MinerAsic IceRiver AL3 3500W Alephium Miner Instructions

IceRiver AL3 3500W Alephium Miner Instructions

Complete Guide to the ICERIVER AL3 (15 TH/s)

Contents

Introduction

The ICERIVER AL3 is a high-performance ASIC miner designed for mining Alephium (ALPH) using the Blake3 algorithm. With a computing power of 15 TH/s and an energy consumption of 3500W, this device is ideal for miners who are looking to mine Alephium efficiently while maintaining a high hash rate. Released in September/October 2024, this miner is a solid choice for professional miners seeking to maximize their profitability in the Alephium network.
This guide provides a comprehensive overview of the technical specifications of the ICERIVER AL3, purchase options, best maintenance practices, safe overclocking methods, and other crucial aspects to optimize the use of this device.

Technical Specifications of the ICERIVER AL3 (15 TH/s)

Main Features

Feature	Details
Manufacturer	ICERIVER
Model	Alephium AL3 (15 TH/s)
First Release	September/October 2024
Mining Algorithm	Blake3
Maximum Hashrate	15 TH/s
Energy Consumption	3500 W
AC Input Voltage	170-300V AC
Interface	Ethernet 10/100M
Dimensions	370 mm x 195 mm x 290 mm
Weight	15 kg
Operating Temperature	0°C – 35°C
Operating Humidity	10% – 90%

Mineable Coins
The ICERIVER AL3 supports mining the Alephium (ALPH) cryptocurrency, which uses the Blake3 algorithm.

Cryptocurrency Symbol Algorithm

Alephium	ALPH	Blake3

Where to Buy the ICERIVER AL3 (15 TH/s)

Purchase Options

You can buy the ICERIVER AL3 (15 TH/s) directly from the ICERIVER official website or from premium resellers. Always choose reliable purchase channels to ensure the quality of the product and receive adequate support.

Purchase Platform	Link	Note
ICERIVER Official Store	iceriver.com	Direct purchase from the manufacturer
Premium Resellers	minerasic.com	Official warranty and support

ASIC Miner Price: Why MinerAsic is Your Best Choice
When purchasing an ASIC miner, price is a key factor, but it's essential to consider quality, reliability, and support. MinerAsic stands out as one of the leading global resellers, offering competitive prices without compromising on performance or service.
Why Choose MinerAsic?

1. Top-Quality Products: MinerAsic offers high-performance miners from trusted brands, ensuring durability and

efficiency.

2. Competitive Pricing: MinerAsic combines affordable prices with exceptional quality, providing the best long-term return on investment.
3. Expert Support: With professional installation assistance, troubleshooting, and reliable warranty coverage, MinerAsic ensures a seamless mining experience.
4. Global Trust: Known for its professionalism and customer service, MinerAsic is a trusted partner fominers around the world.

   In short, MinerAsic delivers the perfect blend of quality, support, and value, making it a top choice foserious miners.

ICERIVER AL3 (15 TH/s) Maintenance

Device Cleaning and Care

To keep your ICERIVER AL3 in perfect condition, it is essential to follow a regular maintenance routine.

1. **Regular Cleaning**

   Dust can impair the performance of the cooling fans. Clean the device every 1-2 months, or more often in dusty environments.

   o Method: Use a soft cloth, a brush, or compressed air. Be careful not to damage the internal components."
2. **Temperature Monitoring**

   Maintain the temperature between 0°C and 35°C to prevent overheating and damage to internal components.

   o Solution: Place the miner in a well-ventilated area. Use additional cooling systems if necessary.
3. **Fan Inspection**

   Fans are critical for cooling. Check their operation every 3-4 months.

   o Replacement: Replace defective fans immediately to prevent damage caused by overheating.
4. **Firmware Updates**

   Keeping the miner's firmware updated is essential to optimize performance and fix potential bugs.

   o Frequency: Regularly check the "Firmware" section in the device's web interface.

Overclocking the ICERIVER AL3 (15 TH/s)
What is Overclocking?
Overclocking increases the miner's calculation speed (hashrate), but it requires caution to avoid long-term damage. By increasing the frequency, both energy consumption and heat production rise, so it's crucial to monitor these parameters carefully.

Overclocking Procedure

1. Access the miner's web interface via your browser, entering the device's IP address.
2. Go to the "Overclocking" section and gradually increase the clock frequency (by 5% at a time).
3. Carefully monitor the temperature and energy consumption to prevent damage.

   Precautions for Overclocking

   - **Cooling:** Increasing frequency generates more heat. Ensure your cooling system is adequate.
   - **Stability Testing:** After each adjustment, test the device to ensure it is stable and operating correctly.

Tips for Optimal Use

1. **Initial Setup and Installation**
   o Placement and Installation: Choose a well-ventilated area free of dust and away from direct heat sources to maximize efficiency.
   o Use Certified Power Supplies: Use efficient power supplies to prevent energy losses and overloads.
2. **Troubleshooting Common Issues**
   o Connection Issues: If you can't connect to the mining pool, check the IP settings and network connection.
   o Hardware Failures: Identify common hardware failures, such as fan or power supply problems, and replace faulty components.
   o Software Errors: For system errors or crashes, try restarting the miner or performing a software reset.
3. **Device Security**
   o Protection from External Attacks: To safeguard your miner from cyberattacks, use a VPN and configure a firewall on the device.
   o Security Updates: Ensure that the firmware is always up-to-date to fix security vulnerabilities and improve performance.
4. **Periodic Maintenance and Prevention**
   o Check Cables and Connectors: In addition to cleaning and fan inspection, regularly check the power cables and connectors to prevent malfunctions.

The Importance of Maintaining Low Humidity Levels in Mining Rooms or Farms
Humidity management in a mining facility is a crucial aspect of ensuring the reliability, efficiency, and longevity of the hardware in use. While often overlooked, humidity control is vital to prevent damage to sensitive electronic components and to maintain an optimal operating environment for mining devices.

Risks of High Humidity Levels
Excessive humidity can have a direct and negative impact on the performance and lifespan of mining devices, particularly models like the **ICERIVER AL3**. The main risks associated with high humidity levels include:

1. **Corrosion of Electronic Circuits:** High humidity promotes the formation of condensation inside ASIC units, which can lead to corrosion of critical electronic components such as motherboards, connectors, and printed circuit boards (PCBs). Corrosion reduces the functionality of the devices, accelerates wear, and increases maintenance costs.
2. **Overheating and Performance Degradation:** High humidity interferes with the proper functioning of cooling systems. The condensation that forms on cooling surfaces and fans can significantly reduce the effectiveness of the cooling system, leading to overheating. This not only compromises operational stability but also shortens the lifespan of devices.
3. **Electrical Failures and Short Circuits:** Humidity that comes into contact with electrical components can cause short circuits. The presence of water or moisture on circuit boards or wiring can trigger electrical failures, potentially damaging the miners irreparably and, in extreme cases, posing a fire hazard.

Optimal Humidity Control
To minimize the risks associated with humidity, it is essential to maintain humidity levels in the mining environment within a safe range, typically between 40% and 60%. To achieve this, the following strategies are highly recommended:

1. **Humidity Monitoring:**
   o Using professional hygrometers is essential for real-time monitoring of humidity levels within the room or

mining farm. Some advanced hygrometers are capable of sending alert notifications when humidity exceeds preset thresholds, allowing for timely intervention.

o Integrating remote monitoring systems can be helpful for continuously tracking multiple farms or devices simultaneously, especially in larger mining operations.

2. **Industrial Dehumidifiers:**

   o If your mining farm is located in a naturally humid environment or in areas subject to seasonal humidity fluctuations, using industrial dehumidifiers is highly recommended. These devices are designed to remove excess moisture and maintain controlled humidity levels, preventing condensation from forming on electronic devices.

3. **Adequate Ventilation:**

   o Controlled mechanical ventilation (CMV) systems are an effective solution to ensure continuous air exchange, facilitating the removal of excess moisture and maintaining stable temperature conditions.

4. **Temperature Control:**

   o Maintaining a constant ambient temperature (ideally between 18°C and 25°C) is crucial to prevent condensation formation. The use of air conditioners or liquid cooling systems not only keeps the temperature ideal for miner operation but can also help reduce relative humidity levels in the environment.

5. **Insulation and Prevention:**

   o If your mining operation is located in a humid environment, such as a basement or coastal area, it is crucial to insulate the building properly to prevent moisture from entering the space.

The Importance of a Holistic Approach to Choosing an ASIC Miner

When evaluating profitability, it's important to adopt a holistic approach. While a high-performance ASIC miner with a large hash rate and low energy consumption may seem like the best choice, many people focus solely on these two factors: raw hash rate (the higher, the better) and energy consumption (the lower, the better). While these factors are certainly crucial, profitability in cryptocurrency mining depends on many other variables, and the most "profitable" device in terms of hash rate isn't always the best choice. Several other elements come into play when calculating profitability, including the manufacturer of the hardware, the mining algorithm being used, and whether the device is a single-algorithm or a multi-algorithm miner. Understanding all these aspects can help make a more informed decision and ensure the best possible return on investment.

By following these recommendations, you can maximize the performance of your **ICERIVER AL3 (15 TH/s)**, ensuring a long operational life and maximizing your returns from cryptocurrency mining. **The ICERIVER Alephium AL3** is an excellent choice for anyone looking to enter the cryptocurrency mining world, especially with the Alephium network. With exceptional computing power and efficient energy consumption, it is an ideal solution for professional miners. By adhering to regular maintenance practices, ensuring proper cooling, and safely overclocking, you will keep the device in optimal condition for years, maximizing profits

MinerAsic

Documents / Resources

	**MinerAsic IceRiver AL3 3500W Alephium Miner** [pdf] Instructions IceRiver AL3 3500W Alephium Miner, IceRiver AL3, 3500W Alephium Miner, Alephium Miner, Miner

References

- MinerAsic- IT Trusted Vendor Cryptocurrency Mining Hardware
- MinerAsic- IT Trusted Vendor Cryptocurrency Mining Hardware
- User Manual