# KAS KS0/PRO

# MANUAL

# ICERIVER



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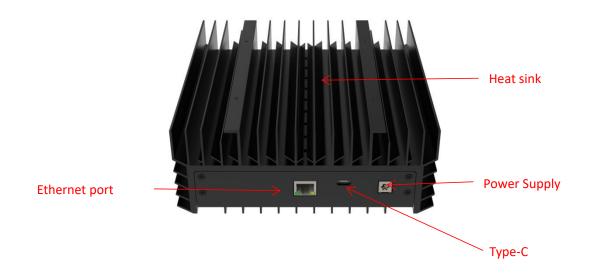
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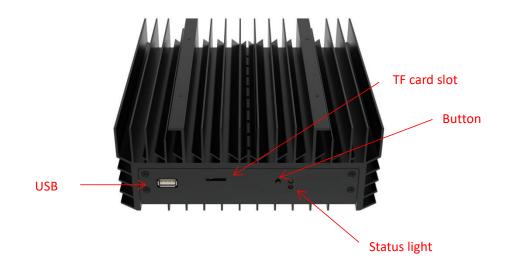
# **1. Product Overview**

# **1.1 Appearance**

KS0:





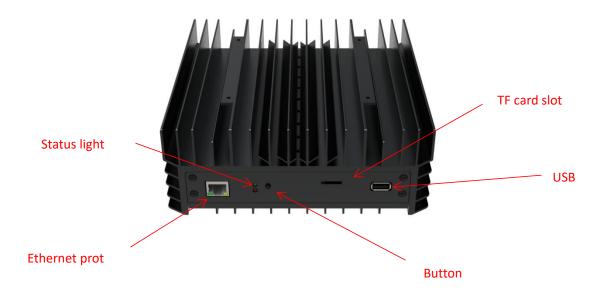


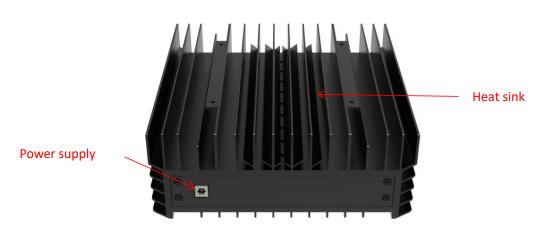
Interface specifications:	
	DC power supply interface: 65w, 19v = 3.42A
Power supply input interface	USB Type-C power supply interface: Protocol: PD2.0 Input: 65w (max), 20v = 3.25A
USB output interface	5V==0.5A

\* DC power supply interface and USB Type-C power supply interface can not be powered at the same time, only by one interface.



KS0 PRO:







#### Interface specifications:

Power supply input interface	DC power supply interface:
	100W, 19V=6.32V
USB output interface	5V==0.5A

#### \*Indicator Description:

Machine Status	Indicator light status
Running Normally	Red light steady, green light blink
Network Issues	Red light blink slowly (once per second)
High-temperature Alarm	Red light blink rapidly (3 times per second).

# 2. Function

## 2.1 Start up

#### 2.1.1 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.
- 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.

#### 2.1.2 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 and observe if the heat sink is off.

\*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.



#### 2.1.3 Boot

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

### 2.2 Access Machine

#### 2.2.1 Obtain Machine IP

- 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 [Detect IP] button and long press the machine's button for 1-2s after the pop-up window to get the machine IP.

r IP Start Scan Reboot Config Reset DMCP Change fan speed Deteot IP Auto Monitor	Interval:	5 minutes	
Status Has Detect IP	×	Version	
Status Has Veccul P 232 Online 1150 IP	ker3		2
232 Unline 115 44 192.168.0.232	al gritnrn		2
392,100,0,202			
Caneal			

#### 2.2.2 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.

			聖景	
		登录名		
Passw	ord	密码		

# 2.3 Language Switch

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



# 2.4 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.

	Refresh time 2023-06-06 10:18:14	en 🗸 logout
Home Mining setting	Reset password	
IP Settings	Current pessword	
User setting	New password	
Firmware upgrade	Confirm password	
		Save
	Version B00T11_0_0410 BIN image_10 icenver_0603_v2_0miner.bgz IP 192.168.0.232 MAC 00.0a.35:00:1e.53 Restore factor	y settings Restart

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

# 2.5 Configuring mining pools and wallets

#### 2.5.1 Add

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

	Refresh time 2023-06-06 10:18:14			en v logout
Home Mining setting IP Settings User setting Firmware upgrade	Locate miner Pool configuration Pool addr. Pool stratum+tcp://16.163.186.49.15837	Wallet/Worker kaspa qpxsj2gmv7mk27asrluhq6yd86s75	Password(Optional)	
гилимае иругаче	Pool2     stratum+tcp.//18.163.39.109.13241       Pool5     stratum+tcp.//18.163.39.109.13241       Hardware configuration	kaspa gposg2gmv7mk27asrluhq9yd96575 kaspa gposg2gmv7mk27asrluhq9yd96575	•	
	Mode Normal v			Save
	Version BOOT1 0_0410 BN image_1 0 kenter_0603_v2_ominer.bgz IP 192.168.0	232 MAC 00.0x35.00.1e.53	Restore fact	vy settings Restart

You can configure three mining pools with the following reference example: Pool1: stratum+tcp://kas.eu1.whalepool.com:15120 Wallet/Worker: kaspa:ndm9tlsgdmrcha4pg83lwwrka0gjya38teh0g5qc4prapavmh7rkyxuzd6w2w.worker

Wal	let	ad	d	ress
vvai	ici	au	u	1033

Worker name

- \* 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.

<b>੨</b> ।∨≡੨	E OCH/s	2023-06-06 10:19:16							en v log
t.									
g setting									
tings				0 mins Miner hashrate					
etting				miner nasinate					
are upgrade	Pool								
	Pool	Pool addr.		Wallet/Worker	Pool state	Diff	Priority	Accepted	Rejected
	1	stratum+tcp://16.163.186.49:15837		kaspa:qpxsj2gmv7mk27asrluhq6yd86s75jk09rsru0j95 6jwpzsxkc8f7m6nxt2c2.ty2	Connected	0.00 G	1	0	0
	2	stratum+tcp://18.163.39.109:13241		kaspa:qpxsj2gmv7mk27asrluhq6yd86s75jk09rsru0j95 6jwpzsxkc8f7m6nxt2c2.ty2	Unconnected	0.00 G	2	0	0
	3	stratum+tcp://18.163.39.109:13241		kaspa:qpxsj2gmv7mk27asrluhq6yd86s75jk09rsru0j95 6jwpzsxkc8f7m6nxt2c2.ty2	Unconnected	0.00 G	3	0	0
	Hash board	1							
	Hash boa	ard	30 mins hashr	ate	TEMP	1		TEMP 2	
	1		0 GH/s		27 °C			32 °C	

\*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 minin	ig pools are kno	Swn to be compatible, and will be continuously updated:
Whalepool	PPLNS	<pre>stratum+tcp://kas.eul.whalepool.com:15120</pre>
Humpool	PPLNS	<pre>stratum+tcp://kas.eul.humpool.com:18083</pre>
Kaana-naal	PPLNS	<pre>stratum+tcp://eul.kaspa-pool.org:4444</pre>
Kaspa-pool	SOLO	<pre>stratum+tcp://eul.kaspa-pool.org:4441</pre>
Waalumaalu	PPLNS	<pre>stratum+tcp://pool.eu.woolypooly.com:3112</pre>
Woolypooly	SOLO	<pre>stratum+tcp://pool.eu.woolypooly.com:3113</pre>
Ueneminene	PPLNS	stratum+tcp://ru.kaspa.herominers.com:1208
Herominers	SOLO	stratum+tcp://ru.kaspa.herominers.com:1208
K1nool	PPLNS	stratum+tcp://eu.kaspa.k1pool.com:23112
K1pool	SOLO	<pre>stratum+tcp://eu.kaspasolo.k1pool.com:23114</pre>
Accpool	PPLNS	<pre>stratum+tcp://acc-pool.pw:16061</pre>
F2pool	PPLNS	<pre>stratum+tcp://kas-euro.f2pool.com:1400</pre>
Kryptex	PPLNS	stratum+tcp://kas.kryptex.network:7777/6666
tw-nool com	PPLNS	<pre>stratum+tcp://stratum.tw-pool.com:10005</pre>
tw-pool.com	PPLNS	<pre>stratum+tcp://stratum2.tw-pool.com:10005</pre>
2miners	PPLNS	stratum+tcp://kas.2miners.com:2121

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

\* 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.

#### 2.5.2 Remove

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

#### 2.5.3 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.

	Refresh time 2023-06-06 10:18:14	en 🗸 la	ogout
Home Mining setting IP Settings	Locale miner		
User setting Firmware upgrade	Pool addr: Wallet/Worker Password(Optional)   Pool [stratum=tcp://51.653.188.49.15837] kaspa qxxs/2gmv/7mk27asruhq6yd96675] •   Pool 2 stratum=tcp://18.163.39.109.13241 kaspa qxxs/2gmv/7mk27asruhq6yd96675] •   Pool 3 stratum=tcp://18.163.39.109.13241 kaspa qxxs/2gmv/7mk27asruhq6yd96675] •		
	Version     BOOT1 0_0410 BIN image_10 kertver_0600_v2_0miner bgz     IP     192 168 0.232     MAC     0.00 a 35 00 1e 53     Restore fact	Save ory settings Rest	

\* After power on, the fan will start only after successfully connecting to the mining pool and mining program starts, and the fan speed is full speed by default.

\* The machine will stop mining in sleep mode.

\* After manually changing the fan speed, the fan speed in [Hardware Configuration] will still show 100%.

## 2.6 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.

	Refresh time	e 2023-06-06 10:29:53								en 🔹	logout
Home Mining setting IP Settings	Fan spe	nashrate Normal eed Normal emp. Normal	5 mins hashrate 100 GH/s		30 mins hashrate 15 GH/s	Pool re 0 %	ejection rate		Miner running 00 d 00 h		3 s
User setting Firmware upgrade	125GH 100GH 75GH 50GH 25GH 0CH	HUS	0 mins	Left click to zo	Miner hashrate on the image. Press and hold corl and left click t	to slide the image		5 mins			
	Pool Pool 1	Pool addr. stratum+tcp://16.163.186.45 f1.0_0410 BIN image_1.0 iceriver_		6jwpzsxkc8f7n	mv7mk27asrluhq6yd86s75jk09rsru0j95 n6nxt2c2.ty2	Pool state Connected	Diff 549.76 G	Priority 1	Accepted 64 Restore factor	Rejected 0	Restart

## 2.7 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).

	Refresh time 2023-06-06 10:29:53		en 🗸 logout
Home Mining setting		IP configuration	
IP Settings User setting	Network information	eth0 MAC: 00 0a:35 00:1e:53 [P: 192:188:0.232 Subnet mask: 255 255 255 0	
Firmware upgrade	Host name Protocol	petalinux_config13 Static ~	
	IP Subnet mask	192 168 0 232 255 255 255 0	
	Gateway DNS server	192.168.0.1	
			Save
	Version BOOT1.0_0410.BIN image_1.0 icer/ver_0603_v2_0miner.bgz IP 192.168.0.232 MAC 0	00.0a.35.00.1e.53	re factory settings Restart

# 2.8 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.

	Refresh time 2023-06-06 10:29:53			en 🗸 logout
Home Mining setting		Firmware upgrade		
IP Settings User setting	Firmware file	□ Keep the settings	Select File	
Firmware upgrade				Update
	Version BOOT1.0_0410.BIN image_1.0 iceriver_0603_v2_0miner.bgz IP 1	92.168.0.232 MAC 00.0a.35.00.1e.53	Restore factory	settings Restart

## 2.9 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.

## 2.10 Shutdown/Reboot

- 2.10.1 Shutdown
- 1. Power off by unplugging the Power Cord.

#### 2.10.2 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.

ICERIVER	Refresh time 2023-06-07 16:34:46	en 💌 🛛 logout				
		Confirm restarting the mining machine?	×	i i i		
Home	5 mins hashrate Normal	5 mins h	Cancel OK rejection rate	Miner running time		
Mining setting	Fan speed Normal	103 GH/s 65 GH/s	0 %	00 d 00 h 26 m 49 s		
IP Settings	Miner temp. Normal			00 0 00 11 20 11 40 3		
User setting						
Firmware upgrade	Miner hashrate					
Filliware upgrade	ade Left dick to zoom the image. Peets and held crit and left dick to state the image.					
	10000/3					
15013						
	SOCH/s					
	25CH/s					
	OCH/s 0 mins	S mins	10 mins 15 mi	ns 20 mins		
	More hudrate					
	Pool					
	Pool Pool addr.	Wallet/Worker	Pool state Diff	Priority Accepted Rejected		
	1 stratum+tcp://16.163.186.4	9.15837 kaspa.qrknmlwhyj49vmgkfurða xae0578q9s5urktrhsv.vital	p4jda79zfynz0zhqr8nk Connected 137.44 G	1 1104 0		
	Version BOOT1.0_0410.BIN image_1.0 iceriver		Restore factory settings Restart			

# **3 Common Faults and Solutions**

## 3.1 Faults Solutions

- 3.1.1 Power Supply
- Connect the power supply and the red and green status lights does not light up:

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

#### 3.1.2 Network

• Network port light does not light up:

Check if the network port is plugged in.

#### 3.1.3 Fan

• The fans does not turn after power is applied:

Check if the mining pool is successfully connected.

#### 3.1.4 High Temperature

- Machine temperature is too high:
- 1. Check that the machine is not covered with.
- 2. Check if the machine is placed in an environment with air convection.
- 3. External fan of not more than 5V==0.5A for cooling via USB port.

#### 3.1.5 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.

### 3.1.6 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.