Complete Guide to the [E-AL1M Goldshell](#)

Introduction

The [E-AL1M Goldshell](#) is a powerful ASIC miner designed specifically for mining **Alephium (ALPH)** using the **Blake3 algorithm**. Released in **September 2024**, the E-AL1M boasts impressive energy efficiency, delivering a maximum hashrate of **4.4 Gh/s** with a **power consumption of only 1800W**. With its competitive specifications and unique algorithm focus, the E-AL1M is perfect for both beginners and seasoned miners looking to mine Alephium efficiently.

This guide provides a comprehensive overview of the technical specifications of the [E-AL1M](#), where to purchase it, maintenance tips, optimal usage strategies, and more.

Technical Specifications of the [E-AL1M Goldshell](#)

Feature	Details

Feature	Details
Manufacturer	Goldshell
Model	E-AL1M
Release Date	September 2024
Mining Algorithm	Blake3 (ALPH)
Maximum Hashrate	4.4 Gh/s (±5%)
Default Power Consumption	1800W
Low-Power Mode Hashrate	3.4 Gh/s
Low-Power Mode Power Consumption	1100W
Size	443 x 360 x 135 mm
Weight	16 kg
Noise Level	45 dB
Fan(s)	2

Feature	Details
Input Voltage	110–240V
Interface	Ethernet
Operating Temperature	5°C – 35°C
Operating Humidity	5% – 85%

Cryptocurrencies Mineable with the **E-AL1M**

The **E-AL1M** is designed to mine **Alephium (ALPH)**, a next-generation cryptocurrency utilizing the **Blake3 algorithm**. Its superior energy efficiency and dedicated hardware make it an ideal miner for Alephium enthusiasts.

Cryptocurrency Symbol Algorithm

Cryptocurrency	Symbol	Algorithm
Alephium	ALPH	Blake3

Where to **Buy the E-AL1M from Goldshell**

Purchase Options

You can buy the E-AL1M directly from authorized resellers or through Goldshell's official platform. It is important to choose reliable purchase channels to ensure product quality and receive proper support.

Purchase Platform	Link	Note
Premium Resellers	MinerAsic	Official warranty and support

Why Choose MinerAsic for Your ASIC Purchase?

When purchasing an ASIC miner, price is a significant factor, but ensuring the quality and reliability of the miner is just as crucial. MinerAsic stands out as a trusted global reseller, offering competitive prices without compromising on performance or customer service.

Why Choose MinerAsic?

1. **Top-Quality Products**: MinerAsic offers reliable, high-performance miners from trusted brands like Goldshell.
2. **Competitive Pricing**: Offering affordable prices without compromising on performance.
3. **Expert Support**: Professional assistance for installation, troubleshooting, and warranty coverage.
4. **Global Trust**: MinerAsic is known for its exceptional customer service and reliable products.

E-AL1M Maintenance

Device Cleaning and Care

Proper maintenance is key to keeping your [E-AL1M](#) in top condition and ensuring long-term stability.

1. **Regular Cleaning**
   Dust buildup can negatively impact cooling efficiency. Clean your device every 1–2 months or more often in dusty environments.
   - **Method**: Use a soft cloth, a brush, or compressed air. Be careful not to damage internal components.
2. **Temperature Monitoring**
   Keep the miner's temperature between **5°C – 35°C** to avoid overheating and prevent internal damage.
   - **Solution**: Place the miner in a well-ventilated area, and use additional cooling systems if necessary.
3. **Fan Inspection**
   Inspect the fans every 3–4 months to ensure they are working efficiently.
   - **Replacement**: If the fans are faulty, replace them immediately to prevent overheating.
4. **Firmware Updates**
   Ensure your firmware is always up to date to maintain optimal performance and bug fixes.
   - **Frequency**: Regularly check the firmware section in the device's web interface for updates.

Overclocking the [E-AL1M](#)

What is Overclocking?

Overclocking is the process of increasing the miner's hashrate to boost performance. This increases power consumption and heat, so it's essential to monitor these factors closely.

Overclocking Procedure

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

Precautions for Overclocking

- **Cooling**: Overclocking generates additional heat, so ensure your cooling system is robust.
- **Stability Testing**: After overclocking, test the miner for stability before leaving it running.

Tips for Optimal Use

1. **Initial Setup and Installation**
   - **Location**: Choose a cool, well-ventilated area away from heat sources and direct sunlight.
   - **Certified Power Supplies**: Use high-efficiency power supplies to avoid energy loss and potential overloads.
2. **Troubleshooting Common Issues**
   - **Connection Issues**: If you cannot connect to the mining pool, check your network connection and IP settings.

- **Hardware Failures**: Common issues include fan or power supply failures. Replace faulty parts immediately.
- **Software Errors**: If the miner is not working correctly, try rebooting it or performing a software reset.

3. **Device Security**
- **Protection**: Use a VPN and firewall to protect the miner from external threats.
- **Security Updates**: Regularly update the firmware to patch security vulnerabilities.

4. **Periodic Maintenance**
- **Cables and Connectors**: Regularly check the power cables and connectors for wear and damage.

Humidity Control in Mining Environments

Humidity management is critical for maintaining the longevity and performance of your mining hardware. High humidity can cause condensation, which can damage electronic components and increase the risk of overheating and electrical failures. To ensure your mining facility operates smoothly:

- **Optimal Humidity Range**: Maintain humidity levels between **40% and 60%**.
- **Humidity Monitoring**: Use hygrometers to monitor real-time humidity levels.
- **Industrial Dehumidifiers**: Use industrial-grade dehumidifiers to control excess moisture in high-humidity environments.
- **Adequate Ventilation**: Ensure proper airflow and ventilation to maintain temperature and humidity levels.
- **Temperature Control**: Maintain stable temperatures (ideally **18°C – 25°C**) to prevent condensation.

Holistic Approach to Choosing an ASIC Miner

When choosing an ASIC miner, take a holistic approach to evaluate profitability, not just focusing on hash rate and power consumption. Consider factors like:

1. **Mining Algorithm Compatibility**: The E-AL1M is tailored for Alephium (ALPH) and uses the **Blake3** algorithm.
2. **Diversification**: Multi-algorithm miners may offer more flexibility in adapting to changing mining conditions.
3. **Cost of Hardware**: Factor in the upfront cost and calculate the return on investment.
4. **Mining Strategy**: Look into strategies like low-cost power sources or renewable energy to maximize profitability.
5. **Long-Term Viability**: Ensure the miner's profitability is sustainable over time as difficulty levels and market conditions evolve.

By following these recommendations, you will maximize the performance of your E-AL1M **from Goldshell**, ensuring it remains efficient and profitable in the long run.

The E-AL1M from Goldshell is an excellent choice for anyone looking to mine Alephium efficiently. Its impressive hashrate and low power consumption, combined with the ease of use and high-quality construction,

make it a top contender for Alephium mining. Regular maintenance, appropriate overclocking, and proper environmental conditions will ensure your [E-AL1M](#) continues to perform optimally for years to come