipment.

3. The following conditions are not covered by the warranty:

- Product damage caused by improper installation, use, and maintenance cannot be repaired.
- Product damage or malfunction caused by dropping, misuse, negligence, or improper operation.
- Product damage caused by physical interference, including but not limited to moisture, fire, flood, lightning strikes, transportation, and extreme environments.
- Products without original barcode or SN label, or products with altered, damaged, or removed labels.
- The server's firmware has been modified by third party.
- Removal or replacement of any components by the customer without official prior approval.
- Damage to the product, device, or any part caused by moisture, oxidation, corrosion, or short circuits. Damage to the server, board, or components caused by water immersion or humid environments.
- Missing pins or PCB damage caused by improper packaging or handling.

- Use of harmful substances like oil or cleaning agents that pose a health risk during repair.

4. If your server cannot operate according to the official standard operating terms and conditions, please submit a ticket at the following website： https://support.iceriver.io/requests/new/

5. Please provide the original order ID, a photo of the server's SN tag showing the hashrate, detailed information about the server status, and screenshots as a reference. If it is confirmed after troubleshooting that the server has a defect and your ICERIVER representative confirms that the server has a defect, please return the component to ICERIVER according to the following detailed information.

a) Log in to your ICERIVER account.

b) www.iceriver.io/In the top menu, click on "Support">>"Repair Order">>"Create Order"

c) Fill in all relevant fields.

Please provide the correct server SN, item list, and tracking number related to the warranty parts, otherwise the package will be rejected.

6. The product owner will bear the cost of returning the product, parts, or components to our service facility. If the return is within the warranty period, ICERIVER will cover the shipping cost to return the product.

7. We are not responsible for any losses incurred during transportation by carriers chosen by the customer. It is highly recommended to use internationally reputable logistics companies to minimize such risks.

If further support is needed, please contact professional customer service at:
https://support.iceriver.io/requests/new/

1.6 Disclaimer

The information contained in this manual is subject to change without notice. The manufacturer makes no representations or warranties, either express or implied, with respect to the contents of this document, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. The manufacturer reserves the right to revise this publication and to make changes to its content at any time without obligation to notify any person or organization of such revisions or changes.

1.7 FCC Compliance Statement

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.

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1.8 EU Compliance Statement

This product, including any applicable accessories, bears the “CE” marking and complies with relevant harmonized European standards under Directives 2014/30/EU (EMC), 2014/35/EU (LVD), and 2011/65/EU (RoHS).

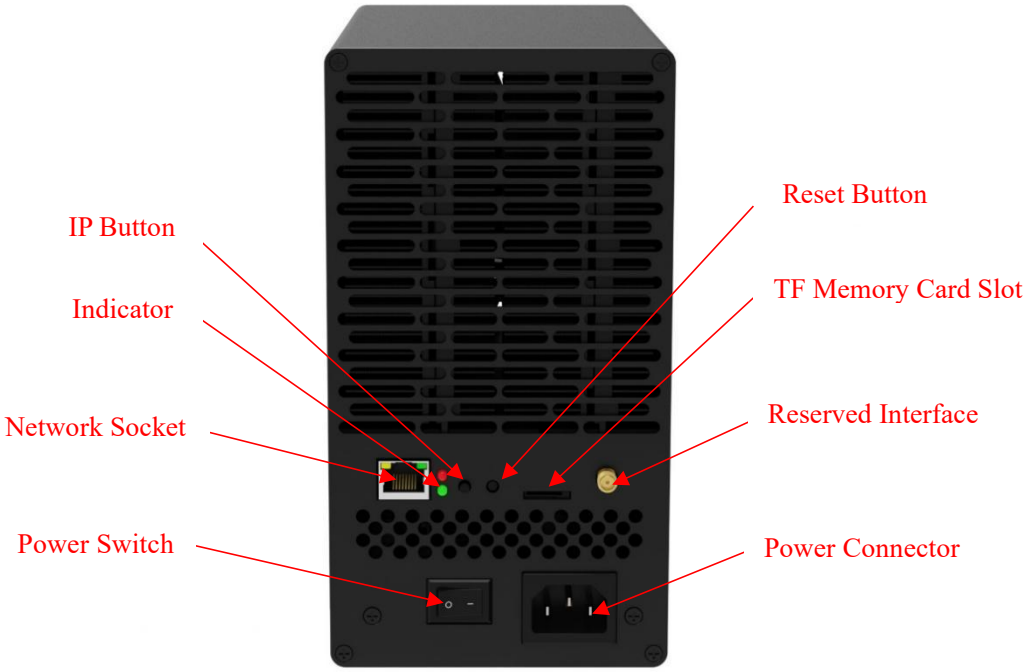
1.9 Directive 2012/19/EU (WEEE Directive)

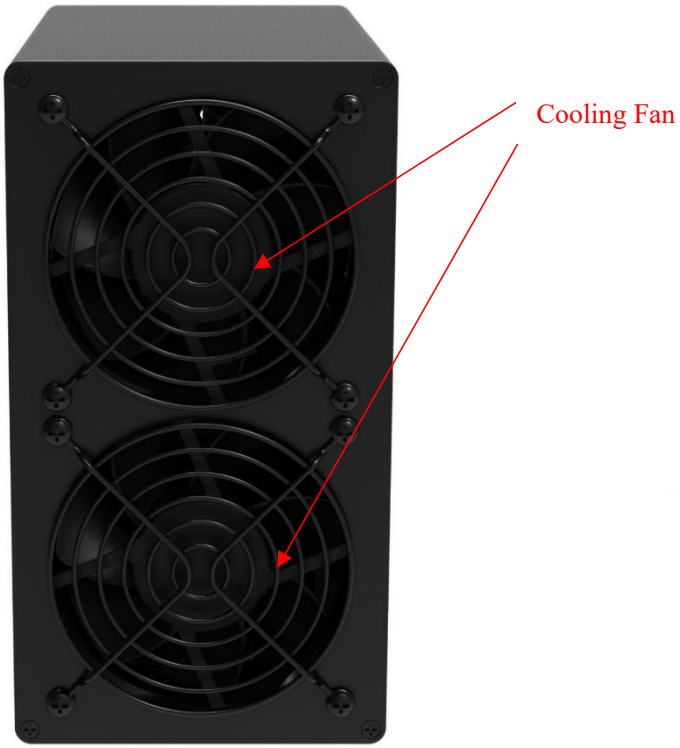
This symbol indicates that this product must not be disposed of with regular household waste in the EU. To reduce potential harm to the environment and human health, please recycle it responsibly. Return the device through an authorized collection point or retailer for environmentally safe disposal.

2. Product Overview

2.1 Appearance

KAS KS7 LITE:





Interface specifications:

Power interface	AC Power input： 100V--240V 50-60HZ

***Indicator Description:**

Indicator Status	**Meaning**
Red light off, green light blink	Machine in normal operation
Green light blinking, red light blink rapidly.	High temperature alert or network abnormal （see 3.1.7 for more details）
Green light blinking, red light blink slowly	Low machine temperature alert（see 3.1.7 for more details）

Product Description:

KAS Hashrate	4.2TH/S(±5%)
Wall Power	500W/h(±10%)
Dimension	205×110×202(mm)
Net Weight	4.02KG
Connection	ethernet
Operating Temp	0~40 ℃

3. Function

3.1 Start up

3.1.1 Precautions

- Check whether there is physical interference causing damage to the machine and beware of electric shock.
- Please check if the cable connection is firm before powering on, and pay attention to the safety of electricity.
- Keep the hash board and other parts away from water or exposed to moisture.
- Please make sure the ambient temperature is between 0-40°C.
- Machines should be operated in environments below 2000 meters in altitude.
- Please make sure to be in an air convection environment.
- Please avoid covering the surface of the machine due to the high temperature of the machine surface during operation.
- Do not place flammable and explosive substances around the machine during operation.
- Please make sure the humidity of the environment is below 90%.
- Please keep the environment clean to prevent dust, hair, willow and other foreign objects from entering the machine and causing damage to the machine.
- Use a stable voltage.
- Please place the machine horizontally.
- The machine, hash board or board parts being crushed or burned due to improper environment is not covered by the warranty.
- Customers should not disassemble the machine by themselves without permission from ICERIVER after-sales team.

3.1.2 Check before start up

Preliminary inspection of the machine before operation:

- Check the appearance of the package for deformation.
- Check the appearance of the machine for deformation and breakage. Also check the fan and cable.
- Check if there is any strange sound in the machine.

*Note: Please do not disassemble the machine by yourself. The machine will not be covered by the warranty if the user disassembles the machine without permission.

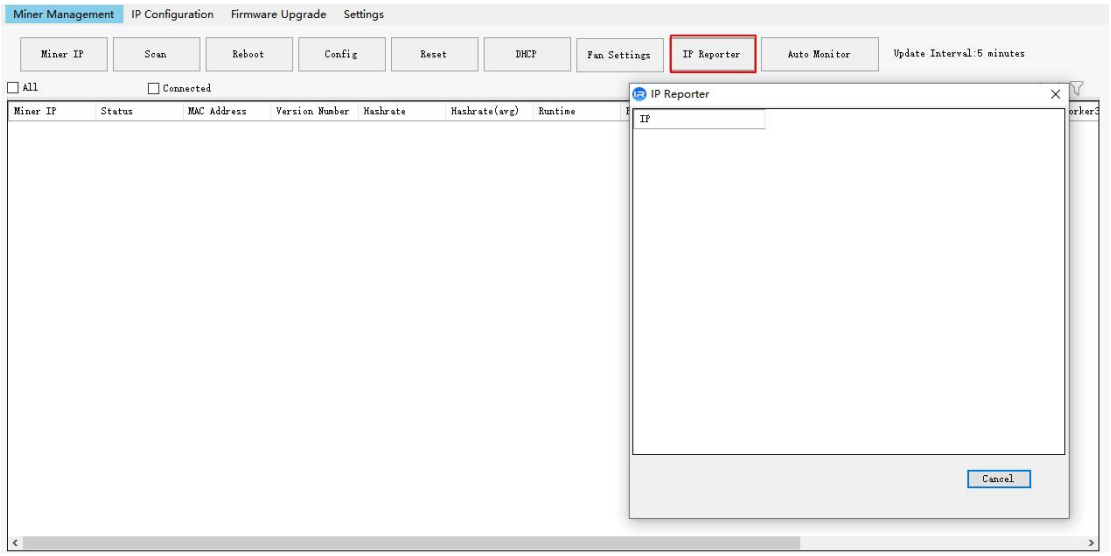
3.1.3 Boot

Please connect the machine to the Ethernet first, and then plug in the power cord. During the startup process, the indicator light will stay solid. After approximately 1 minute, the green status light will start blinking, indicating that the miner has successfully started.

3.2 Access Machine

3.2.1 Obtain Machine IP

1. Obtain the IP address of the machine through download and unzip the batch processing tool provided by our company (please refer to the official website to download: *https://www.iceriver.io/tutorial/*).
2. Click the [IP Reporter] button and long press the machine's button for 1-2s after the pop-up window to get the machine IP.

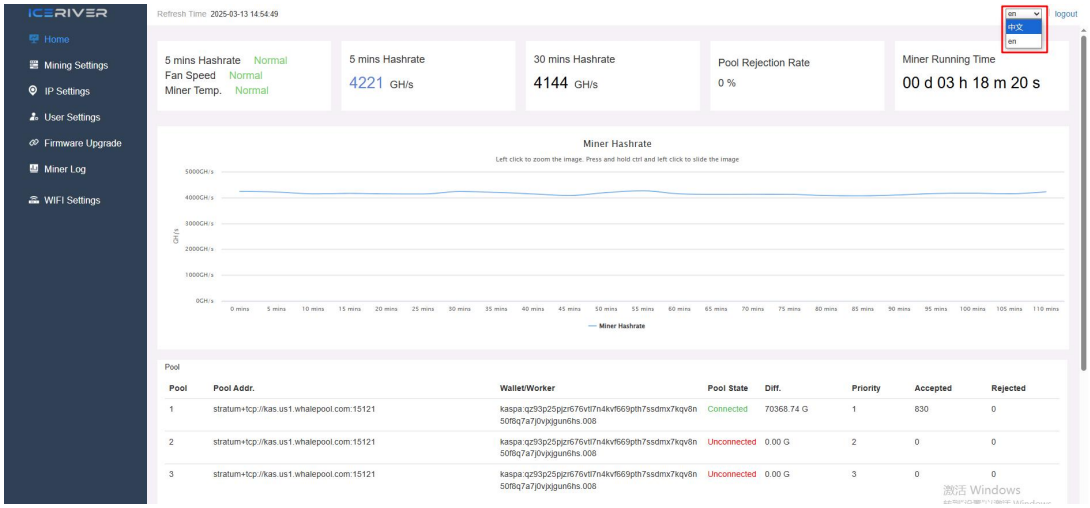


3.2.2 Access Machine

1. Open your web browser (Chrome browser is recommended) and enter the machine's IP address in the address bar. You will see the following interface.
2. Use the default username "admin" and the default login password "12345678" to log in to the machine.

3.3 Language Switch

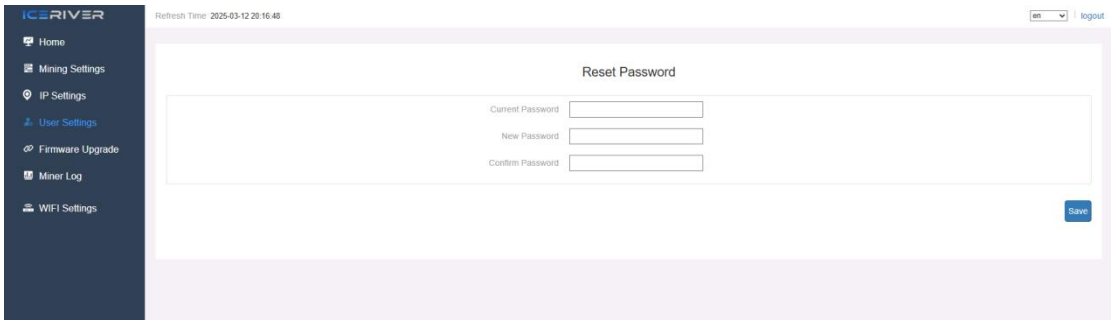
1. Click [Language] in the upper right corner of the page to switch between Chinese or English.



3.4 Change Password

To protect your property security, please change the miner password after the first time you turn on the machine.

1. Click [User Settings], enter the current password and the new password as shown below, and click the [Save] button.

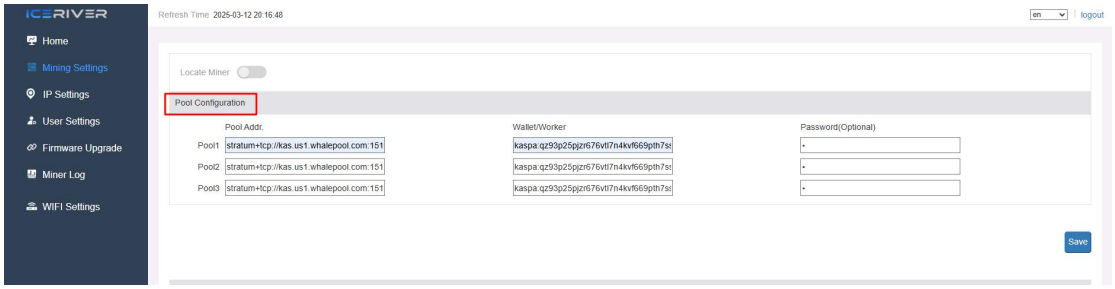


2. After the password change is completed, you need to log in again with the new password.

3.5 Configuring mining pools and wallets

3.5.1 Add

1. Go to the [Mining Setting] page and find [Pool Configuration].



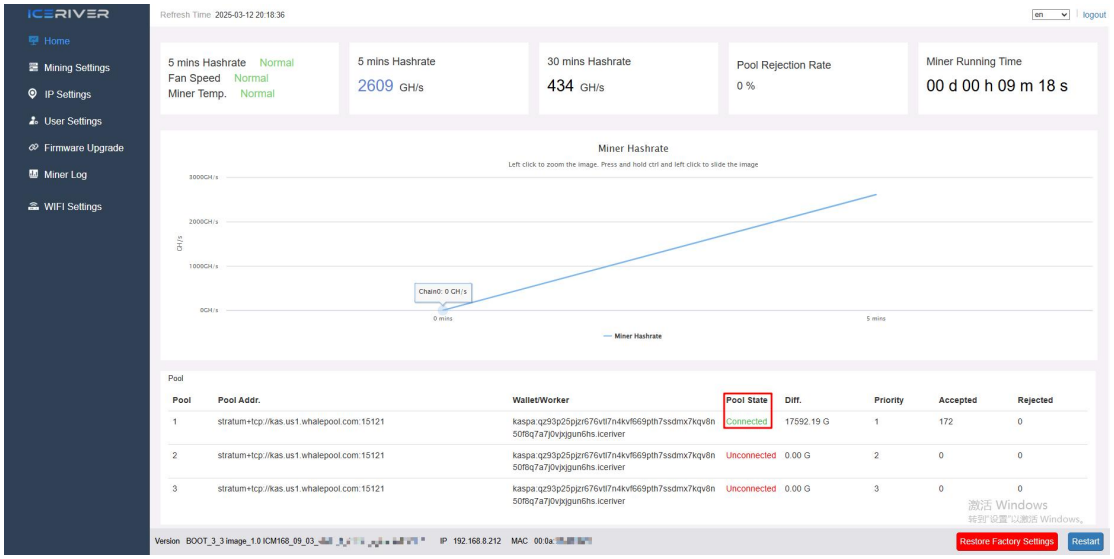
You can configure three mining pools with the following reference example:
Pool 1：stratum+tcp://kas.eu1.whalepool.com:15121
Wallet/Worker：
kaspa:ndm9tlsgdmrcha4pg83lwwrka0gjya38teh0g5qc4prapavmh7rkyxuzd6w2w.worker
Wallet Address
Worker

* The password is optional and can be set or not, it does not affect mining.

2. Click Save and a configuration success window will pop up.

3. After successful configuration, click [Reboot] and wait for the machine to reboot (do not power off during the reboot process).

4. The information on the home page shows that the pool is " connected ", which means the pool is successfully connected.



*The default pool configuration is the configuration of our company when testing, please configure your own mining wallet address before you start mining, please do not use the default configuration.

*If pool 1 is not connected, the machine will automatically connect to pool 2. If pool 2 is not connected, the machine will automatically connect to pool 3.

* If the configuration fails you can configure it again and restart it.

The following mining pools are known to be compatible, and will be continuously updated:

Whalepool	PPLNS	stratum+tcp://kas.eu1.whalepool.com:15121
Humpool	PPLNS	stratum+tcp://kas.eu1.humpool.com:18083
Kaspa-pool	PPLNS	stratum+tcp://eu1.kaspa-pool.org:4444
	SOLO	stratum+tcp://eu1.kaspa-pool.org:4441
Woolypooly	PPLNS	stratum+tcp://pool.eu.woolypooly.com:3112
	SOLO	stratum+tcp://pool.eu.woolypooly.com:3113
Herominers	PPLNS	stratum+tcp://ru.kaspa.herominers.com:1210
	SOLO	stratum+tcp://ru.kaspa.herominers.com:1210
K1pool	PPLNS	stratum+tcp://eu.kaspa.k1pool.com:23222
	SOLO	stratum+tcp://eu.kaspasolo.k1pool.com:23114
Accpool	PPLNS	stratum+tcp://acc-pool.pw:16061
F2pool	PPLNS	stratum+tcp://kas-euro.f2pool.com:1400
Kryptex	PPLNS	stratum+tcp://kas.kryptex.network:7777/6666
tw-pool.com	PPLNS	stratum+tcp://stratum.tw-pool.com:10007
	PPLNS	stratum+tcp://stratum2.tw-pool.com:10005
2miners	PPLNS	stratum+tcp://kas.2miners.com:2121
NiceHash		stratum+tcp://kheavyhash.auto.nicehash.com:9200

* The above mining pool information is the mining pool address we used for testing purposes.

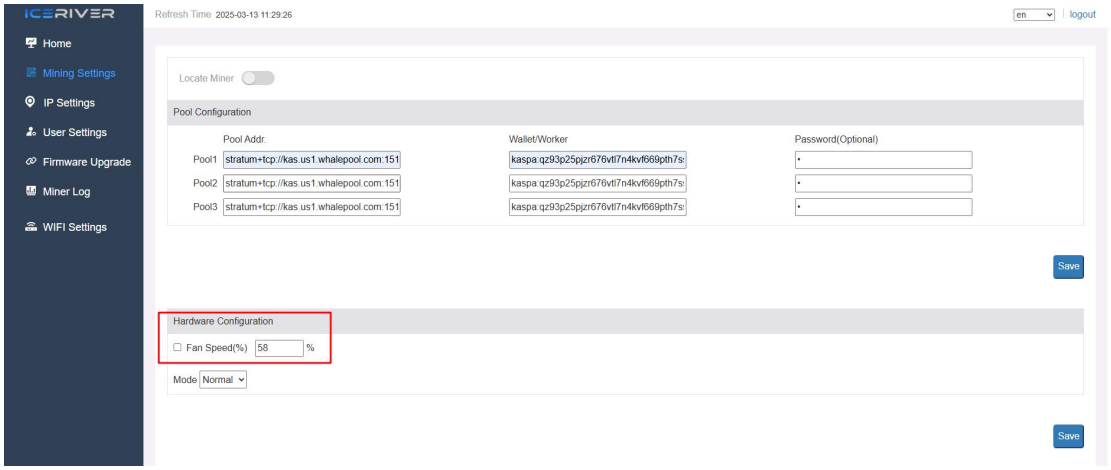
Before connecting to the mining pool, please log in to the respective mining pool's official website and check if the mining pool address has changed.

3.5.2 Remove

1. Clear the information in [Pool Configuration] and click [Save] to remove the mining pool.

3.5.3 Adjusting fan speed

1. Find [Hardware Configuration] in [Mining Setting].
2. Check [Fan Speed].
3. Select the fan mode, or manually adjust the speed, click [Save] after modification.

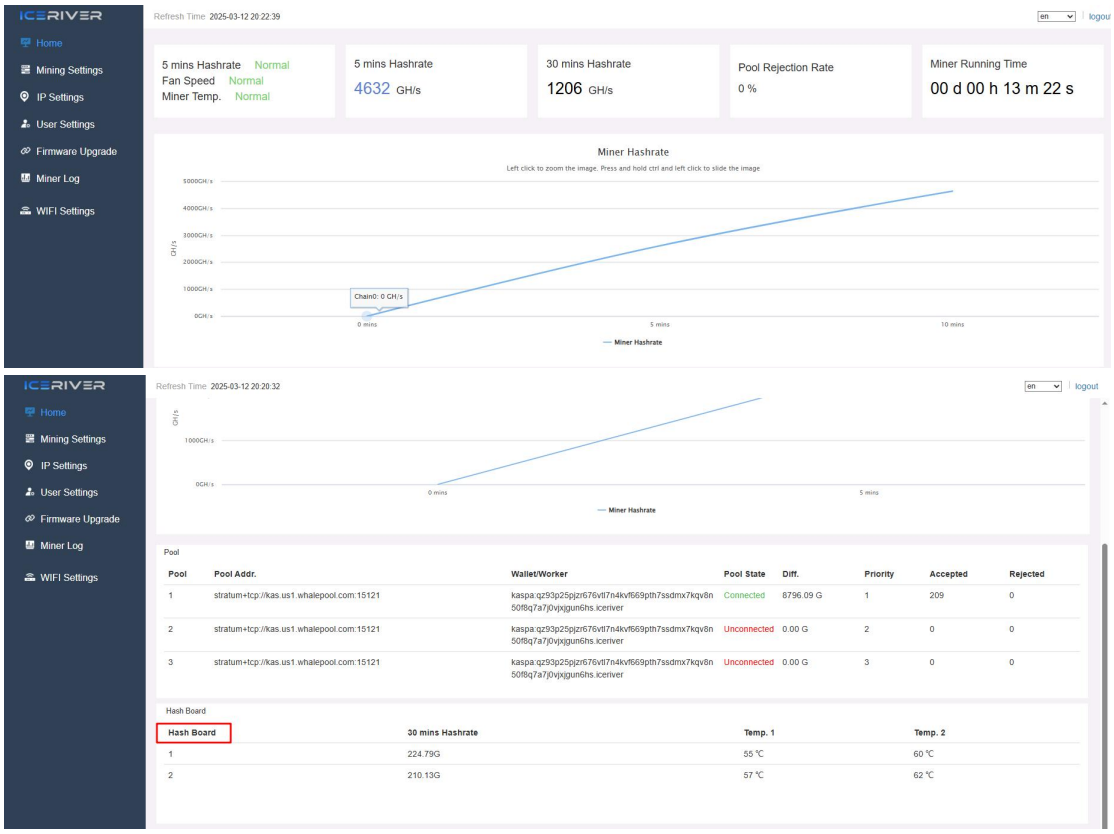


* After power on, the fan will start only after successfully connecting to the mining pool and mining program starts.
* The machine will stop mining in sleep mode.

3.6 View Hashrate Chart

1. Click [Home] to view the Hashrate Chart.

* After 5 minutes of connecting to the pool, you can view the machine's hashrate and hashrate chart, the chart is updated every 5 minutes.
* Under Hash board, you can view the machine temperature and fan speed, which can monitor the working status of the machine in real time.

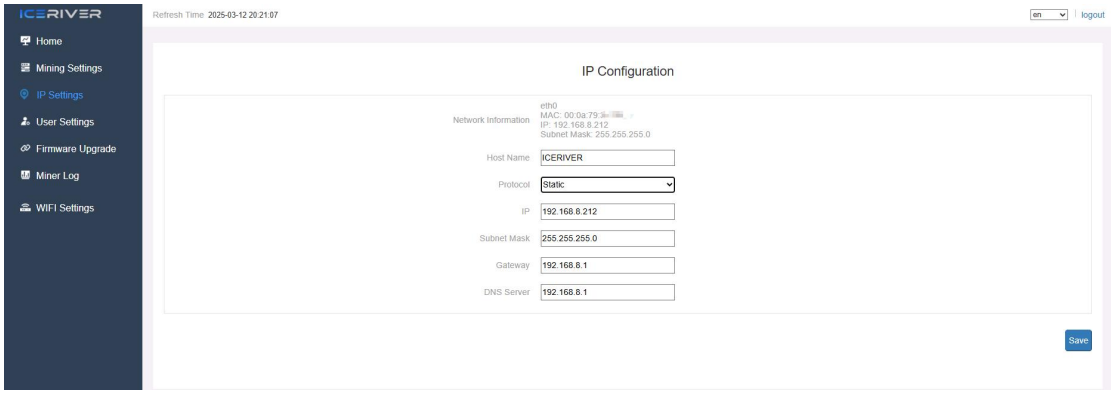


3.7 Network Settings

The factory default is DHCP mode, users can set the IP mode according to their needs.
Set static IP:

1. Click [IP Settings], select *Static* in [Protocol], fill in the IP information according to the user, and then click [Save] button.

2. After saving the configuration, click [Reboot] and wait for the machine to reboot (do not power off during the reboot).



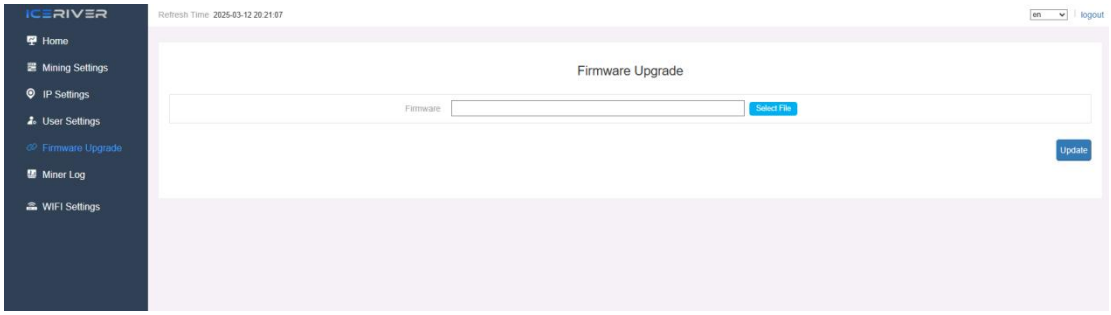
3.8 Firmware Upgrade

When the official website releases a new upgrade package, download it and upgrade it via Web.

1. Click [Firmware Upgrade], select the official upgrade package and click [Upgrade].

2. Wait for the pop-up window to show success and then click [Reboot] and wait for the machine to reboot (do not power off during the reboot process).

3. After reboot, the firmware upgrade is successful.



3.9 Factory Reset

When the machine has abnormal conditions, you can restore the factory settings through the Button on the machine.

1. After the green status light starts blinking following the power-up (1 minute after power on), press and hold Button for 20 seconds until the red status light starts blinking. Waiting until the red status light stops blinking and wait for the machine to reboot (do not power off the machine during the reboot process).

2. After the machine reboot, reconfigure the mining pool and wallet to resume mining.

3.10 Shutdown/Reboot

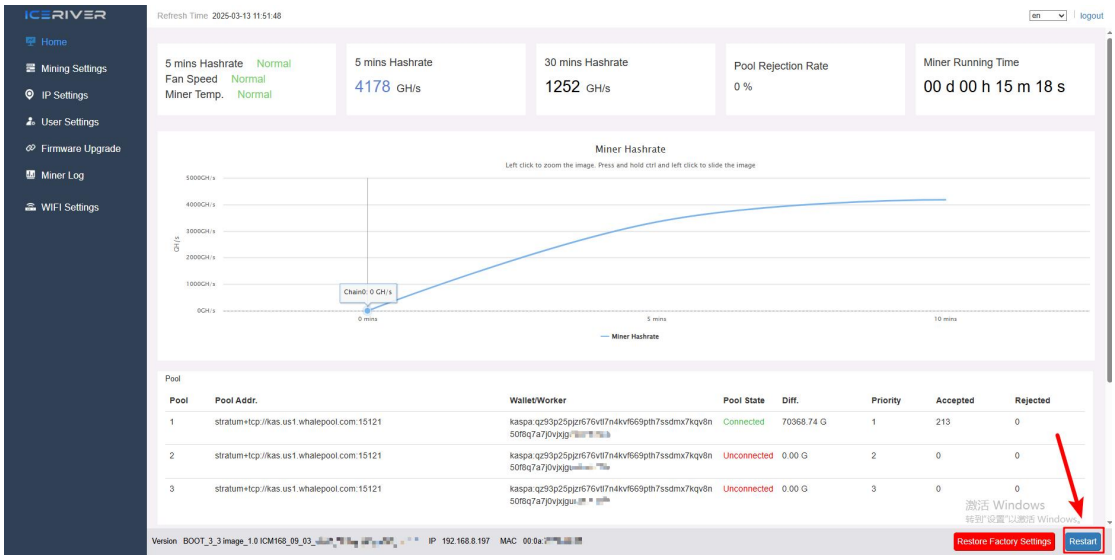
3.10.1 Shutdown

1. To shut down the machine, press the power button if available. Alternatively, unplug the power cord to ensure complete shutdown.

3.10.2 Reboot

1. Click [Reboot] in the bottom right corner of the home page, then click [OK] to confirm, then reboot the machine.

* Note: Do not power off the machine during the reboot process.



3.11 Viewing Miner Logs

Miner logs are an important tool for recording the operating status of your device. They help users monitor performance, quickly identify faults, and analyze root causes. After logging into the miner, click on the "Miner Log" option in the backend to view the log content.

3.11.1 Log Functions and Uses

Miner logs record operational data of the miner and are used for:

- Monitoring the miner's status (such as hashrate, temperature, fan speed).
- Diagnosing common faults (such as network disconnections or hashboard errors).
- Providing historical data to trace the root cause of issues, making maintenance and optimization easier.

3.11.2 Log Categories

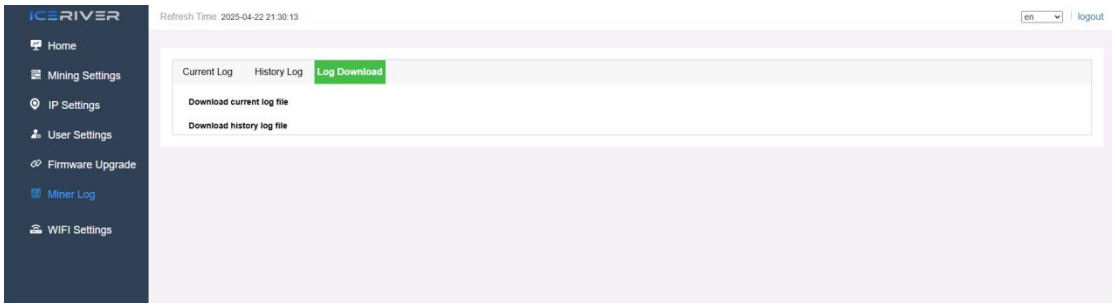
1.Current Logs: These logs record the miner’s operational status since its last startup. They are useful for troubleshooting issues that occurred without a reboot.

2.History Logs: These contain long-term operational data. The file size is fixed, and older logs are overwritten by new ones. After a reboot, historical logs can be used to analyze the cause of faults.

3.11.3 How to Download Logs

1. Download Current Logs: Saves the complete logs of the current session.

2. Download History Logs: Saves all historical log records for future analysis.



4. Common Faults and Solutions

4.1 Faults Solutions

4.1.1 Power Supply

- Connect the power supply and the red and green status lights do not light up:

Check whether the power connector is loose or off, and whether the power cord is inserted tightly.

4.1.2 Network

- Network port light does not light up:

Check if the network port is plugged in.

4.1.3 Fan

- The fans does not turn after power is applied:

Check if the mining pool is successfully connected.

4.1.4 High Temperature

- Machine temperature is too high:

1. Check that the machine is not covered, Place it in a well ventilated environment.

4.1.5 Hashrate does not up to the target hashrate

- Hashrate does not up to the target hashrate:

1. Check whether the surface temperature of the machine is too high. High temperature will trigger high temperature protection and cause the machine to downscale, please place the machine in an air convection environment or external fan to cool down the temperature.
2. Short-term hashrate fluctuations, please observe the 12-hour average hashrate.

- The difference between the Web hashrate and the mining pool hashrate is large:

Check whether the network connection is normal.

4.1.6 Unable to enter the Web operation page

- The browser displays 404 after entering the machine IP:

Reboot the machine and re-enter the Web operation page.

4.1.7 Red and green lights blink simultaneously

Possible Situations:
1.High Temperature Warning: The internal temperature of the machine has exceeded the normal range. This could be due to high ambient temperature, poor ventilation, or insufficient cooling of the device itself.

2. Network Issue: The machine has encountered a problem while trying to communicate with the network. This could be due to unstable network connection, incorrect network settings, or incorrect mining pool configuration.

3.Low temperature anomaly: The internal temperature of the machine is below the normal range, which may be caused by a low ambient temperature.

Troubleshooting Steps:
1. Check the Machine Temperature: Ensure that the ambient temperature around the machine is not too high and check if the machine's ventilation openings are blocked. If the ambient temperature is high, move the machine to a well-ventilated area to ensure proper cooling.

2. Check Network Connection: Verify that the network connection is stable, check that network settings are correct, and ensure that the mining pool configuration is accurate. This will help ensure that the machine can connect to the mining pool properly.

3.Check if the operating environment of the machine is too cold or if the temperature has droped due to improper use of external fans.