



VOLCMINER

User Manual

VOLCMINER D1 Hydro

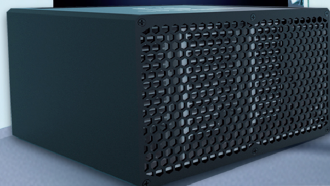


VOLCMINER D1

VOLCMINER D1 Lite



VOLCMINER Mini Pre



WWW.VOLCMINER.COM

VOLCANER

WE ARE COMMITTED TO BECOMING A GLOBAL LEADER IN CHIP INNOVATION

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PRODUCTS

Custom production

Air cooling, water cooling, oil cooling, size, and shape options

VOLCMINER D1



16 Gh/s
Hashrate



229 J/G
Power Efficiency



3725 W \pm 5%
Consumption



LTC/Doge/BEL/LKY/PEP
Currency Types

Net Weight: 17.5 kg **Algorithm:** Scrypt

Size: 335*205*290mm



Air
cooling



Air
cooling

VOLCMINER D1 Lite



14 Gh/s
Hashrate



296 J/G
Power Efficiency



4150 W \pm 5%
Consumption



LTC/Doge/BEL/LKY/PEP
Currency Types

Net Weight: 15.6 kg **Algorithm:** Scrypt

Size: 335*197*285mm

VOLCMINER D1



18.5 Gh/s
Hashrate



229/253 J/G
Power Efficiency



4250 W \pm 5%
Consumption



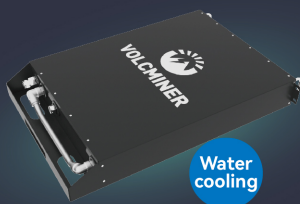
LTC/Doge/BEL/LKY/PEP
Currency Types

Net Weight: 20.8kg **Algorithm:** Scrypt

Size: 335*220*325mm



Air
cooling



Water
cooling

VOLCMINER D1 Hydro



30 Gh/s
Hashrate



253 J/G
Power Efficiency



7600 W \pm 5%
Power Efficiency



LTC/Doge/BEL/LKY/PEP
Currency Types

Net Weight: 28.6 kg **Algorithm:** Scrypt

Size: 90*445*655mm

VOLCMINER Mini Pre



2.2 Gh/s
Hashrate



229 J/G
Power Efficiency



500 W \pm 5%
Power Efficiency



LTC/Doge/BEL/LKY/PEP
Currency Types

Net Weight: 4.45 kg **Algorithm:** Scrypt

Size: 135*202*175mm



Air
cooling

TECHNICAL ADVANTAGES



Dynamic Circuits

Utilizes dynamic circuits to achieve approximately 50%-75% optimization in power consumption and area reduction.



Area Optimization:

Reduces the silicon area occupied by the circuits, enabling more circuit components to be integrated on the same size silicon chip.



Logic Optimization

Increases the density of logic gates, raises maximum frequency, and enhances overall chip performance.



Ultra-Low Voltage Design

Achieves near-threshold voltage digital logic design at around 0.3V, offering up to five times the functional optimization compared to conventional designs.



Integrated On-Chip Memory and Computation Architecture

Delivers bandwidth and power advantages on an order-of-magnitude scale.



3D Stacked Packaging Technology

Provides an order-of-magnitude bandwidth and power efficiency advantage for the chip's memory interface, allowing for expanded storage capacity.



COMPANY MILESTONES

In 2019

The FPGA chip was mass-produced, supporting flexible switching of 40 algorithms. It was the best performance product in the FPGA industry at that time.

The HNS chip successfully completed its first tape-out, becoming the best performance miner upon mass production.

In 2020

In 2021

The ETH chip was completed using the advanced WOW packaging technology.

The tape-out of the first generation LTC chip was successfully completed. Compared to competitors, its performance improved fourfold and the power consumption was reduced by half.

In 2022

In 2023

The first generation LTC chip went into mass production.

Successfully completed the second generation LTC chip flow and mass production, leading the market in performance. Launched Mini, Hydro, Server and other product forms. Meanwhile optimized frame the third version of the optimized architecture has been developed.

In 2024

ABOUT US

VOLCMINER is committed to becoming a global leader in chip innovation. By providing cutting-edge technology and a comprehensive ecosystem, we continuously push the boundaries of high-performance computing. We not only deliver top-quality products and services to our clients but also create lasting value for investors.

Our goal is to maintain ongoing innovation and provide outstanding computational power efficiency to meet the global demand across sectors like blockchain, cloud computing, and big data. Our efficient miner symbolize not just performance, but a strong commitment to building the digital world of the future.

Business Coverage

We have provided mining machines or computing power distribution services to users in over 50 countries worldwide:

Asia: China, Japan, South Korea, Southeast Asia, Central Asia, India

North America: United States, Canada

Europe: Russia, Germany, France, Italy, Spain, Netherlands, Switzerland, Sweden, Norway, UK, Austria, Denmark, Turkey, etc.

Oceania: Australia, New Zealand

South America: Brazil, Uruguay, Peru, etc.

Africa: South Africa



AFTER-SALES

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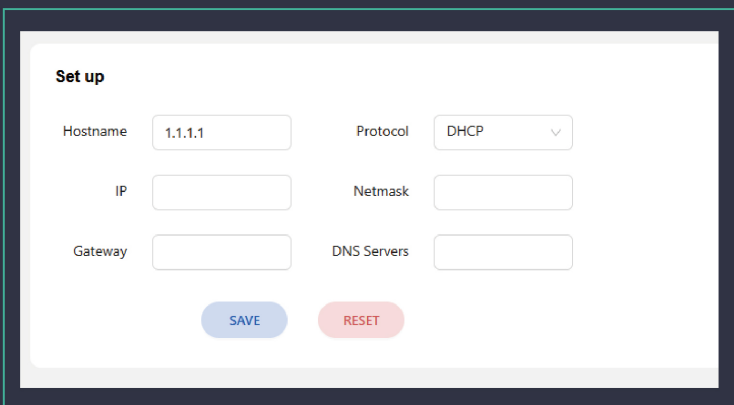
TEL: +380953632426

E-mail : Business01@trshua.com

Basic configuration

1.1 IP How to find and set IP

1. Download the IP reporter software on the TECHNICAL SUPPORT page of official website
2. Install and run “IP reporter”
3. For batch management, please set appropriate values for the shelf, step and position according to the placement of the server; for family use management, use the default values (There is a detailed description of the batch management software at the end of the article) .
4. Click “STRAT”。
5. Press the "IP report" button on the control board, and when the red indicator light is on, release the button
6. The IP address of the current server is displayed on the computer screen
7. In the browser, enter the IP address of the server to log in to the server. The default user-name and password are “root/ltc@dog”
8. IP The default network of the server is DHCP. The DHCP protocol is used to automatically obtain network configurations. You can also set the network protocol to static and manually configure the server to obtain a static ip address. The configuration information includes the ip address, subnet mask, gateway, and DNS server address. After login, on the Configuration-Network screen, you can set the server to a fixed IP address
9. Click “Save”

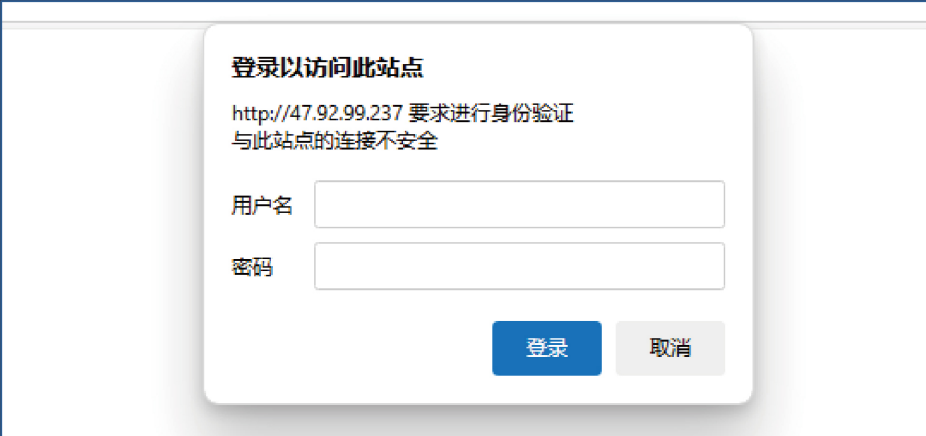


Set up

Hostname	<input type="text" value="1.1.1.1"/>	Protocol	<input type="text" value="DHCP"/>
IP	<input type="text"/>	Netmask	<input type="text"/>
Gateway	<input type="text"/>	DNS Servers	<input type="text"/>

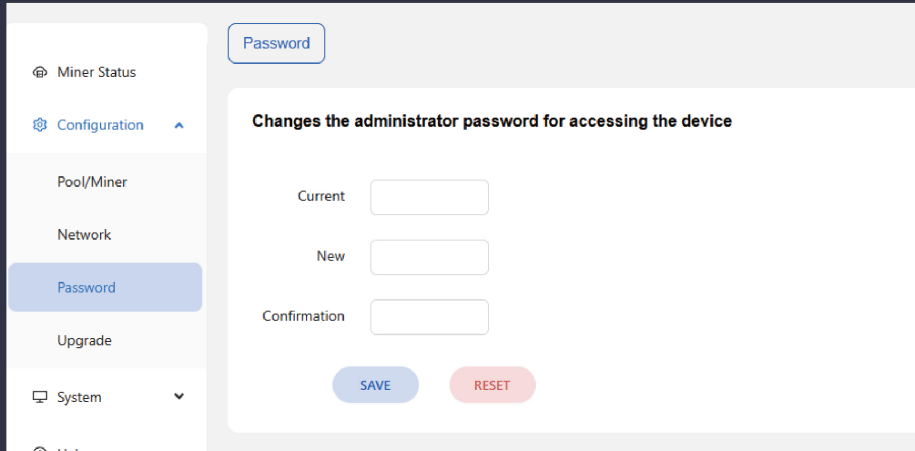
1.2 How to log in and set up a password

1. a) Log in to the server management interface, the default user name and password are root/ltc@dog



A login dialog box with a white background and a light gray border. At the top, it says "登录以访问此站点" (Log in to access this site). Below that, it displays the URL "http://47.92.99.237" and a warning in Chinese: "要求进行身份验证" (Authentication is required) and "与此站点的连接不安全" (Connection to this site is not secure). There are two input fields: "用户名" (Username) and "密码" (Password). At the bottom right, there are two buttons: "登录" (Log in) in blue and "取消" (Cancel) in gray.

2. Click Configuration-password, enter the current password, and then enter your password, after confirmation, click "Save", wait for the machine to restart, and the password modification is completed



A screenshot of the "Password" configuration page in a web interface. The left sidebar shows a menu with "Miner Status", "Configuration" (expanded), "Pool/Miner", "Network", "Password" (selected), "Upgrade", and "System". The main content area has a title "Changes the administrator password for accessing the device". It contains three input fields labeled "Current", "New", and "Confirmation". At the bottom, there are two buttons: "SAVE" in blue and "RESET" in red.

1.3 How to set up mining pool and wallet

Pool1

URL

stratum+tcp://127.0.0.1:1234

Worker

hz001

Password

123

Pool2

URL

1

Worker

2

Password

3

Pool3

URL

4

Worker

5

Set up

Customize the fan speed percentage

front

%

rear

%

Customize the memory parameters

3

Working mode

3

The server supports a maximum of three pool addresses. The priorities are as follows: Pool 1 > Pool 2 > Pool 3

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Advanced Configuration

2.1 Custom fan speed

By default, the server self-adjusts the fan speed according to the temperature of the computing board. Users can also set the fan speed according to the percentage of the maximum fan speed, so that the fan runs at a fixed speed.

Pool1

URL

sl[REDACTED]m:f

Worker

hz000001

Password

123

Set up

Customize the fan speed percentage

front

%

rear

%

Customize the memory parameters

3

2.2 Work Modes

Users can switch different modes according to their own needs

•Normal Mode

In this mode, the power consumption ratio parameters are the best

Three green chevrons pointing right, indicating a continuation or next step.

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Pool1

URL

stratum+tcp://m:1

Worker

hz000001

Password

123

Pool2

URL

1

Set up

Customize the fan speed percentage

front

%

rear

%

Customize the memory parameters

3

Working mode

Normal Mode

•Overclocking mode

In this mode, the mining machine operates at a higher frequency, thereby increasing the mining machine's computing power and income. For users with cheap electricity bills, the income is higher.

Pool1

URL

stratum+tcp://m:1

Worker

hz000001

Password

123

Pool2

URL

1

Set up

Customize the fan speed percentage

front

%

rear

%

Customize the memory parameters

3

Working mode

Over Frequency Mode

2.3 Custom memory parameters

It is not recommended that users modify this parameter. 3 is the best memory parameter value obtained through testing.

The screenshot displays the Volcano Miner configuration interface. On the left, there are two pool configuration sections: 'Pool1' and 'Pool2'. 'Pool1' includes fields for 'URL' (partially obscured), 'Worker' (hz000001), and 'Password' (123). 'Pool2' has a 'URL' field with the value '1'. On the right, the 'Set up' section contains a toggle for 'Customize the fan speed percentage', two percentage input fields for 'front' and 'rear' fans, a red-bordered box around the 'Customize the memory parameters' field which is set to '3', and a 'Working mode' dropdown menu currently set to 'Over Frequency Mode'.

2.4 Usage environment

• Power supply

Air Cold Miner—Single-Phase AC Power supply input voltage: 180V~285V

Hydro Miner—Three-Phase AC Power supply input voltage: 380V

• Environmental requirements

Operating temperature: -25°C ~35°C

Storage temperature: -40°C ~70°C

Working humidity (non-condensing): 10%~90%RH

2.5 Firmware Upgrade

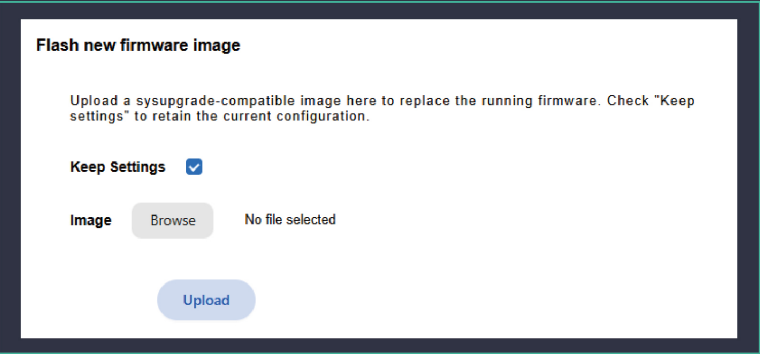
• SD Card upgrade

Obtain the latest SD card upgrade package from the official website www.volcminer.com, copy it into the SD card (FAT format), insert the SD card into the main control SD card slot, and turn on the computer. When the server's traffic lights flash simultaneously, it indicates that the SD card upgrade is completed. Pull out the SD card after shutting down the server.

2.5 Firmware Upgrade

• Network upgrade

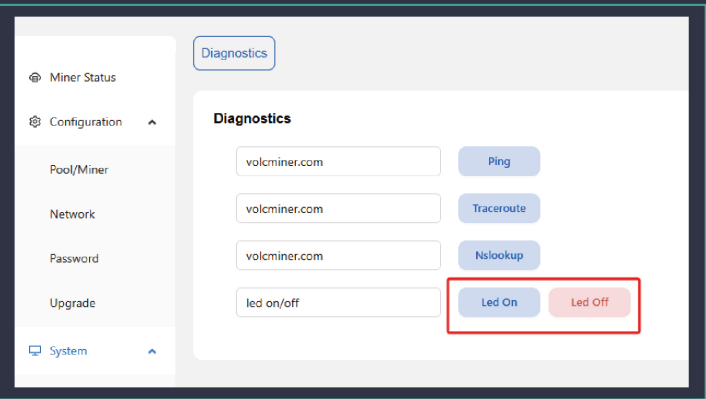
Obtain the latest network upgrade package from the official website www.volcminer.com, select the upgrade package through the web page, click upload, and select Confirm



The **Keep Settings** option indicates whether to save the current configuration information of the server after the upgrade. If it is not checked, the mining pool, wallet and other information in the server will be restored to the factory default settings after the upgrade.

2.6 Lighting Function

In the site where servers are managed in batches, in order to quickly find the server and locate the machine location, in the server system/diagnosis page, after clicking [Led on], the machine will keep the traffic light on until [Led off] is clicked or the machine is restarted, the light will go out.



Batch Tool User Manual

1. Select the machines you want to operate. The batch tool uses the ip segment to specify the machines. It is recommended that users fix the ip address to manage the batch machines.

IP block: ip segment

Start/End: indicates the start ip address and end ip address

After filling in the IP block and Start/End, click OK and the selected ip will be displayed in the following display page:

The screenshot shows the Batch Tool interface. At the top, there is a section for IP selection with fields for 'IP Block' (192.168.1), 'Start' (1), and 'End' (4), followed by an 'OK' button. Below this is a 'Pool info' section with a dropdown menu set to 'lto'. There are three checked checkboxes for 'Pool 1', 'Pool 2', and 'Pool 3'. Each pool has a 'Worker' field and a 'PWD' field. Below the pool settings, there are checkboxes for 'Low Power Mode', 'vol:', and 'fan:', along with a 'freq:' field. At the bottom, there is a table with columns: 'IP', 'STATUS', 'Pool1', 'Worker', 'Pool2', and 'Worker'. The 'IP' column contains a list of IP addresses: 192.168.1.1, 192.168.1.2, 192.168.1.3, and 192.168.1.4. The 'STATUS' column is empty. The 'Pool1', 'Worker', 'Pool2', and 'Worker' columns are also empty.

2. Configure the server information

a) Fill the mining Pool information into the pool and the wallet information into the Worker. Up to 3 groups of mining pools/wallets are supported. If Suffix needs to be added to each server Worker, select the IP selection box for Suffix. The default suffix is - as the interval symbol. If you want to change to . As the interval symbol, manually add full stop mark . , as shown in the picture below:



IP Block 192.168.1 Start 1 ~ End 4 OK Import Delet Line

Pool info Upgrade

☒ Pool 1: stratum.com Worker: dkwl225 PWD: 123 Suffix: ☒ IP ☐ None

☒ Pool 2: Worker: PWD: 123 Suffix: ☐ IP ☒ None

☒ Pool 3: Worker: PWD: 123 Suffix: ☐ IP ☒ None

☐ Low Power Mode ☐ vol: ☐ fan:

freq:

IP	STATUS	Pool1	Worker	Pool2	Worker	Pool3	Worker
192.168.1.1							
192.168.1.2							
192.168.1.3							
192.168.1.4							

b) Finally, click the Start button, select "Yes" in the "Are you sure to change pools" dialog box, and then start to configure corresponding machines according to IP.

c) The machine operation mode can be selected during the configuration process (only one mode can be selected):

IP Block 192.168.8 开始IP 1 ~ 结束IP 4 OK 导入IP列表 删除行

☐ 超频老化测试 矿机密码

新密码

确认密码

矿池相关 固件升级

☒ Pool 1: stratum.com Worker: dkwl225 PWD: 123 后缀: ☐ IP ☒ 无

☒ Pool 2: Worker: PWD: 123 后缀: ☐ IP ☒ 无

☒ Pool 3: Worker: PWD: 123 后缀: ☐ IP ☒ 无

☐ 正常模式 ☐ 超频模式

☐ 风扇(前置) % ☐ 风扇(后置) %

IP	STATUS	Pool1	Worker	Pool2	Worker	Pool3	Worker
192.168.8.1							
192.168.8.2							
192.168.8.3							
192.168.8.4							

3. Password use

On the upper right of the tool, you can fill in the password of the machine. If you do not fill in the password, you will use the password by default. If the user has changed the Password, enter the new password in the Current Password box.

IP Block 192.168.1 Start 1 ~ End 4 OK Import Delet Line

Current Password *****

New Password

Confirm Password

Pool info Upgrade

☒ Pool 1: stratum.com Worker: dkwl225 PWD: 123 Suffix: ☒ IP ☐ None

☒ Pool 2: Worker: PWD: 123 Suffix: ☐ IP ☒ None

☒ Pool 3: Worker: PWD: 123 Suffix: ☐ IP ☒ None

☐ Low Power Mode ☐ vol: ☐ fan:

freq:

IP	STATUS	Pool1	Worker	Pool2	Worker	Pool3	Worker
192.168.1.1							
192.168.1.2							
192.168.1.3							
192.168.1.4							

4. Change passwords in batches

Mining machine password: fill in the current machine password

New Password: Fill in the new password you wish to update

Confirm password: Fill in the new password again

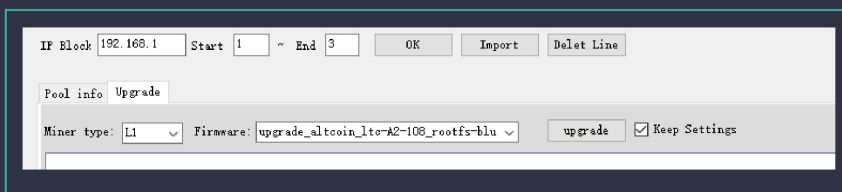
Fill in the IP segment and click OK. At this time, the change password button becomes clickable. Click and select OK.

5. Check the server status

Fill in the ip segment and click OK, click the Check Pools button and the server status will be displayed in the display box.

6. Batch upgrade firmware

- a) Select the Firmware Upgrade button, and the display page switches to the upgrade display screen.
- b) Click the Add Firmware button, select the Miner Type/Miner Type as Volcminer, click the Select Firmware button and select the firmware package to be upgraded.
- c) After the firmware is added to the batch tool, close the Add Firmware dialog box.
- d) Select Miner Type/Miner type as VolcMiner, select a certain firmware to upload, it is particularly important to keep the configuration box. If you do not check the upgrade firmware, all data in the machine will be cleared, such as the password configured by the user, the user's previous Configured mining pool information, fixed IP, adaptive parameter file, etc. So be especially careful to keep this option configured, it is checked by default.






- e) Fill in the IP segment information and click OK. Finally, click the upgrade button and select OK. The tool will start to upgrade the firmware in batches.



VOLCMINER

WE ARE COMMITTED TO BECOMING A GLOBAL LEADER IN CHIP INNOVATION



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-  **Twitter:** <https://x.com/VolcMiner2025>
-  **Official Telegram:** t.me/volcminergroup
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