

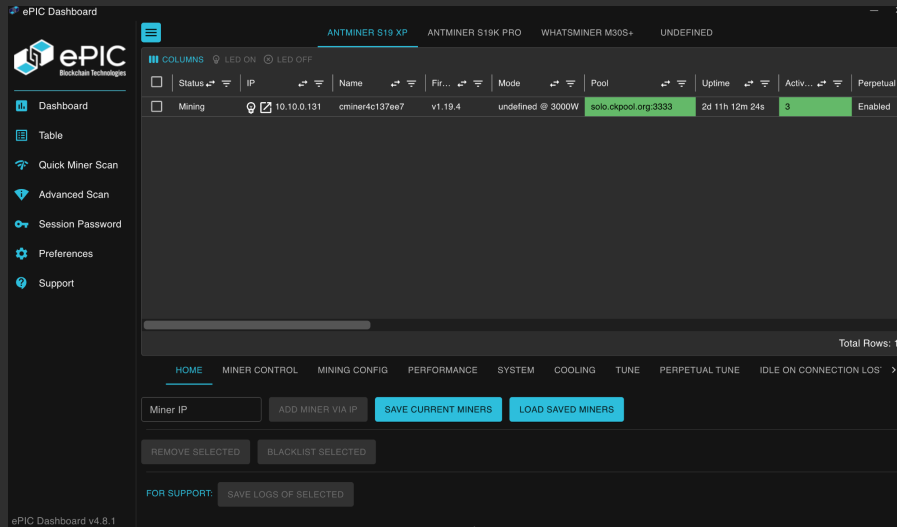
FAQ

Last updated: April 2026

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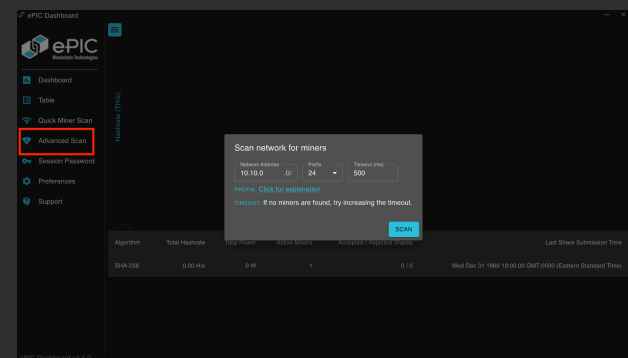
ePIC Dashboard (Fleet Management Tool)



What is the recommended way to access miners using the ePIC UMC?

We recommend using our fleet management tool, ePIC Dashboard
Download it from [ePIC GitHub](#)

I am unable to access my miner using the same IP address. How can I resolve this?



If you have a **static IP***, and can't access your miner, restarting your router may assign a new IP address. To locate your miner's new IP, use the scan feature in the ePIC Dashboard.

Another way to resolve this issue is to **flash*** an SD card and update the image or a **power cycle*** the miner.

Can I scan a specific IP range and save for future use?

Yes, you can set a specific IP range and save a list of miners for quick recovery during future sessions.

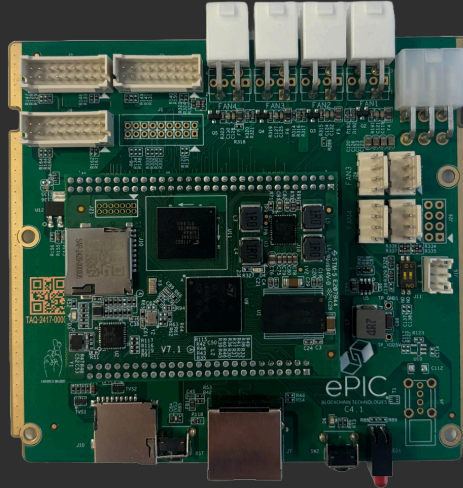
You can manage miner pools and sub-accounts by using the filtering function in conjunction with IP ranges.

How can I set all my miners to static IPs?

There is currently no function that allows you to set all your miners to static IPs at once.

You will need to manually access each miner's IP address, disable DHCP, and set a static IP individually.

UMC (Universal Mining Control)



Does the ePIC UMC support display for S21 XP?

Unfortunately, our current design does not support display at this time.

For more information, please refer to the [ePIC UMC & SOM Form Factor Guide](#).

Does the ePIC UMC software support **syslog**?

No, but you can use an API and endpoint to send data to your source server.

You can also use the API tab on Webdash to view and test available API commands, or **SSH*** into your miner to retrieve logs.

Is the ePIC UMC board compatible with **Foreman**?

Only Antminer- and BlockMiner-compatible UMCs are supported by Foreman.

Please contact us at support@epicblockchain.io for more information

How do I set up my UMC board?

Setting up your UMC is simple!

Follow the detailed step-by-step instructions in our [User Guide](#) to ensure proper installation and configuration.

How do I update the **firmware** on my UMC board?

You can update the firmware directly using system update on **Webdash*** under Settings or **ePIC Dashboard*** if you have multiple rigs.

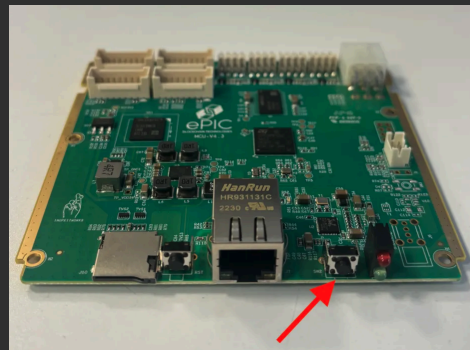
For detailed instructions, please refer to the [User Guide](#)

What are the overclocking capabilities of the UMC?

The extent to which you can overclock your miner depends on **external factors** such as your cooling mechanism and the limit of your power supply.

Since performance can vary based on individual setups, we encourage careful testing and consideration of your specific conditions.

I can't find the IP address using the IP report button on the UMC. How can I resolve this?



Try re-flashing the UMC by downloading the SD recovery image or performing a power cycle. Please note that the IP report button is enabled on **UMC 4.3.1 and above**.

This button is also supported by Foreman and ePIC Dashboard.

I am unable to reset the UMC board using the left button. What should I do?

We recommend re-flashing the UMC by downloading the SD recovery image of the latest firmware from [ePIC Github](#)

My UMC board isn't performing better than the stock control board. How can I improve performance?

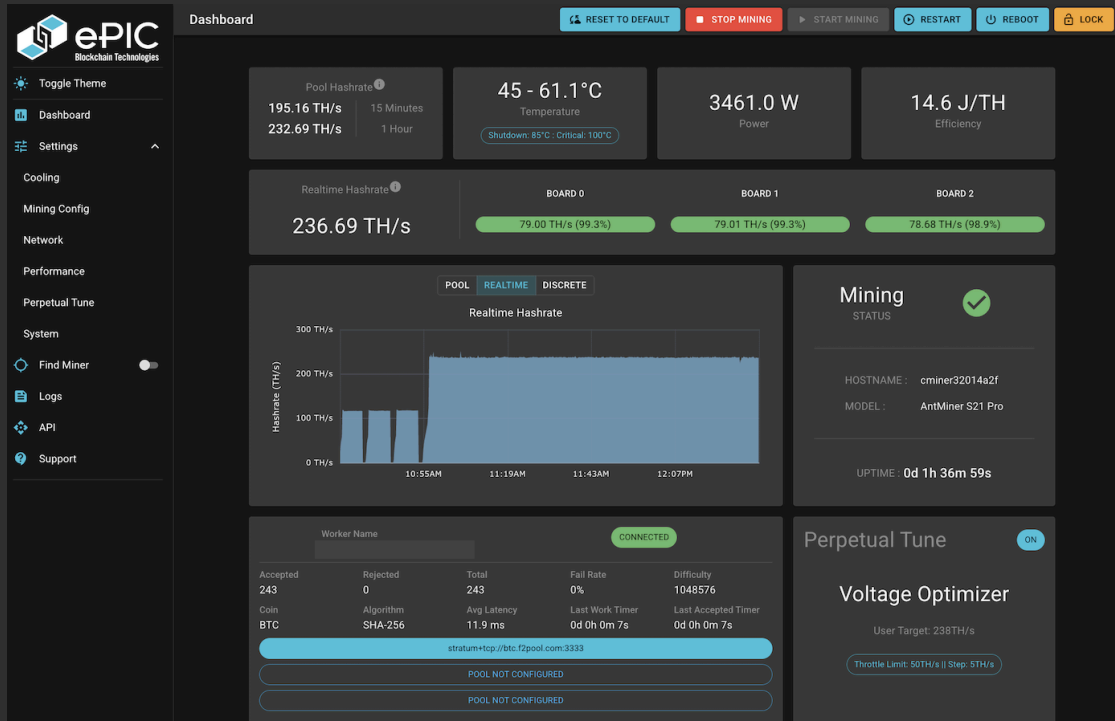
The performance of the UMC board varies based on individual setups and external factors.

	<p>Ensure that the operating temperature does not exceed 40°C. You may also want to use our Voltage Optimizer to enhance performance and stability.</p>																		
<p>Why is the hashrate on my miner lower compared to the stock control board?</p>	<p>If you are using the Voltage Optimizer or Board Tune and the miner is close to the shutdown temperature, survival mode* might be activated and is throttled down.</p> <p>We recommend using the 1-hour or 24-hour hashrate reading on Webdash, as the 15-minute reading may not be stable.</p>																		
<p>What do the LED indicators on the UMC represent?</p>	<table border="1"> <thead> <tr> <th>Red LED</th> <th>Green LED</th> <th>Status Description</th> </tr> </thead> <tbody> <tr> <td>Off</td> <td>Blinking</td> <td>System is booting up</td> </tr> <tr> <td>Blinking Alternating</td> <td>Blinking Alternating</td> <td>System is calibrating</td> </tr> <tr> <td>Off</td> <td>Solid</td> <td>System is mining normally</td> </tr> <tr> <td>Solid</td> <td>Solid</td> <td>Mining with fewer than 3 hashboards (some boards may be defective)</td> </tr> <tr> <td>Solid</td> <td>Off</td> <td>Miner is in an idle state</td> </tr> </tbody> </table>	Red LED	Green LED	Status Description	Off	Blinking	System is booting up	Blinking Alternating	Blinking Alternating	System is calibrating	Off	Solid	System is mining normally	Solid	Solid	Mining with fewer than 3 hashboards (some boards may be defective)	Solid	Off	Miner is in an idle state
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<p>Why is J1 on the ePIC UMC not functional?</p>	<p>The channels are arranged to provide maximum flexibility and compatibility across different miners, as some miners utilize different communication protocols.</p>																		

UMC OS

What is UMC OS?	UMC OS enables users to install ePIC firmware directly onto an Amlogic or BeagleBone stock control board, offering a flexible alternative to using ePIC UMC boards.
How can I install UMC OS?	UMC OS can be installed via RigRunner* application. You can download the latest version here .
Is there a dev fee?	Yes, there is a 2.5% dev fee . However, if you are interested in licensing options, please contact license@epicblockchain.io
Will the Web UI be the same as with a UMC board?	Yes, it provides all of ePIC's advanced firmware features and configurations available in Webdash.
What operating systems does UMC OS support?	UMC OS runs on all 3 major OS: Windows, macOS, and Linux.

Webdash (Web UI)



After performing Chip Tune, my miner reboots every few minutes, and I receive “not receiving results from hashboards” or similar errors. How can I resolve this?

This error indicates that all hashboards are not working. However, check the connections and try running **Voltage Optimizer**, as it can adjust the throttle up and down based on temperature.

Can I adjust Tune settings while Perpetual Tune is running?

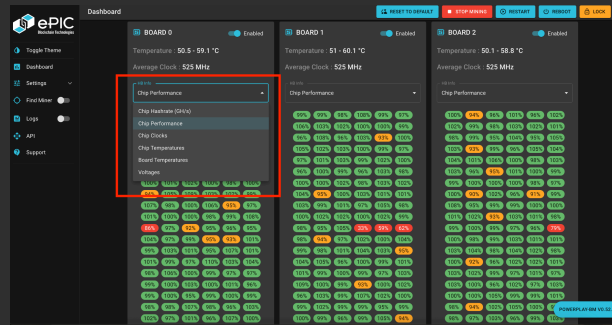
No, we recommend not making any changes to the Tune settings while Perpetual Tune is active, as the software will overwrite any modified values and continue auto-tuning.

Can AutoFan and the Tuning algorithm run simultaneously?

Yes, but there are conditions to consider. Since voltage is influenced by temperature, being too aggressive with AutoFan can interfere with the tuning, preventing the voltage from being constantly optimized.

While the feature is available, it is required to fine-tune both settings to suit your specific environment and needs.

Does this display on the dashboard change in real-time?



Yes, all the HB info is in real-time.

- Chip Hashrate (GH/s)
- Chip Performance
- Chip Clocks
- Chip Temperatures
- Board Temperatures
- Voltages

How can I change the password on Webdash?

The default password is *letmein*.

You can change it under Settings > System > Change Password > Apply.

How does each Perpetual Tune work?

	Voltage Optimizer	ChipTune	Board Tune
Adjusting Variable	Voltage	Individual chip clocks	Board clocks
Duration	< 30min	< 60min	< 45min
Environment	Unstable environment	When temperature is stable	In between

	<table border="1"> <tr> <td data-bbox="712 266 854 609">Usercase</td> <td data-bbox="854 266 1021 609">If you have multiple miners and want long-term stability</td> <td data-bbox="1021 266 1219 609">If you have a few miners and want to maximize performance in a short period of time</td> <td data-bbox="1219 266 1427 609">If you have an S21 with mixed hashboards and want to optimize performance</td> </tr> </table>	Usercase	If you have multiple miners and want long-term stability	If you have a few miners and want to maximize performance in a short period of time	If you have an S21 with mixed hashboards and want to optimize performance
Usercase	If you have multiple miners and want long-term stability	If you have a few miners and want to maximize performance in a short period of time	If you have an S21 with mixed hashboards and want to optimize performance		
How does Board Tune work?	<p>Board Tune is a hybrid of Voltage Optimizer and ChipTune. It adjusts the board clock by changing the frequency of individual chips on the best-performing hashboards, optimizing for better efficiency and performance in stable environments.</p> <p>This feature was created on firmware v0.48.0 and up to improve hashboard performance on S21 series.</p>				
How does ChipTune work?	<p>ChipTune targets a -10 TH setting and adjusts the chip clock by changing the frequency of individual chips to achieve the best performance at a specific voltage.</p> <p>Once optimized, the frequency is locked to maintain performance.</p>				
How does Voltage Optimizer work?	<p>Voltage Optimizer adjusts the chip clock by changing the frequency on all chips to find the best efficiency at a certain voltage.</p> <p>The voltage is then continuously adjusted to maintain performance, especially in unstable environments.</p>				
How is the power consumption calculated on Webdash?	<p>Power consumption on Webdash is estimated due to the lack of current feedback from certain models of Antminer PSUs. For the S19 series, we recommend reading the power directly from the meter for the most accurate results.</p>				

	<p>Accurate power readings for the APW17 (S21 and S21 Pro) are available on v0.51.5 and later.</p>
<p>If a crash occurs while making changes, will I lose access to Webdash?</p>	<p>If you experience a crash or performance issues, adjust your settings and then click "Restart Mining."</p> <p>This will reset the chips to the last successfully applied settings, and you will retain access to Webdash.</p>
<p>The chip temperature on each board shows 0.</p>	<p>This option is only available for S21 and T21 as they have the per-chip temperature sensors.</p>
<p>Should I be concerned if chips appear red on Webdash?</p>	<p>The color indicators on Webdash represent chip performance ranges:</p> <ul style="list-style-type: none"> ● Green: 97% or higher ● Yellow/Orange: Between 95% and 97% ● Red: Below 95% <p>Therefore, red chips are not necessarily indicative of a machine's health unless the machine is overheating and showing an error.</p>
<p>The pool status says "DISCONNECTED". What should I do?</p>	<p>First, check whether the network connection and the mining pool are functioning correctly.</p> <p>If configured incorrectly, clear and re-add your pool address by going to Mining Config > Clear Fields > Copy and paste your pool address, then fill in your pool username under Worker Name.</p>
<p>What is the purpose of the Unique ID under Mining Config?</p>	<p>The Unique ID is useful when managing hundreds of miners. It helps identify your miner by its IP address, MAC address, or CPU ID under the Worker Name on the dashboard.</p>
<p>What does the Autofan do?</p>	<p>AutoFan lets you set a target operating temperature, and the fan speed automatically adjusts to maintain that temperature.</p>

General Questions

<p>After cleaning and re-installing two hashboards with the same PSU, the fan does not start, and only the green light is blinking. What should I do?</p>	<p>A blinking green light often indicates a network issue. Try connecting the machine to a known working Ethernet cable or use a different cable to see if the issue persists. If it does, consider plugging to another board.</p>
<p>Can I install ePIC firmware on other control boards?</p>	<p>No, the ePIC Firmware is exclusively designed to work on the ePIC UMC Board.</p>
<p>Can I remove PSU fans for immersion cooling without causing software issues?</p>	<p>Yes, you can remove the PSU fans as long as the PSU does not overheat.</p>
<p>Can you set a specific power level for my miners?</p>	<p>Firmware v0.49.2 and below don't have a feature to set power levels directly, as predicting input power without current feedback from the Power Supply was challenging. However, we've developed a "Power Estimator" algorithm that uses Voltage, Clock, and Temperature as variables to estimate input power.</p>
<p>Do I need a fan spoofer for immersion cooling?</p>	<p>No, UMC can run without a fan spoofer</p>
<p>Is there a firmware release date for Whatsminer?</p>	<p>Firmware for Whatsminer is currently available up to v0.26.0.</p> <p>We are actively working to enhance its whatsminer performance and functionality for the next firmware release. Please stay tuned!</p>
<p>Is there a firmware release date for Antminer?</p>	<p>New firmware releases are scheduled for the middle of every month for Antminers.</p>

<p>What management tool does ePIC recommend?</p>	<p>You can manage your deployment en masse using the ePIC Dashboard. The installation package and user guide can be found on ePIC Support.</p> <p>We also provide ePIC API documentation to facilitate smooth integration if you already have an existing management tool.</p>
<p>Does ePIC support Hashrate Split?</p>	<p>Yes, the Hashrate split feature is available on v0.100.3 and above.</p>
<p>Does ePIC support the xnsub flag?</p>	<p>Yes, the xnsub flag is available on v0.53.3 and above.</p>
<p>How can I ensure uninterrupted mining uptime?</p>	<p>We have built-in features for overheat protection, such as survival mode, to maximize the miner's uptime in hot environments. Our firmware automatically throttles down when the miner is approaching shutdown temperature. If the miner reaches this temperature, it will shut down the power to protect the chips and cool down before ramping up to the throttled target.</p>
<p>How can I rename the host in the GUI?</p>	<p>This feature is currently under development.</p>
<p>How do I determine the appropriate voltage and frequency settings for my miner?</p>	<p>Our firmware allows you to set voltage and frequency manually. However, using the Perpetual Tune feature will automatically calculate the best frequency and voltage to reach your target hashrate with optimal efficiency.</p>
<p>I received a UART communication failure. How can I resolve this?</p>	<p>Check all connections and consider rolling back to an older firmware version to see if the issue persists.</p> <p>If the ambient temperature is above 40°C, the PSU might shut down, leading to communication loss with the chip.</p>

<p>Why does my miner restart from 0 hashrate when I decrease the hashrate?</p>	<p>The miner's uptime should increase when hashrate decreases, reducing heat production. However, if the miner reaches shutdown temperature, it will shut down to protect the chips and cool down before ramping up to the throttled target hashrate.</p>
<p>Is a power cord included with the UMC board?</p>	<p>No, a power cord is NOT included with the miner. You will need to provide one that meets the requirements of the country where the product will be used.</p>
<p>Can I make more advanced adjustments beyond what the optimizer allows?</p>	<p>Yes, you can. The optimizer will try to stay within 1% of the target hashrate, but you have the option to make more advanced adjustments.</p>
<p>Is the BTC Tool supported by ePIC?</p>	<p>Unfortunately, BTC Tool is NOT supported. However, the API is documented, and large miners can use the API documentation to integrate with their own management tools. Check our API Documentation.</p>
<p>Is there a time limit to how quickly the throttling takes effect when the shutdown temperature is reached?</p>	<p>The current firmware monitors temperature every 3 seconds. Once the temperature approaches the shutdown limit, the next ramp-up will throttle the target hashrate by the user-specified step.</p>
<p>Can I configure the miner to idle when there is no internet connection?</p>	<p>We have a function called "Idle On Connection Lost" and it is enabled by default.</p>
<p>The miner status shows that the fan is missing. How can I fix this?</p>	<p>Try reconnecting the fan, check the number of fans detected and "Minimum Working Fans Required" under FANS. Also, try replacing the fans to working ones. If the issue persists after replacing the fan, the control board may be damaged.</p>
<p>What is Overdrive mode?</p>	<p>Some of the Bitmain chips are unique and ePIC have discovered a pattern on Antminers with BM1366 ASIC chips that outperforms stock when overclocking.</p>

<p>What does the Idle on Connection Lost feature do?</p>	<p>It means the miner will be stopped and be put in an idle state until an internet connection is re-established. Disabling this feature means that the miner will continue to draw power.</p>												
<p>What happens if I overclock the miner too much?</p>	<p>We encourage cautious overclocking. Each chip and system has its own unique sweet spot, which can vary from one miner to another. While our system allows you to overclock, optimal performance is not guaranteed.</p>												
<p>What is the default password?</p>	<p>The default password is <i>letmein</i>.</p>												
<p>What is the payment structure of the UMC board and firmware?</p>	<p>We charge a one-time flat fee for both the UMC Board and the Firmware. Firmware updates are provided without any additional fees.</p>												
<p>What miners use BM1362 and BM1366 chips?</p>	<p>These chips are present in the following models: S19J, S19J Pro, S19K Pro, S19 XP, S19J Pro+.</p> <table border="1" data-bbox="862 1136 1422 1629"> <thead> <tr> <th>ChipType</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td>BM1398</td> <td>S19, S19 Pro, S19A, S19A Pro,</td> </tr> <tr> <td>BM1362</td> <td>S19J, S19J Pro</td> </tr> <tr> <td>BM1366</td> <td>S19K Pro, S19 XP, S19J Pro+</td> </tr> <tr> <td>BM1368</td> <td>S21</td> </tr> <tr> <td>BM1370</td> <td>S21 Pro, S21 XP, S21+</td> </tr> </tbody> </table>	ChipType	Model	BM1398	S19, S19 Pro, S19A, S19A Pro,	BM1362	S19J, S19J Pro	BM1366	S19K Pro, S19 XP, S19J Pro+	BM1368	S21	BM1370	S21 Pro, S21 XP, S21+
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BM1362	S19J, S19J Pro												
BM1366	S19K Pro, S19 XP, S19J Pro+												
BM1368	S21												
BM1370	S21 Pro, S21 XP, S21+												
<p>Can I use ePIC firmware on a stock control board?</p>	<p>Yes, it is called UMC OS and we support Amlogic and BeagleBone boards.</p> <p>Please download RigRunner to install ePIC firmware!</p>												

BlockMiner

<p>Can I run the Model 520i on air even though the product spec sheet says it's "immersion-ready"?</p>	<p>Absolutely! The Model 520i is designed to operate in both air and immersion environments. You can choose the operating environment based on your needs.</p>
<p>I see a switch on the PSU. What is it for?</p>	<p>The switch on the PSU is used to turn off the PSU fans. This feature is particularly useful for users who are preparing the miner for immersion, allowing them to avoid disassembling the PSU and removing the fans.</p>
<p>What do you mean by "immersion-ready"?</p>	<p>"Immersion-ready" refers to several enhancements made to the Model 520i, including:</p> <ul style="list-style-type: none">• A 5kW PSU providing headroom for overclocking.• The ability to maintain overclocking even after fan removal in immersion.• Minimal stickers on the PSU to reduce the risk of debris blocking the tank.• Filtered graphite thermal pads to minimize the risk of being washed away in immersion.
<p>What power cord should I use for Model 520i?</p>	<p>The Model 520i has two C19 plugs. Please note that power cables are NOT included with the miner.</p>

SC200

Can my SC200 miner operate at 110V?

Yes, our PSU can operate in Normal Mode with both 110V and 220V. However, please note that all miners are defaulted to “Efficiency Mode.” To change the mining mode:

1. Open your ePIC Dashboard.
2. Select “Table” from the menu on the left-hand side.
3. Select the miner you wish to change.
4. Under “OPERATING MODE,” choose the desired mode from the drop-down menu.
5. Enter your password and click “APPLY.”
6. You are all set!

How do I update the firmware?

Firmware updates are essential for optimal performance. There are two ways to update your firmware:

- **Update through ePIC Dashboard (recommended):**
 - Download the latest firmware version.
 - Select the rig(s) you want to update by clicking the checkboxes in the table.
 - On the ePIC Dashboard, click “Firmware” at the bottom of the menu bar.
 - Click “Browse” in the “Firmware file” section and upload the downloaded file.
 - Check “Maintain config over update” (otherwise, the miner will revert to the default manufacturer wallet).
 - Enter your password and click “Apply.”
 - Your firmware will be updated.
- **Update by flashing the SD card:**
 - If necessary, flash the SD card with the new firmware.
 - SD card files and instructions can be found here: [SD Card Documentation](#).

My miner is not showing up on the dashboard. What should I do?

If your miner is not discoverable by the dashboard, follow these troubleshooting steps:

1. Ensure your miner is powered on.
2. Check if the lights on the front of the rig are solid green. Flickering red and green lights indicate calibration.
3. Verify that your internet connection is working.
4. If the lights are solid green, check if your rig is mining to your wallet.
5. Ensure the dashboard and miner are on the same subnet (same switch/router, etc.). If not, the ePIC dashboard may not detect it automatically.

My miner is performing under spec. What should I do?

If your miner is underperforming:

1. Verify if your miner is set to Efficiency Mode. In this mode, the expected hashrate is 1.8 TH/s $\pm 10\%$.
2. If the hashrate is still lower than expected, check if your firmware is updated to the latest version

My SC200 hashrate dropped, and a restart doesn't fix the issue. An IP scanner detects the miner, but it says "refused to connect," and the ePIC software reports "no miner found." What should I do?

Update your firmware and dashboard to the latest version.

If the issue persists, remove the SD card and reflash it.

Where can I find the files to load onto the SD card?

All SD cards now come preflashed. If your SD card needs to be reflashed, more details can be found here: [SD Card Documentation](#).

Glossary

ePIC Dashboard	An in-house fleet management tool designed to allow users to monitor and control multiple mining machines simultaneously. It provides centralized access to key performance metrics, operational statuses, and configuration options, streamlining the management of mining fleets for efficiency and scalability.
Flash	The process of writing a new firmware or software image to an SD card to update the control board, often used for system upgrades and fixes.
Power cycle	The process of turning off a device by unplugging it from its power source, waiting for several minutes to ensure all components fully discharge, and then plugging it back in. This process is used to reset the device and clear any temporary issues or glitches in the system.
Rig Runner	A user-friendly tool for scanning, installing, and uninstalling firmwares across multiple rigs, simplifying fleet management without command-line use.
SSH	A protocol for securely accessing and managing remote devices over a network, using encryption to protect communication.
Static IP	A fixed, unchanging numerical address assigned to a device on a network. Unlike dynamic IP, which can change over time, a static IP remains constant, making it ideal for servers, remote access, and devices requiring consistent network communication.
Survival mode	A feature that automatically reduces the target hashrate of a miner to prevent overheating when it nears or reaches shutdown temperature. It increases the hashrate again as the temperature drops, with a minimum throttle threshold to prevent excessive throttling and leave the rig in an idle state if necessary.
Webdash	ePIC's web-based interface, accessed via a miner's IP address that allows users to manage and control a single miner.

Have a question?

Website

<https://epicblockchain.io/support/>

Email

Support@epicblockchain.io

Github

<https://github.com/epicblockchain>

Twitter

<https://twitter.com/ePICBlockchain>

Telegram

https://t.me/epic_umc