

BITMAIN

# AntMiner S5+ Manual

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## 1 Overview

The AntMiner S5+ with 7.722Th/s is Bitmain's newest iteration, using the state of the art BM1384 chip powered by ultra-low power 28nm technology. S5+ are tested and configured prior to shipping to make it easier for customers to set up. This model is comprised of three hashing modules, each of which is approximately the same form factor as the S5, with the addition of an extra hashing board located in the middle.



**Please note:**

- 1. You must prepare your own ATX Power Supply**

## 2 Features

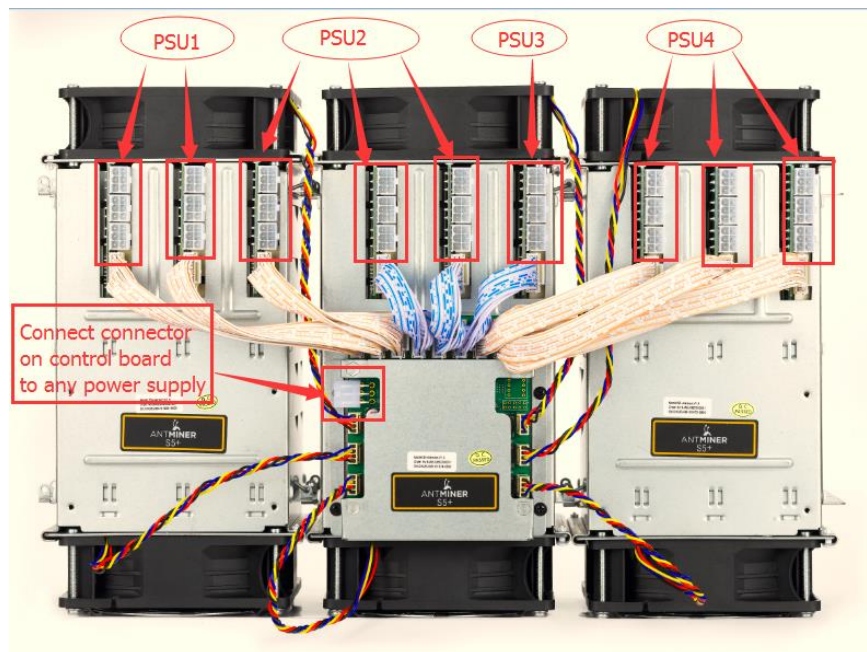
Ideal Hash Rate (GH/s)	7722 GH/s $\pm$ 5%
Default chip clock (M)	325
Input Voltage (V)	12.00
Estimate power on wall (W) -- assume with AC/DC 93% efficiency, 25°C ambient temp)	3436W
Estimate efficiency on wall (W/GH)	0.445
Dimensions (mm)	275 mm x 372 mm x 155 mm
Weight (kg)	11
Operating ambient temperature (°C)	0 ~ 40

Notes: Input voltage should not be less than 12.00V and all the 3 PCIE connectors are all required on each hash board, since it is based on serial power solution and there is no DC/DC inside the miner. Higher input voltage will cause higher mining efficiency.

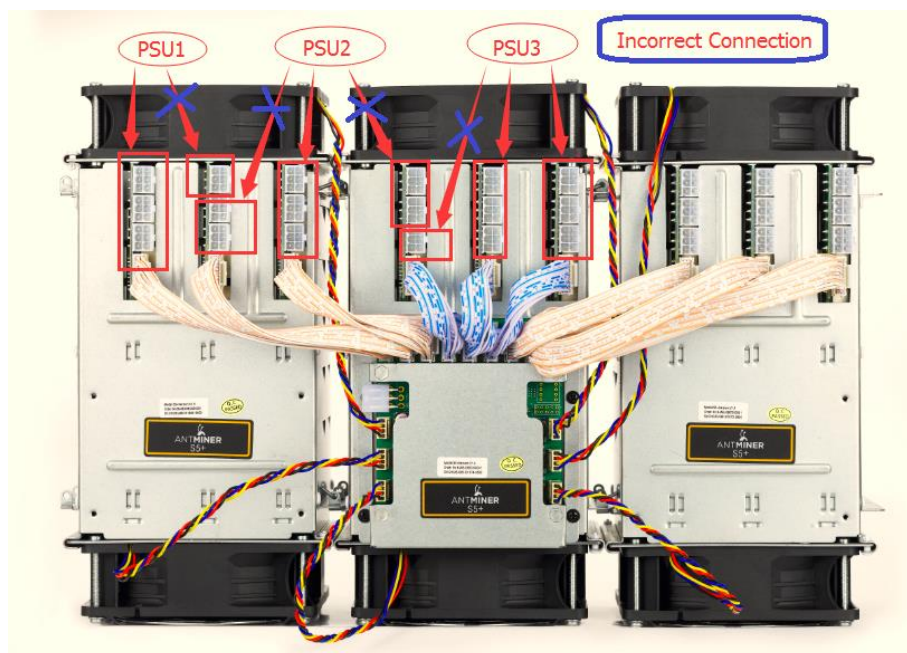
## 3 Power Supply

Each AntMiner S5+ has 27 PCI-e connectors for +12V/15A DC **STABLE** input on hash boards and 1 PCI-e connector on the controller, **all the 28 PCI-e connectors are required.** **Do not connect more than one PSU to the same hashing board to prevent possible damage and instability.** **And be sure to connect the hash boards to the PSU first and then connect the controller to PSU.** See below screenshot for the CORRECT and INCORRECT connection of the PCI-E connectors:

**Correct connection:**



**Incorrect connection:**



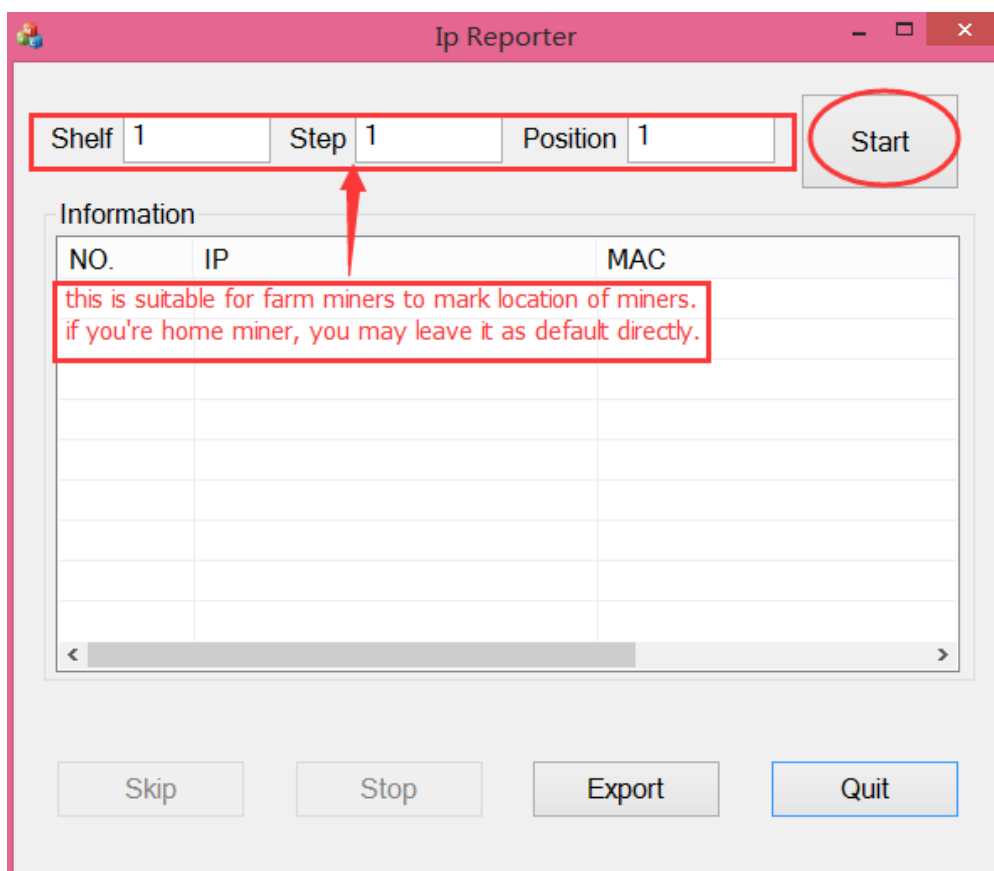
## 4 Connect to Miner

Step 1. The default DHCP network protocol distributes IP addresses automatically. Please download [IPReporter.zip](#) from minerlink.com, then please follow below steps to find out the IP of the miner.

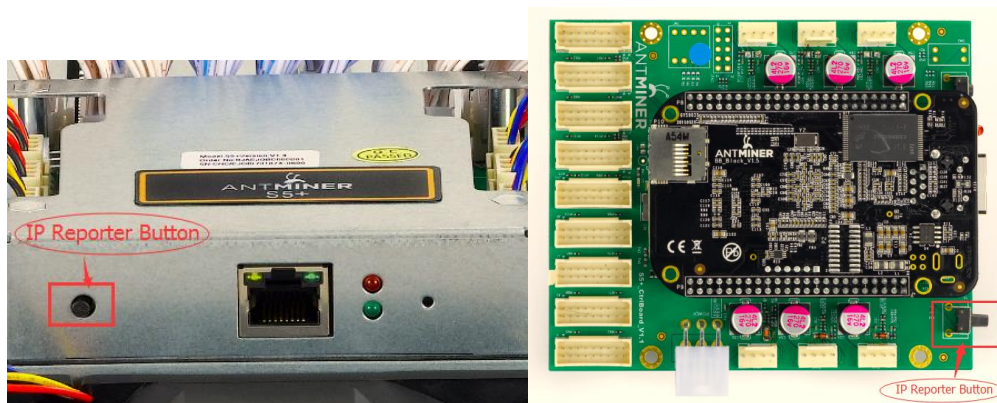
1. Extract the file and double click 'IPReporter.exe'.

The 'Shelf, Step, Position' options are suitable for farm miners to mark the location of the miners. For home miners, it can be left as default.

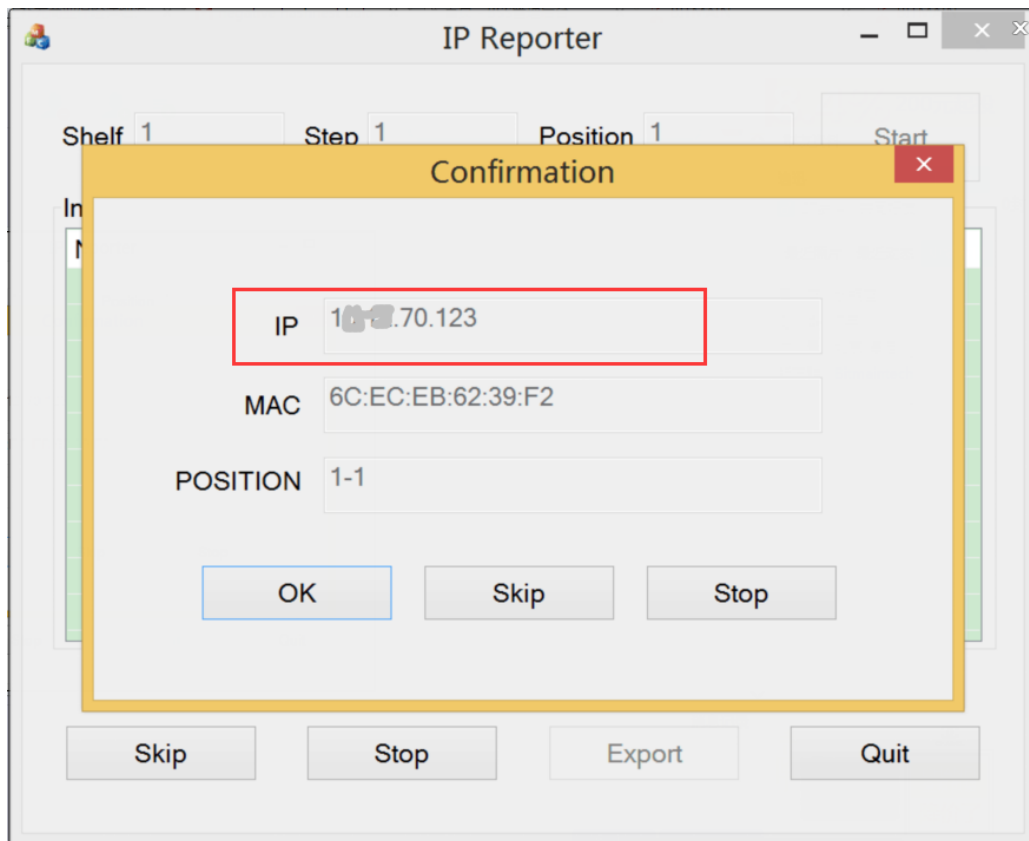
Then click 'Start'.



2. Press the IP Reporter button on IO board and you'll hear a beep sound:

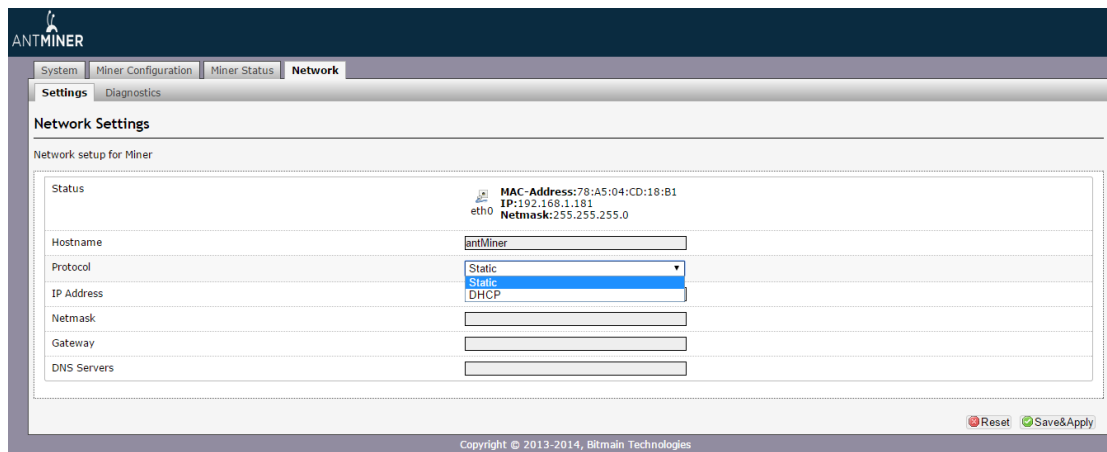


3. Check your PC, you'll see the IP address showing in the pop-up window.



Step 2. Enter the IP address provided into your WEB browser and proceed to login using 'root' for both the username and password.

In the 'Network' section, you can assign a 'Static' IP address if you like. Click 'Save&Apply' after modifying it.



## 5 Miner Configuration

### 5.1 Pool Setting

You can configure your miner through 'Miner Configuration->General Settings'.

Pool URL- Enter the URL of your desired pool in this column.

Worker- This is your worker ID on the selected pool.

Password- This is the password for your selected worker.

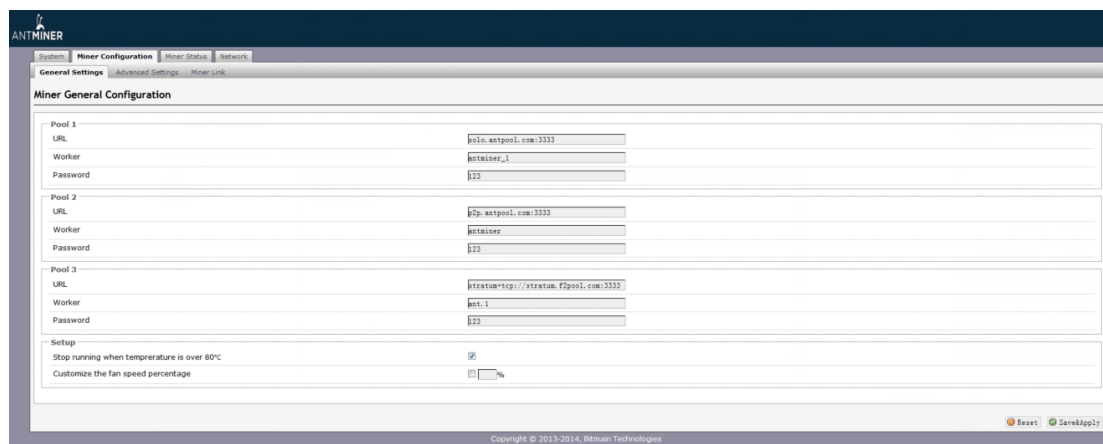
**Comment:**

4.1.1 The AntMiner S5+ 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 have gone offline.**

4.1.2 When 'Stop running when temperature is over 80°C' is checked, the miner will stop mining when the temperature exceeds 80°C to protect the miner. If it's unchecked, the miner will still mine even in high temperature.

4.1.3 When "Customize the fan speed percentage" is checked, the fan speed can be controlled by customer. If it's unchecked, the fan speed will depend on the temperature of the hash boards.

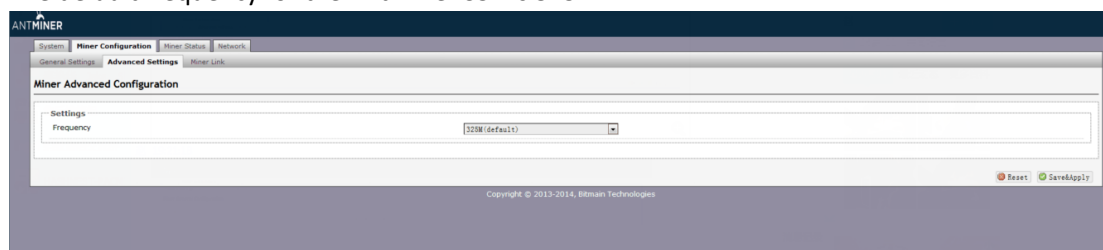
Click 'Save & Apply' to save and restart miner.



### 5.2 Frequency Modification

You are able to modify the frequency value through 'Miner Configuration->Advanced Settings'.

The default frequency for the AntMiner S5+ is 325M.





## 6 Miner Status

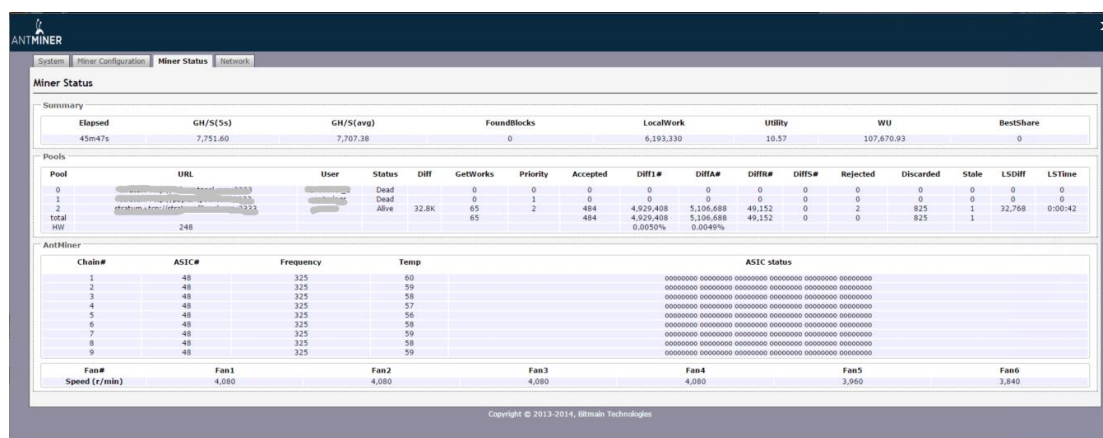
You can check the operating status of your miner on 'Miner Status' page.

ASIC#: Number of chips detected in the chain

Frequency: ASIC frequency setting

Temp: Temperature, centigrade

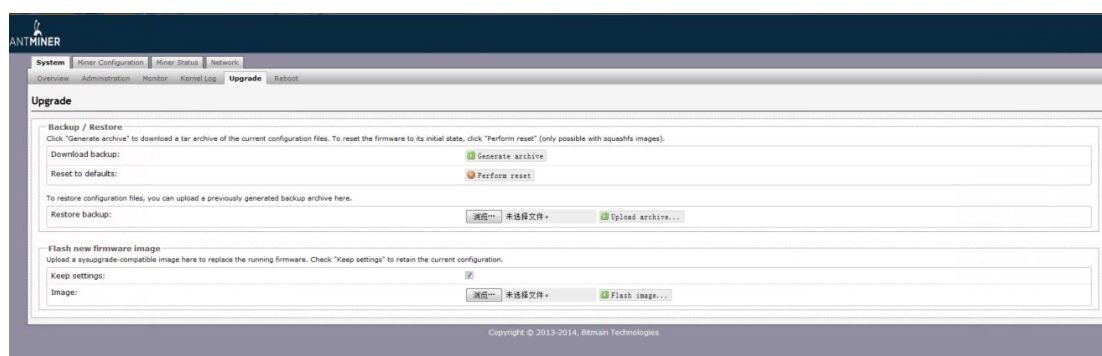
ASIC status: o stands for OK, x stands for error.



## 7 System Configuration and status

### 7.1 System Upgrading

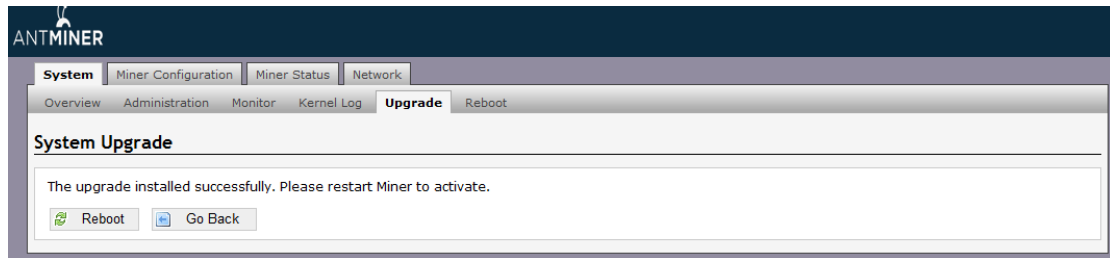
You can upgrade the miner's firmware on 'System->Upgrade' page.



'Keep setting' is chosen by default and should be enabled if you want to keep your current settings. You should deselect this option if you are trying to return the miner to default settings. Click 'Browse' button to choose upgrade file. Select the upgrade and click the 'Flash image..' button. The interface will display if the firmware can be upgraded and download the software. During the upgrade process, you need to **wait patiently, and must keep power on, otherwise, the AntMiner can only be fixed with returned to factory.** You will see below screenshot after



upgrading successfully.



Clicking the 'Reboot' button will restart the miner so it can load the new software. Clicking 'Go Back' will keep the AntMiner mining, before switching to the new software when it is restarted next time or power cycled.

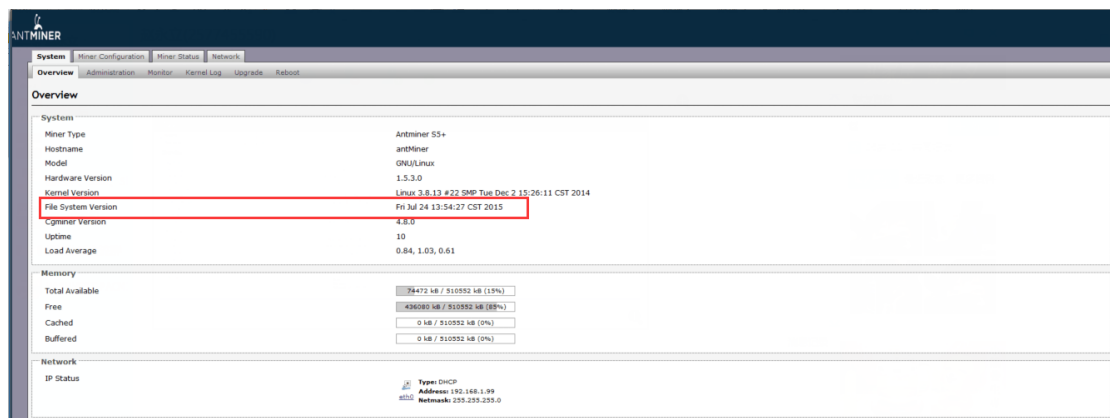
## 7.2 Password Modification

The AntMiner login password can be changed on the 'System->Administration' page. Once modified, press 'Save and Apply' to save the new password.



## 7.3 Software Version Checking

You can check which version of the software you are currently running on the 'System->Overview' page. 'File System version' displays the date of the firmware your miner use. In the example below, the miner is using 20150724 firmware.



## 7.4 Restore Initial Setting

There is a 'Reset' button on the right hand side of the Ethernet port, next to the green and red LED light. Power on miner and let it run for 5 minutes, then press and hold the reset button for 10 seconds in order to restore to the default settings and reboot. The red LED will flash once every 15 seconds automatically if the reset is operated successfully.

