



# **L3+ Server Installation Guide**

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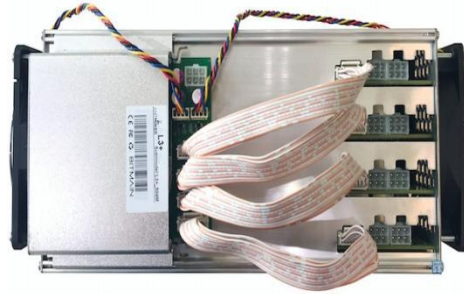
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## 1. Overview

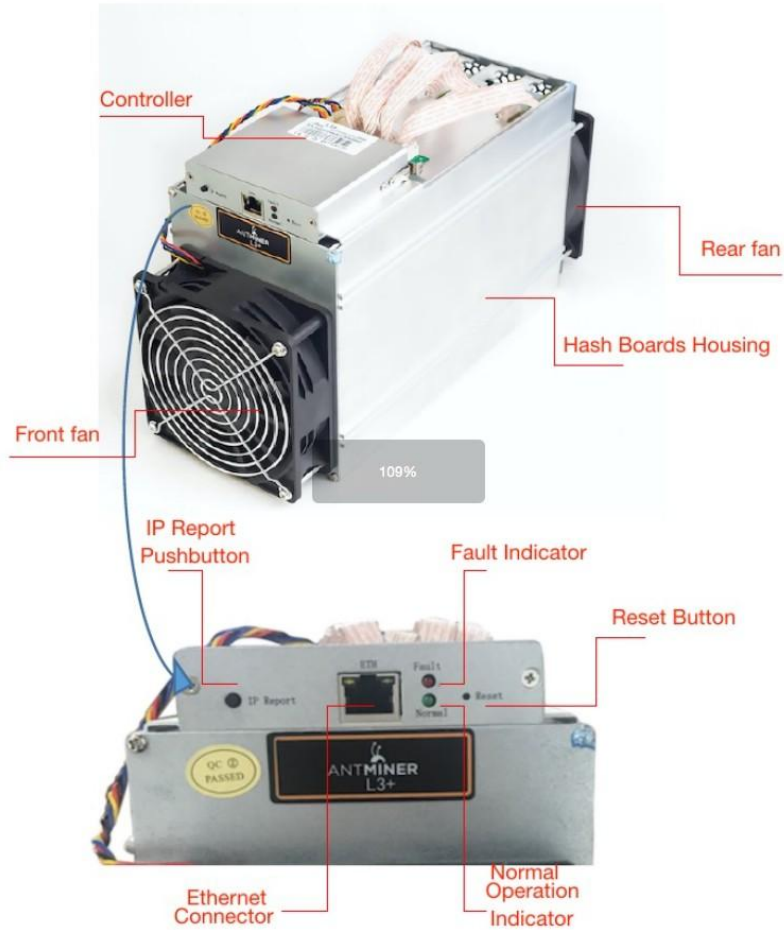
The L3+ server is Bitmain's newest version in the L3+ server series. It boasts a state-of-the-art BM1485 custom-made chip. All L3+ servers are tested and configured prior to shipping to ensure easy set up.



Power supply unit is **not included**. Please provide your own ATX power supply.

## 1.1 L3+ Server Components

The L3+ server main components and controller front panel are shown in the following figure:



## 1.2 Specification

Feature	Description
Ideal Hash Rate	504MH/S
Default chip frequency	384M
Estimated wall outlet power consumption (with APW3, 93% efficiency, 25°C ambient temperature)	800W +10%
Rated voltage	11.6 -- 13.00V
Estimated wall outlet power efficiency (with APW3, 93% efficiency, 25°C ambient temperature)	1.6J/MH +10%
Dimensions (L x W x H)	352mm (l) x 130mm (w) x 187.5mm (h)
Net weight	5.2kg
Operating ambient temperature	0 -- 40°C



The server does not contain a DC/DC converter; therefore, higher input voltage will cause higher Mining efficiency.

## 2. Connecting the Power Supply

Nine PCI-e connectors are located at the top of the L3+ server for connecting the PSU as follows:

- Eight PCI-e connectors for the hash boards. Each hash board has a set of two PCI-e connectors.
- One PCI-e connector located on the controller.



Each hashboard must be powered by the same PSU on both connectors to prevent possible damage and instability.

### To connect the power supply:

1. Connect PSU power cable connectors to each of the eight PCI-e connectors on the top of the L3+ server, ensuring that each hash board is powered by the same PSU.
2. Connect a PSU power cable connector to the L3+ server PCI-e connector on the controller.
3. Connect the network cable to the ETH port.
4. To power up your L3+ server, connect the PSUs to the power wall outlet.



If you are using more than one PSU, power up the PSU connected to the controller AFTER you have powered up the other PSU(s).

## 2. Connecting the Power Supply

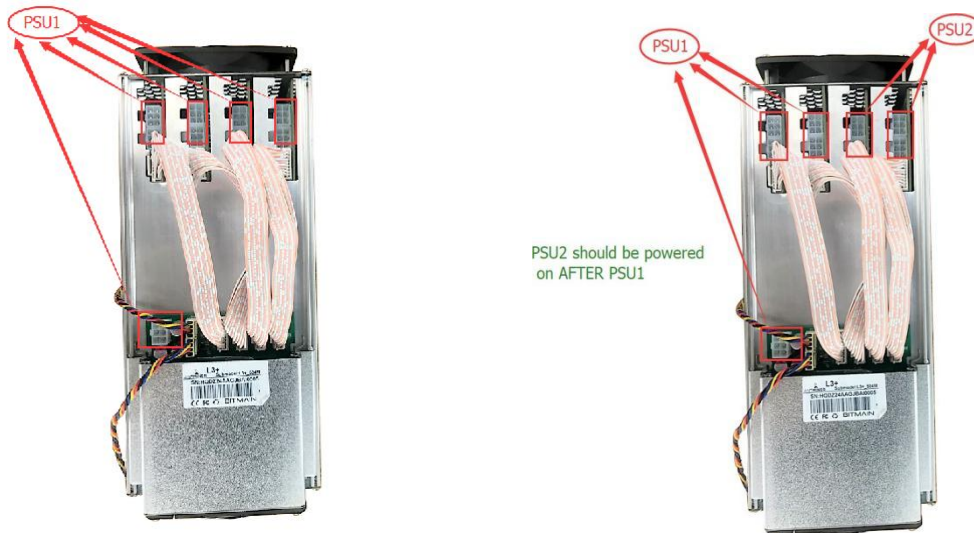


Figure 2-- 1. PCI-- E Connectors -- Correct Connection



Figure 2-- 2. PCI-- E Connectors -- Incorrect Connection




### 3. Setting Up the Server

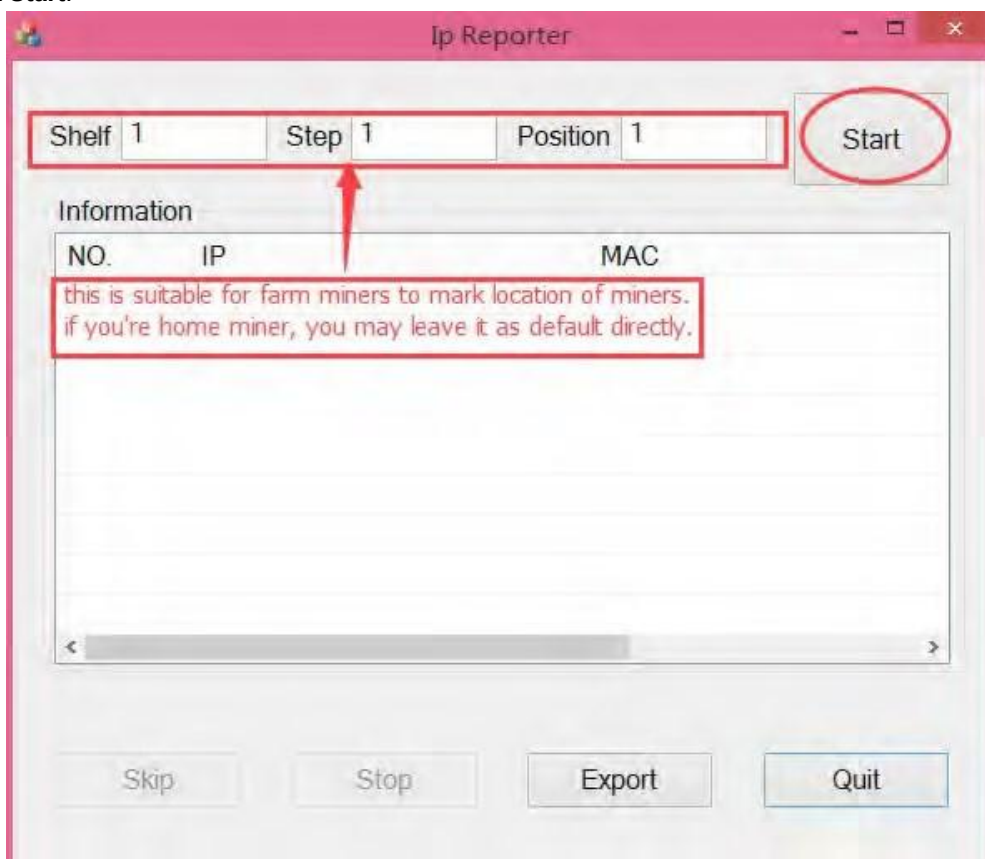
To set up the server:

 The file IPReporter.zip is supported by Microsoft Windows only.

1. Go to the following site: <https://shop.bitmain.com/support/download>
2. Choose 'Others' and download the following file: IPReporter.zip
3. Extract the file.3.

 The default DHCP network protocol distributes IP addresses automatically.

4. Rightm click **IPReporter.exe** and run it as Administrator.
5. Select one of the following options:
  - Shelf, Step, Position – suitable for farm servers to mark the location of the servers.
  - Default – suitable for home servers.
6. Click **Start**.

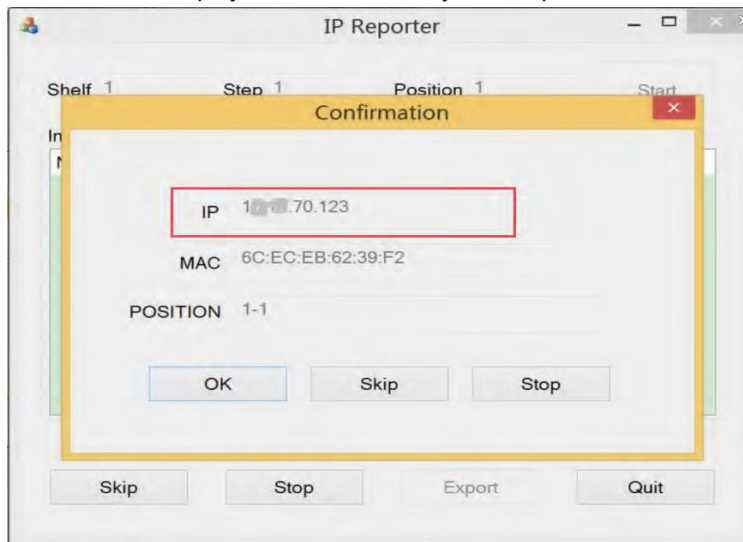


### 3. Setting Up the Server

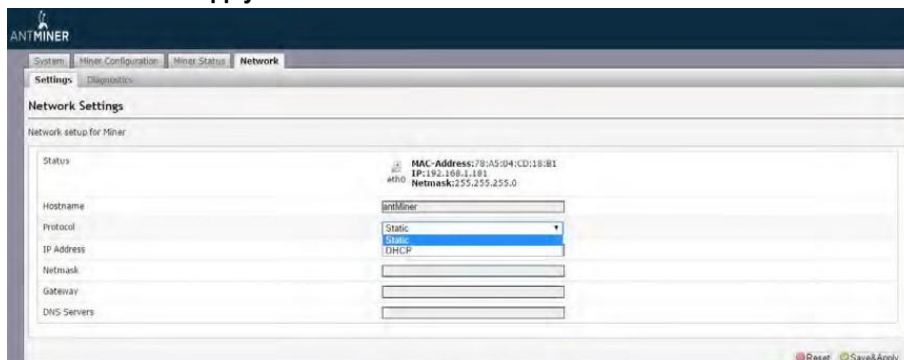
- On the controller board, click the IP Report button. Hold it down until it beeps (about 5 seconds).



The IP address will be displayed in a window on your computer screen.



- In your web browser, enter the IP address provided.
- Proceed to login using `root` for both the username and password.
- In the Network section, you can assign a Static IP address (optional).
- Click **Save & Apply**.




## 4. Configuring the Server

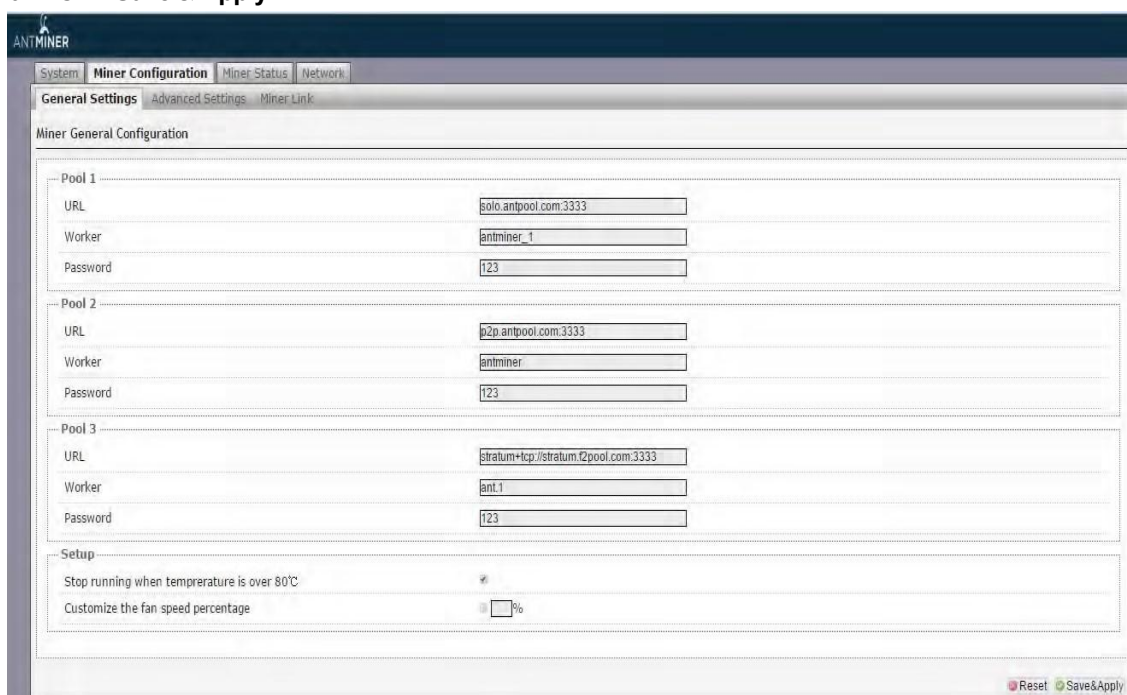
### 4.1 Setting Up the Pool

To configure the server:

1. click **General Settings**.
2. Set the options according to the following table:

Option	Description
Pool URL	Enter the URL of your desired pool.  <div style="border: 1px solid black; padding: 10px;">  <p>The L3+ server can be set up with three mining pools, with decreasing priority from the first pool (pool 1) to the third pool (pool 3). The pools with low priority will only be used if all higher priority pools are offline.</p> </div>
Worker	Your worker ID on the selected pool.
Password	The password for your selected worker.

3. Click **Save & Apply** to save and restart the server.



The screenshot shows the ANTMINER web interface. The 'Miner Configuration' tab is active, and the 'General Settings' sub-tab is selected. The 'Miner General Configuration' section contains three pool configuration blocks:

- Pool 1:** URL: solo.antpool.com:3333, Worker: antminer\_1, Password: 123
- Pool 2:** URL: p2p.antpool.com:3333, Worker: antminer, Password: 123
- Pool 3:** URL: stratum+tcp://stratum.f2pool.com:3333, Worker: ant.1, Password: 123

Below the pool settings is a 'Setup' section with two options:

- Stop running when temperature is over 80°C:
- Customize the fan speed percentage:  %

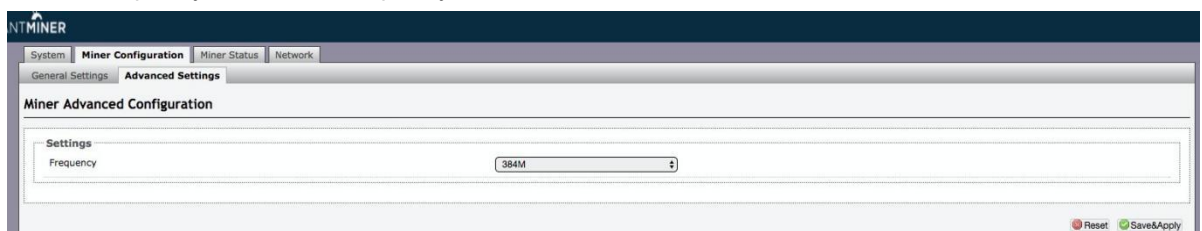
At the bottom right, there are buttons for 'Reset' and 'Save&Apply'.

## 4. Configuring the Server

## 4.2 Modifying the Frequency (Applied only to fixed frequency firmware)

To modify the frequency value:

1. click **Advanced Settings**
2. Select a frequency. The default frequency for the L3+ server is 384M

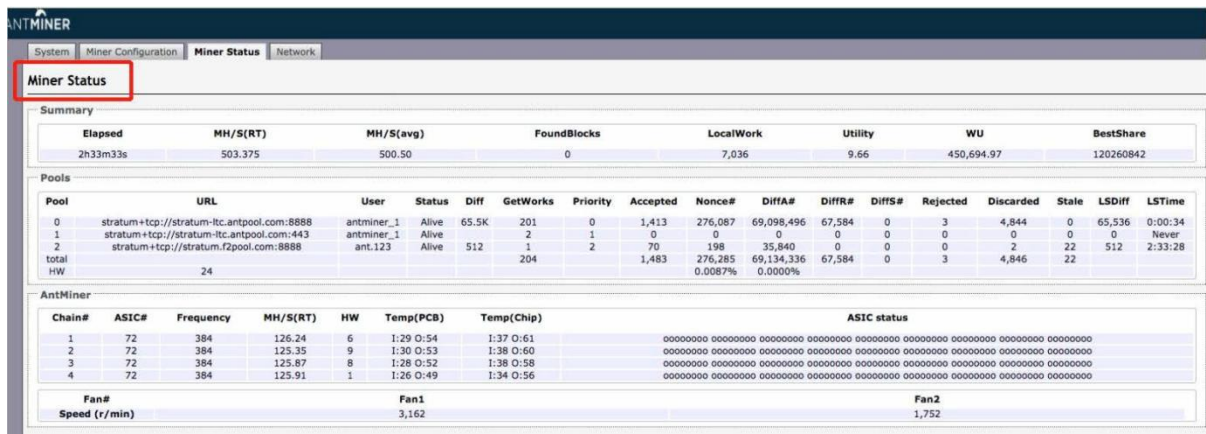


## 5. Monitoring Your Server

To check the operating status of your server:

1. Click the status marked below.
2. Monitor your server according to the descriptions in the following

Option	Description
ASIC#	Number of chips detected in the chain.
Frequency	ASIC frequency setting.
GH/S(RT)	Hash rate of each hash board ( MH/s)
Temp(PCB)	Temperature of each hash board (°C).(Applied only to server with fixed frequency)
Temp(Chip)	Temperature of the chips on each hash board (°C).
ASIC status	One of the following statuses will appear: <ul style="list-style-type: none"> <li>● O -- indicates OK</li> <li>● X -- indicates error</li> <li>● -- -- indicates dead</li> </ul>



The screenshot shows the 'Miner Status' page in the AntMiner web interface. It includes a navigation bar with 'System', 'Miner Configuration', 'Miner Status', and 'Network'. The 'Miner Status' section is highlighted with a red box. Below it, there is a 'Summary' table with columns: Elapsed, MH/S(RT), MH/S(avg), FoundBlocks, LocalWork, Utility, WU, and BestShare. A 'Pools' table follows, listing pool details like URL, User, Status, Diff, GetWorks, Priority, Accepted, Nonce#, DiffA#, DiffR#, DiffS#, Rejected, Discarded, Stale, LSDiff, and LSTime. At the bottom, there is an 'AntMiner' table showing Chain#, ASIC#, Frequency, MH/S(RT), HW, Temp(PCB), Temp(Chip), and ASIC status. Below this, 'Fan# Speed (r/min)' is shown for Fan1 (3,162) and Fan2 (1,752).

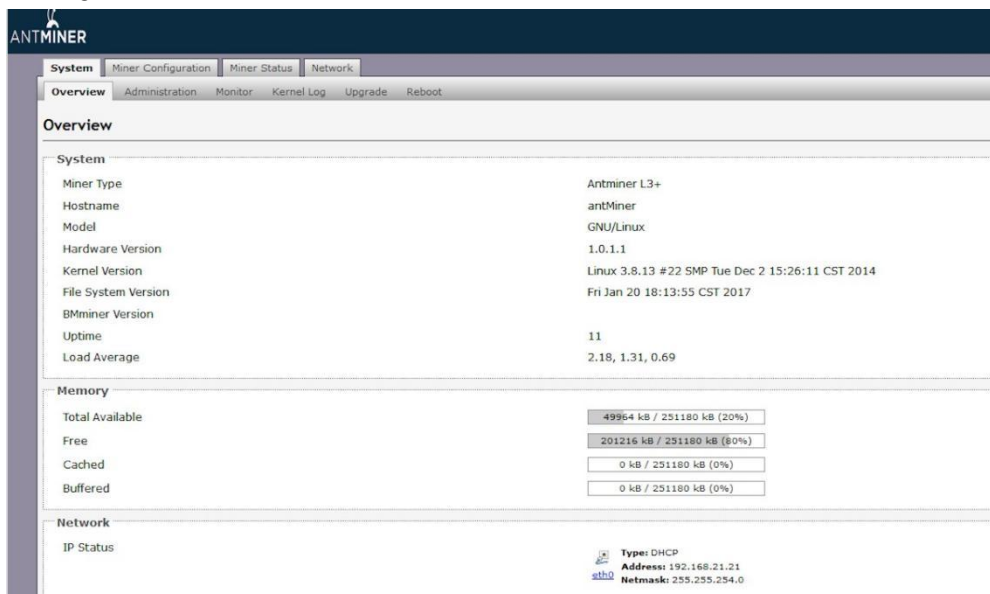
Note :The server will stop running when the PCB temperature is over 85°C

## 6. Administering Your Server

### 6.1 Checking Your Firmware Version

To check your firmware version:

1. In **System**, click the **Overview** tab.
2. **File System Version** displays the date of the firmware your server use. In the example below, the server is using firmware version 20170120.



The screenshot shows the Antminer L3+ System Overview page. The 'System' section contains the following information:

Miner Type	Antminer L3+
Hostname	antMiner
Model	GNU/Linux
Hardware Version	1.0.1.1
Kernel Version	Linux 3.8.13 #22 SMP Tue Dec 2 15:26:11 CST 2014
File System Version	Fri Jan 20 18:13:55 CST 2017
BMminer Version	
Uptime	11
Load Average	2.18, 1.31, 0.69

The 'Memory' section shows:

Total Available	49864 kB / 251180 kB (20%)
Free	201216 kB / 251180 kB (80%)
Cached	0 kB / 251180 kB (0%)
Buffered	0 kB / 251180 kB (0%)

The 'Network' section shows IP Status:

Type: DHCP  
Address: 192.168.21.21  
Netmask: 255.255.254.0

### 6.2 Upgrading Your System



Make sure that the L3+ server remains powered during the upgrade process. If power fails before the upgrade is completed, you will need to return it to Bitmain for repair.

To upgrade the server's firmware:

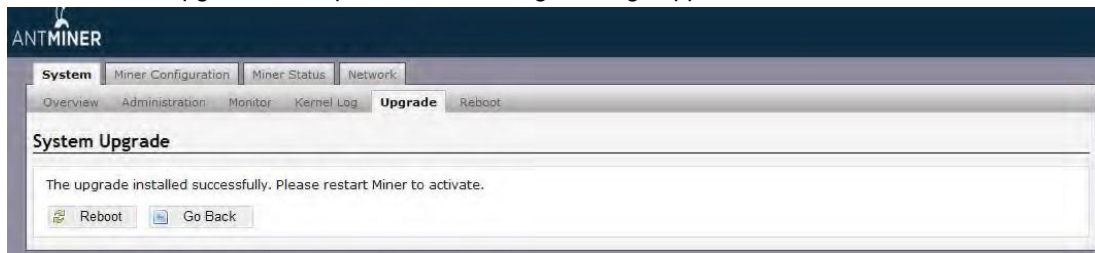
1. In System, click **Upgrade**.



The screenshot shows the Antminer L3+ System Upgrade page. It contains the following sections:

- Backup / Restore:**
  - Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).
  - Download backup:
  - Reset to defaults:
  - To restore configuration files, you can upload a previously generated backup archive here.
  - Restore backup:
- Flash new firmware Image:**
  - Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration.
  - Keep settings:
  - Image:

2. For **Keep Settings**:
  - Select the check box to keep your current settings (default).
  - Clear the check box to reset the server to default settings.
3. Click the **选择文件 (Browse)** button and navigate to the upgrade file. Select the upgrade file, then click **Flash image**. A message appears notifying you if the L3+ server firmware can be upgraded and if yes, will then proceed to flash the image.
4. When the upgrade is completed, the following message appears:

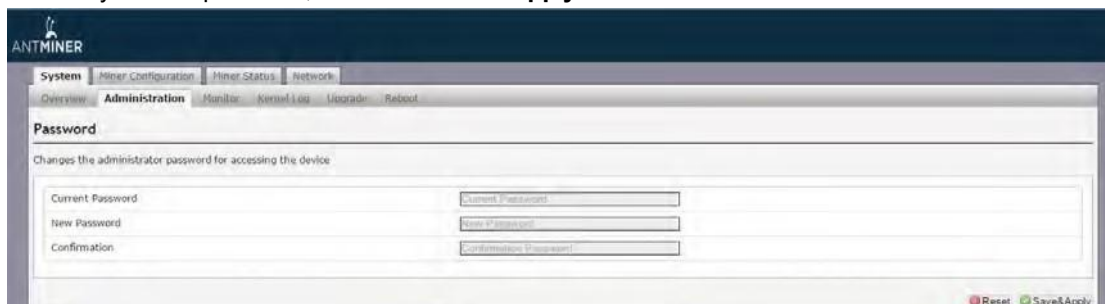


5. Click one of the following options:
  - **Reboot** - to restart the server with the new firmware.
  - **Go Back** - to continue mining with the current firmware. The server will load the new firmware next time it is restarted.

### 6.3 Modifying Your Password

To change your login password:

1. In **System**, click the **Administration** tab.
2. Set your new password, then click **Save & Apply**.



### 6.4 Restoring Initial Settings

To restore your initial settings

1. Turn on the server and let it run for 5 minutes.
2. On the controller front panel, press and hold the **Reset** button for 10 seconds.



Resetting your server will reboot it and restore its default settings. The red LED will automatically flash once every 15 seconds if the reset is operated successfully.

**Regulation:**

**FCC Notice (FOR FCC CERTIFIED MODELS):**

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**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.

**EU WEEE: Disposal of Waste Equipment by Users in Private Household in the European Union**



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information

about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

**台灣 ROHS:**

設備名稱: _____, 型號: _____						
單元	有害物質					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr+6)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
外殼	○	○	○	○	○	○
電路板組件	—	○	○	○	○	○
其他線材	—	○	○	○	○	○
備考 1. “超出 0.1 wt %” 及 “超出 0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。 備考 2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。 備考 3. “—” 係指該項限用物質為排除項目						