

DG 1+ Server Manual V1.0.2



DG 1+ Server Manual

Version 1.0.2

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Regulations

1. Overview

The DG 1+ Server is the latest machine launched by AlphaPex with scrypt algorithm, which consists of a central hash boards box, four fans, a power supply and a main control box. All DG 1+ Servers are tested and configured prior to shipping to ensure easy set up.



Notes:

- Place the server and route cables properly to ensure proper working status of the server.
- Do not remove the server cover during normal operation. Ensure that the screws are tightly screwed and the cover is sealed.
- The server must be connected to an earthed mains socket-outlet. The

socket-outlet shall be installed near the server and shall be easily accessible.

- *Connect the two power sockets of the server to two power sockets at the same time. When powering off the device, ensure that all power inputs are disconnected.*
- *DO NOT remove any screws and cables tied on the product.*
- *This varies from server to server, the actual situation prevails.*

1.1 Server Components

The main components and controller front panel of DG 1+ Servers are shown in the following figure:

Controller

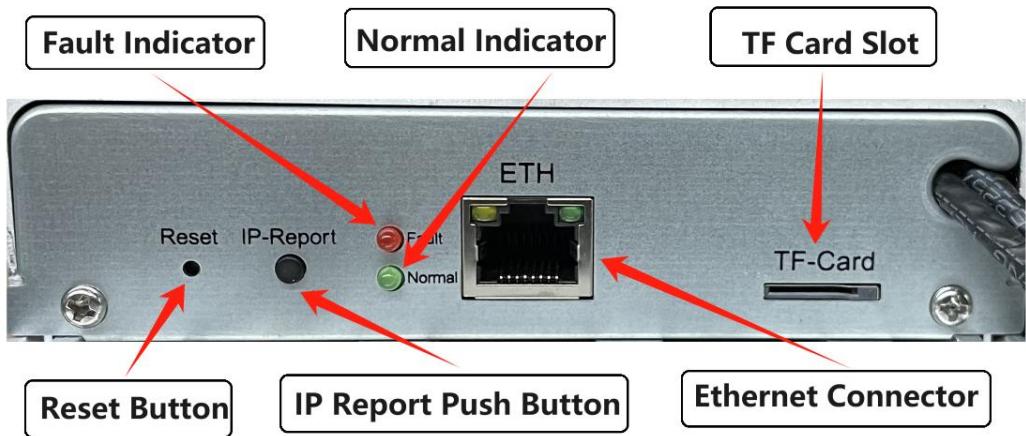
Power Supply



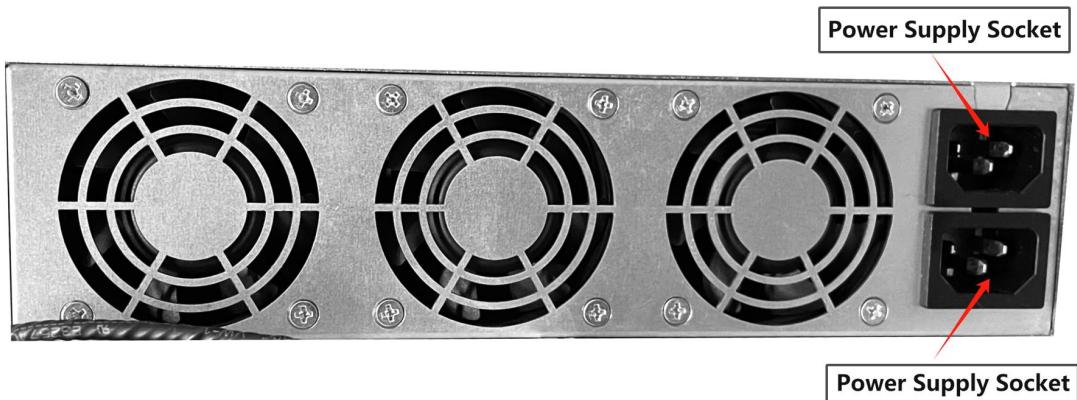
Fans

Hash Boards Box

Controller Board Interface:



FP-103 Power Supply:



Notes:

- The power supply of the FP-103 is quite large, in order to avoid excessive cable current, the FP-103 adopts a dual socket interface designed to balance the transmission current.

1.2 Specifications

Product Glance	Value
Version	1.0.2
Model	DG 1+
Crypto Algorithm/Coins	Scrypt
Hashrate, MH/s	$14000 \pm 3\%$
power on wall@25°C, Watt	$3920 \pm 10\%$

power efficiency on wall @25°C, J/MH	0.28 ± 10%
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Detailed Characteristics	Value
Power Supply	
Power supply AC input voltage, Volt	200-240
Power supply AC Input Frequency Range, Hz	47~63
Power supply AC Input current, Amp	10*2
Hardware Configuration	
Network connection mode	RJ45 Ethernet 10/100M
Server Size (Length*Width*Height, w/o package), mm	432.8*196*287
Server Size (Length*Width*Height, withpackage), mm	624*289*387
Net weight, kg	18.3
Gross weight, kg	20
Environment Requirements	
Operation temperature, °C	0~40
Storage temperature, °C	-20~70
Operation humidity(non-condensing), RH	10~90%
Operation altitude, m	≤2000

Notes:

- *Caution: Wrong input voltage may probably cause equipment damaged
- Max condition: temperature 40°C, altitude 0m

- Ensure that two power cables are used at the same time. The typical current of each cable is 16A.
- In the altitude range of 900 ~ 2000m, the maximum operating temperature drops by 1 °C for every 300m increase.

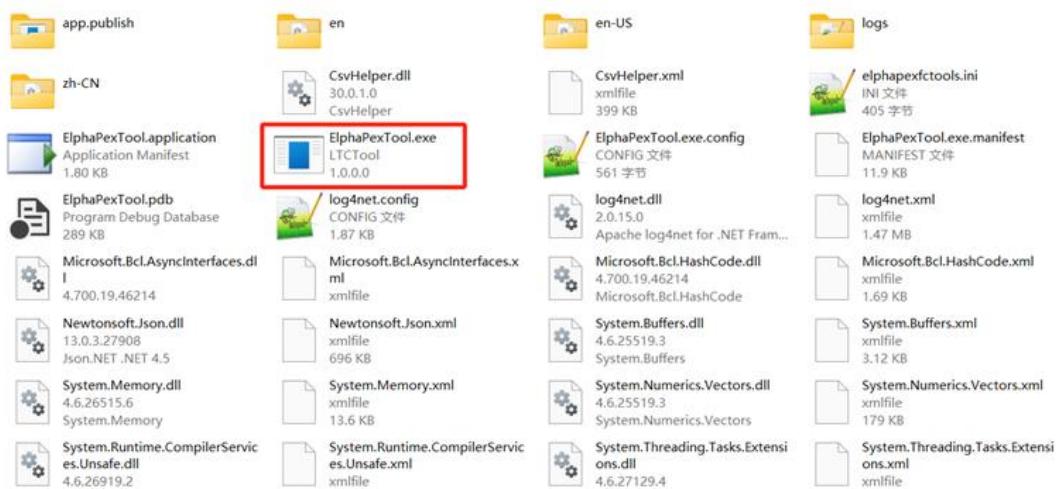
2. AlphaPexTool Guide

Note: You can **SKIP** this step if you already know its IP address and can use website to configure the mining info.

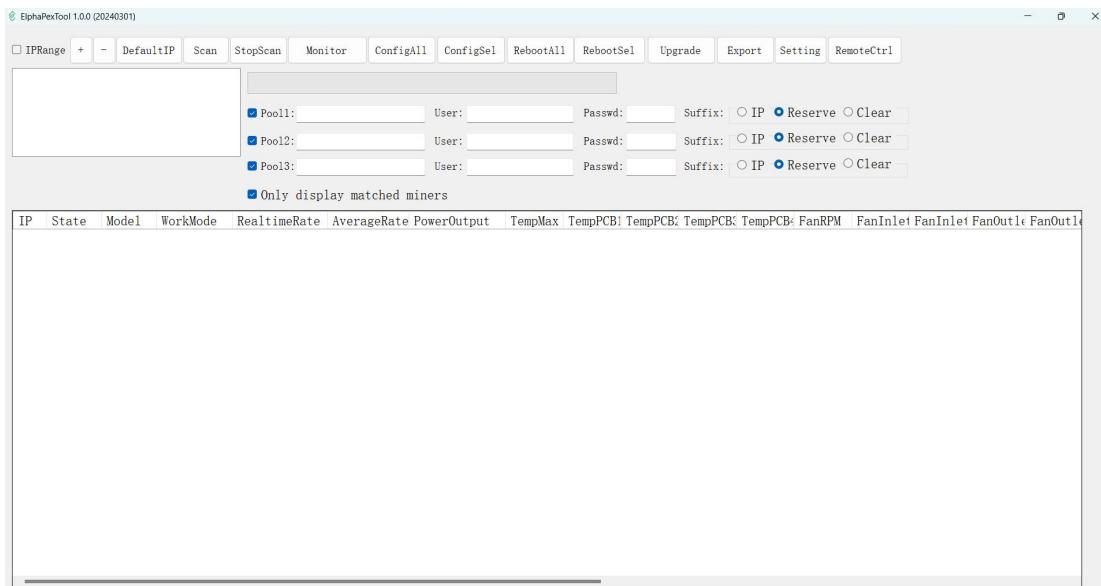
1. Get software pack **AlphaPexTool** from www.elphapex.com

Notes:

- **AlphaPexTool** is now only available on windows platforms
- 2. Extract the file.

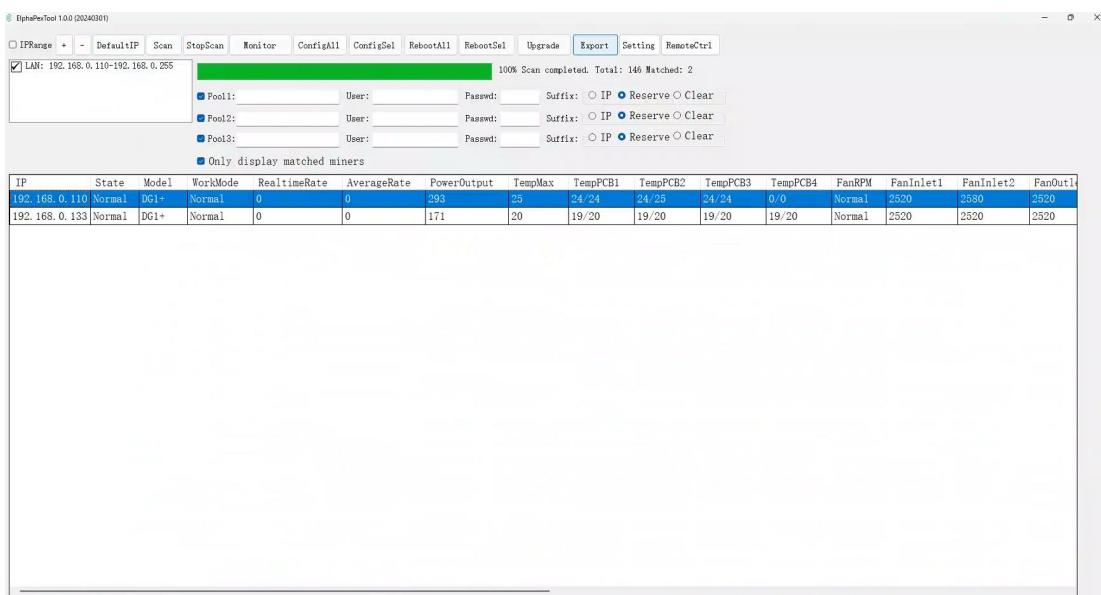


3. Open the software **AlphaPexTool.exe** and click on **[+]**, Add the corresponding network segment range



4. Press the **Scan** button.

The information about servers in the current network segment is displayed in a list.



5. Double-click the selected line, this will open the browser to the server's web page.

6. Proceed to login using **root** for both the username and password.
7. In the **IP** section, you can assign a Static IP address (optional).
8. Enter the IP address, Subnet mask, gateway and DNS Server.
9. Click **SAVE** button.

firmwareVersion: DG1+_SW_V1.0.0, ipAddress: 192.168.31.106, MAC: b8:4c:87:ef:a0:27, firmwareType: Release

RESTORE REBOOT

3. Server Configuration

3.1 Pool Configuration

1. Enter server web page, click **Miner** Section:

firmwareVersion: DG1+_SW_V1.0.0, ipAddress: 192.168.31.106, MAC: b8:4c:87:ef:a0:27, firmwareType: Release

RESTORE REBOOT

Notes:

- Note that please **DO NOT** adjust the fan speed by yourself although it can be configured. The server itself will tune the fan speed automatically going along with the environment temperature changes.

2. Set the options according to the following table:

Option	Description
Mining Address	Enter your pool address

User Name	Your worker ID on the selected pool.
User Password	The password for your selected worker.

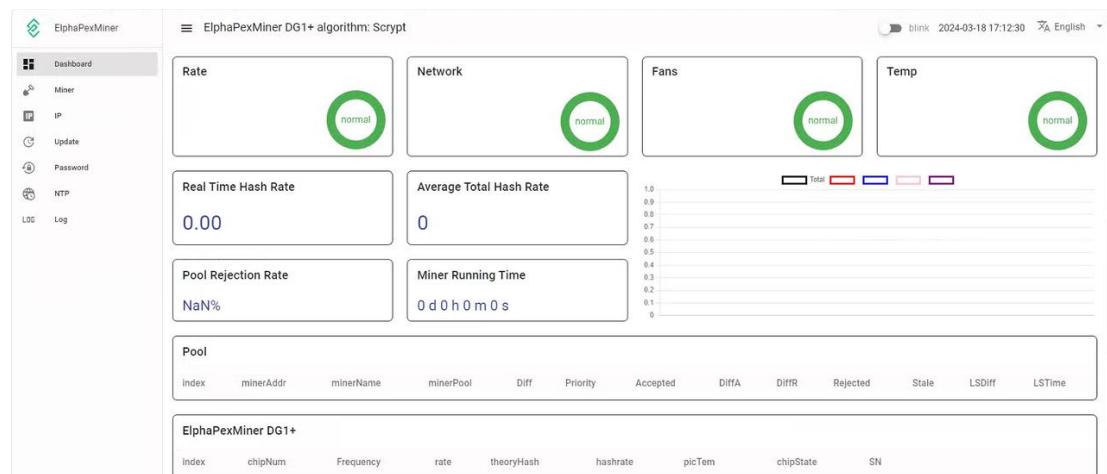
Notes:

- The DG 1+ server can set up three mining pools(pool 1 to pool 3) at the same time.
- The priority of pools 1 through 3 is reduced in turn, and when a pool with a higher priority is offline, a pool with a lower priority will be put into use

3. Click **SAVE** after the configuration.

4. Server Monitoring

1. Click dashboard to check the server status



Notes:

- When the temperature of the outlet reaches 85 °C, the temperature control policy of the DG 1+ server will activate the high temperature protection and the mining process will stop

2. Monitor your server according to the descriptions in the following table:

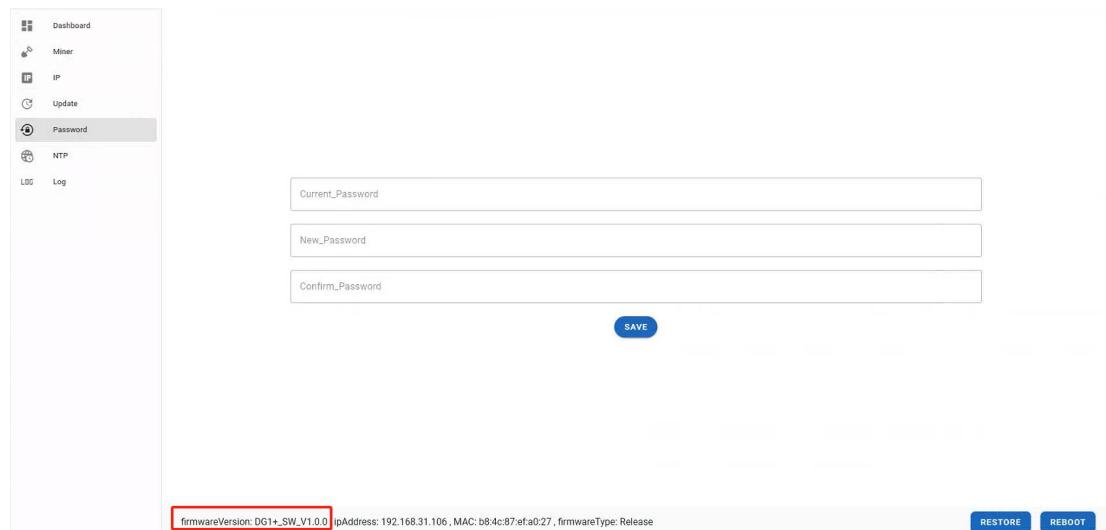
Option	Description
chipNum	Number of chips detected in the chain.
Frequency	ASIC frequency.
rate	Network level hash rate of each hash board (MH/s).

theoryHash	Theoretical hash rate of each hash board (MH/s).
hashrate	Board level hash rate of each hash board (MH/s).
picTem	Onboard Temperature of each hash board(inlet/outlet) (°C).
chipState	Chip operating state <ul style="list-style-type: none"> • Normal • Abnormal
SN	Series Number of each hash board

5. Server Management

5.1 Firmware Version Check

1. Enter the backstage web site of your server, find the firmware version on the bottom.
2. **firmwareVersion** displays the current release version your server uses. In the examples below, the server is using firmware version: **DG1+_SW_V1.0.2**

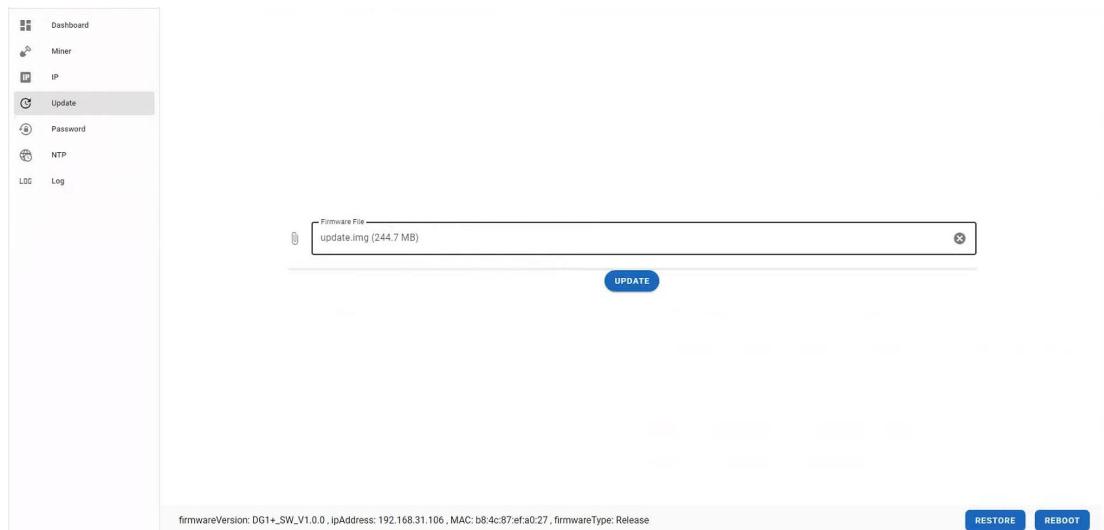


5.2 System Update

Notes:

- During the firmware upgrade, ensure that the server remains powered on and no other operations are conducted.
- The DG 1+ server provides support for firmware upgrades using the .img and .zip file extensions.

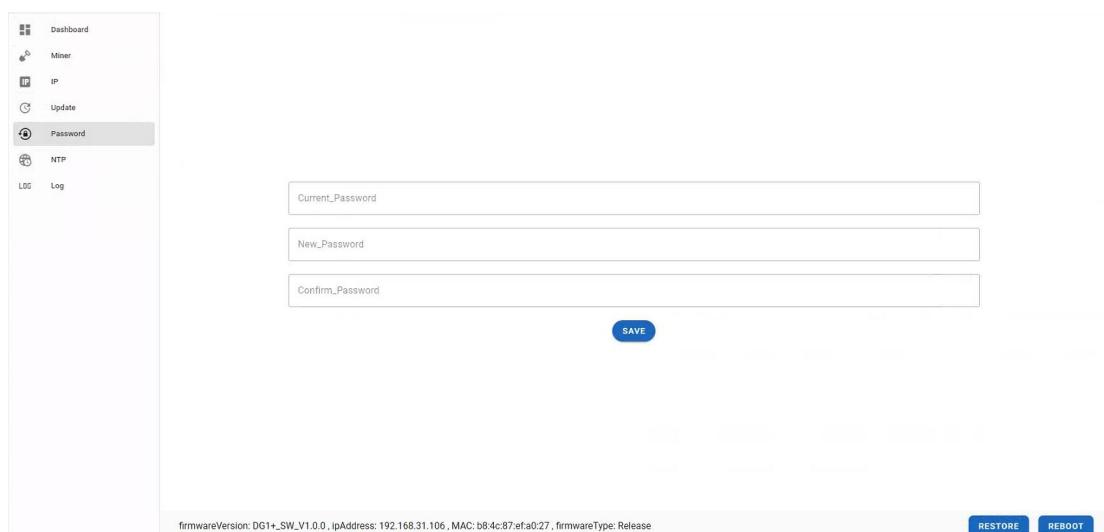
1. In Web site page, click **Update** to enter the firmware upgrade page.
2. Click **Firmware File** input field, select the .img or .zip firmware file, and then click **UPDATE**, The server will start the firmware update process.



3. When the update process is completed, the server will restart and it will turn to the **Dashboard** page.

5.3 Password Change

1. In Web site page, click **Password**.
2. Enter the current password and the new password, then click **SAVE**.

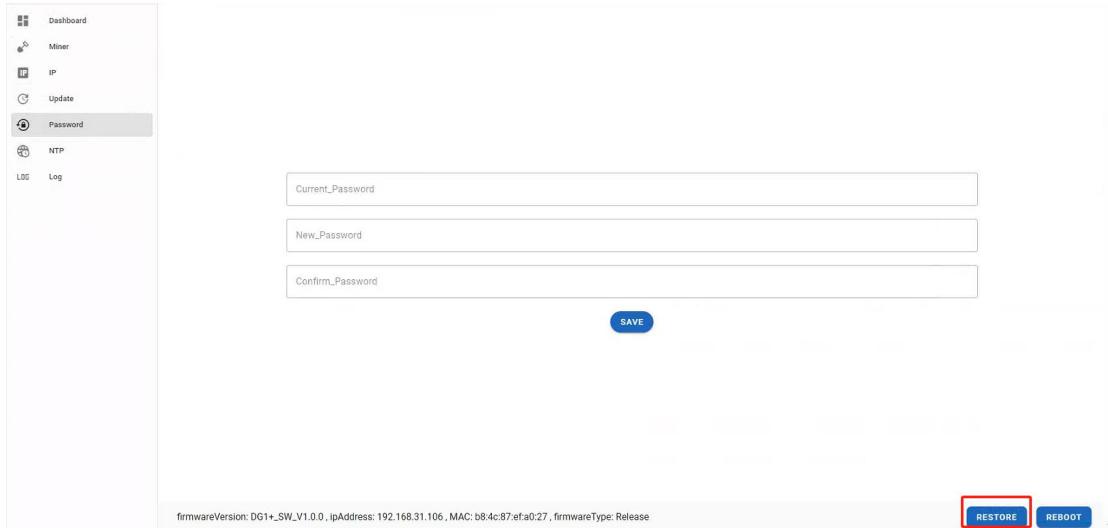


5.4 Restoring Initial Settings

Notes:

- The RESTORE operation will clear the pool Settings and restore the original password. Exercise caution when performing this operation.

1. In Web site page, Click RESTORE button.



Regulations:

Notice:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1). This device may not cause harmful interference.
- (2). This device must accept any interference received, including interference that may cause undesired operation.

CAN ICES-003(A) / NMB-003(A)

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.