

BITMAIN

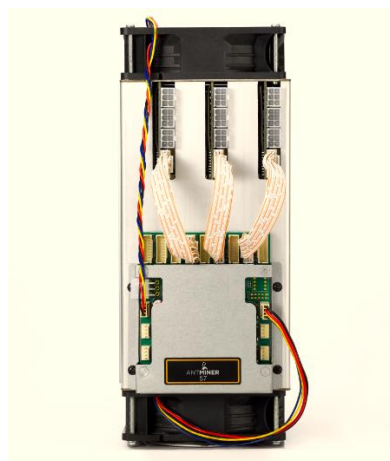
AntMiner S7 Manual

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1 Overview

The AntMiner S7 with 4.86Th/s is Bitmain's newest iteration, using the new state of the art BM1385 chip with full-customs made, powered by ultra-low power 28nm technology. S7 are tested and configured prior to shipping to make it easier for customers to set up.



Please note:

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

2 Features

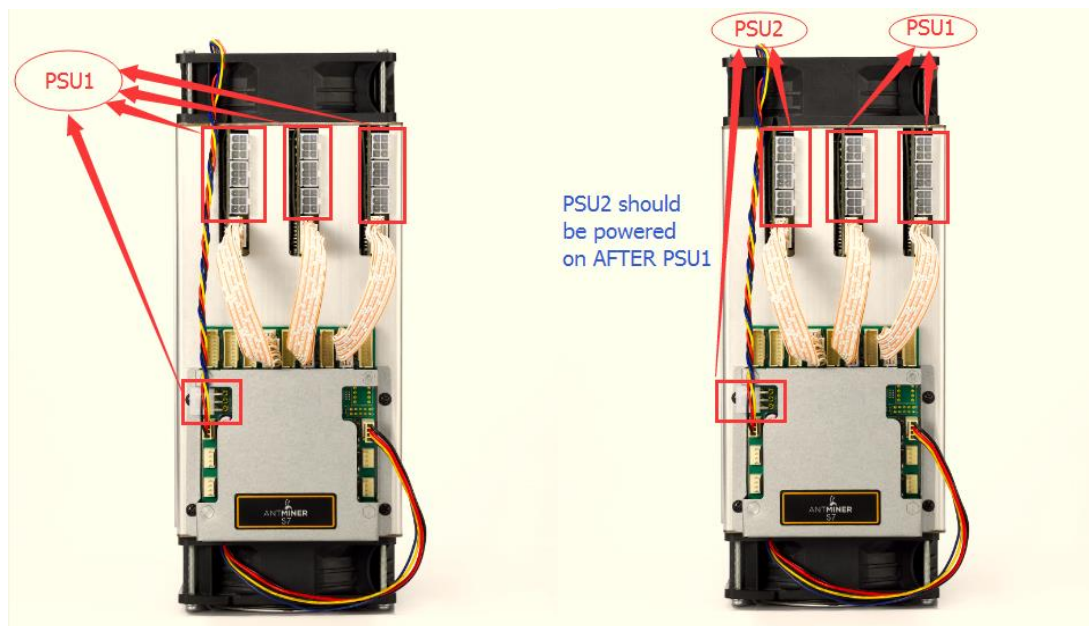
Ideal Hash Rate (GH/s)	4860 GH/s
Default chip clock (M)	600
Input Voltage (V)	12.00
Estimate power on wall (W) -- assume with APW3, 93% efficiency, 25°C ambient temp)	1210W
Estimate efficiency on wall (J/GH)	0.25
Dimensions (mm)	301 mm x 123 mm x 155 mm
Weight (kg)	4
Operating ambient temperature (°C)	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.

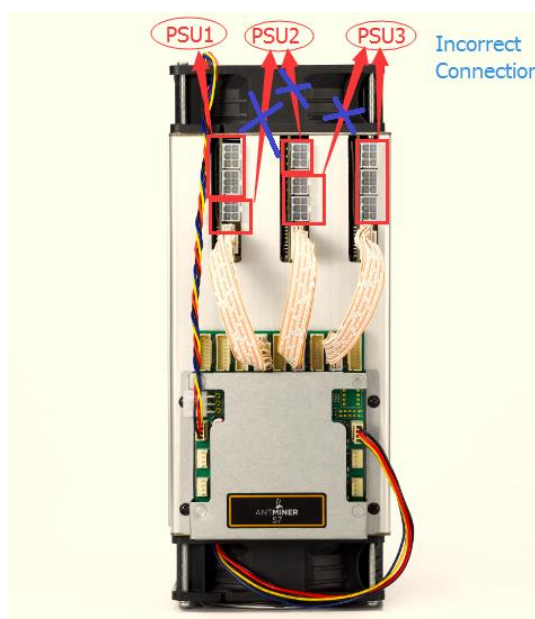
3 Power Supply

Each AntMiner S7 has 9 PCI-e connectors for +12V/15A DC **STABLE** input on hash boards and 1 PCI-e connector on the controller, **all the 10 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:



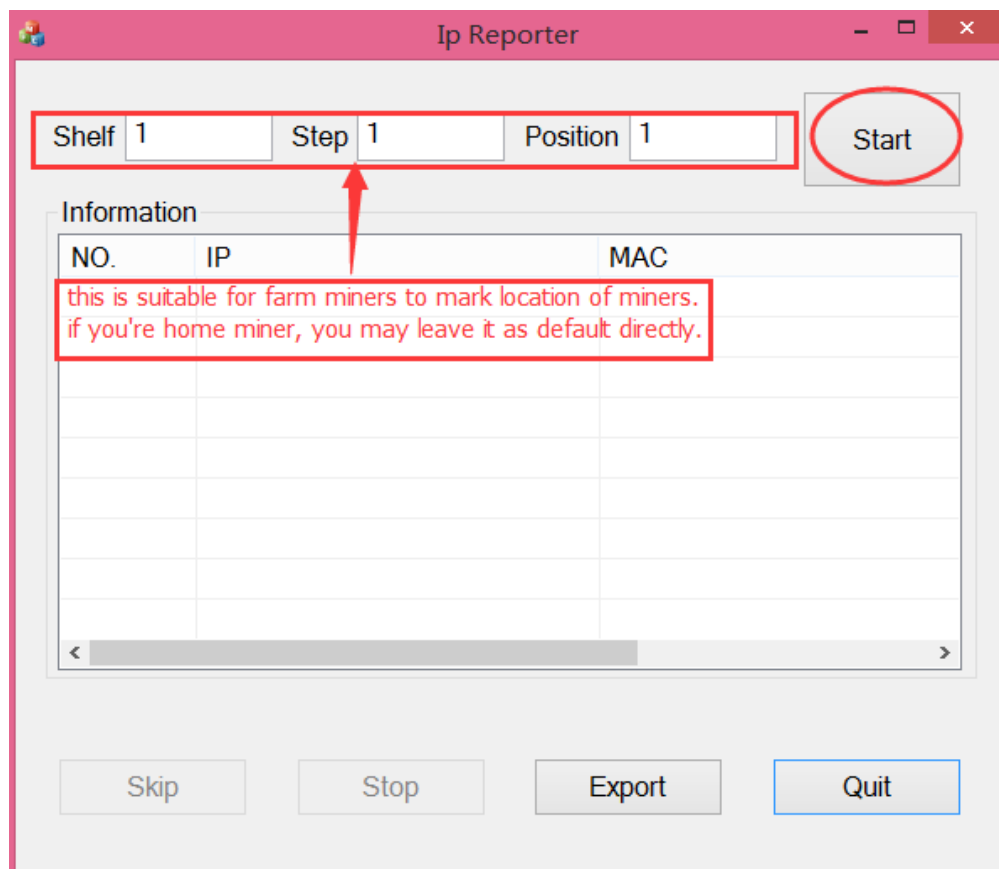
4 Connect to Miner

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.

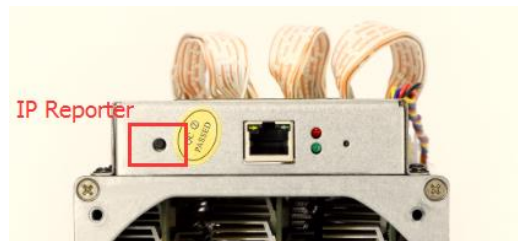
1. Extract the file and double click 'IPReporter.exe'.

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.

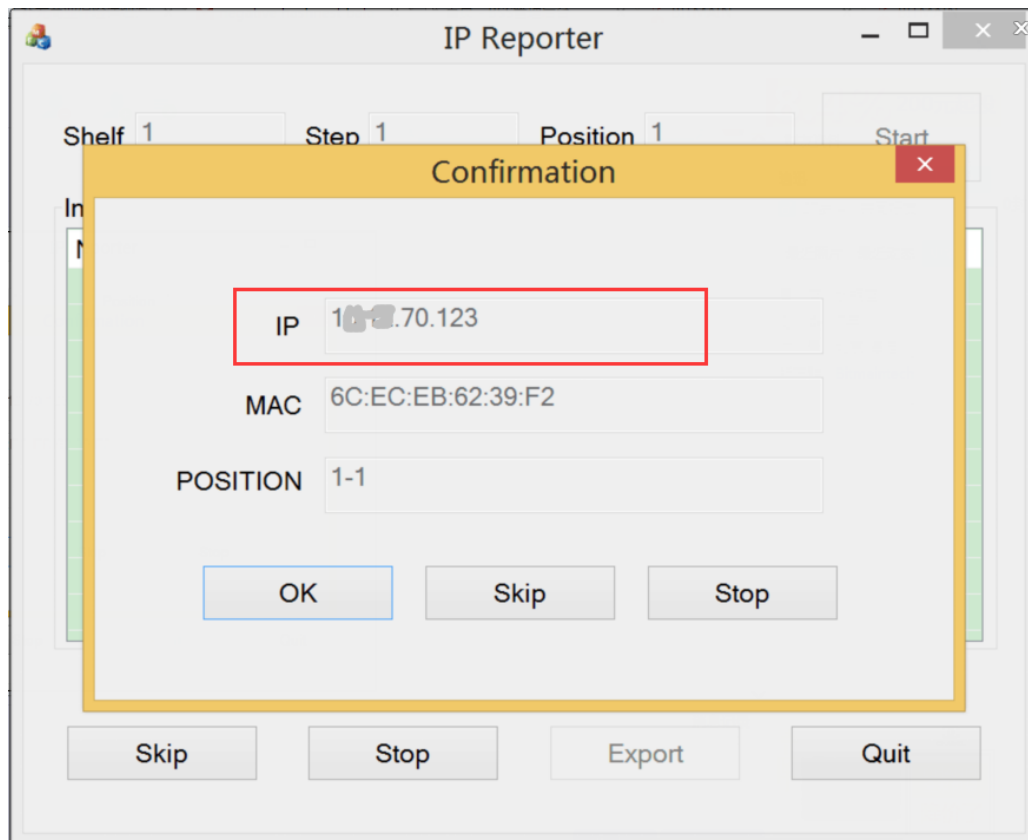
Then click 'Start'.



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

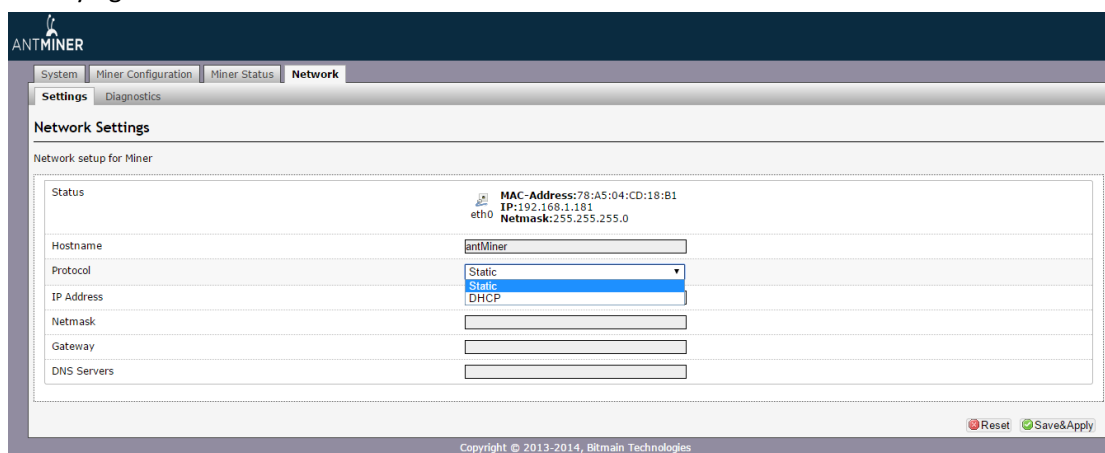


3. Check your PC, you'll see the IP address showing in the pop-up window.



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.

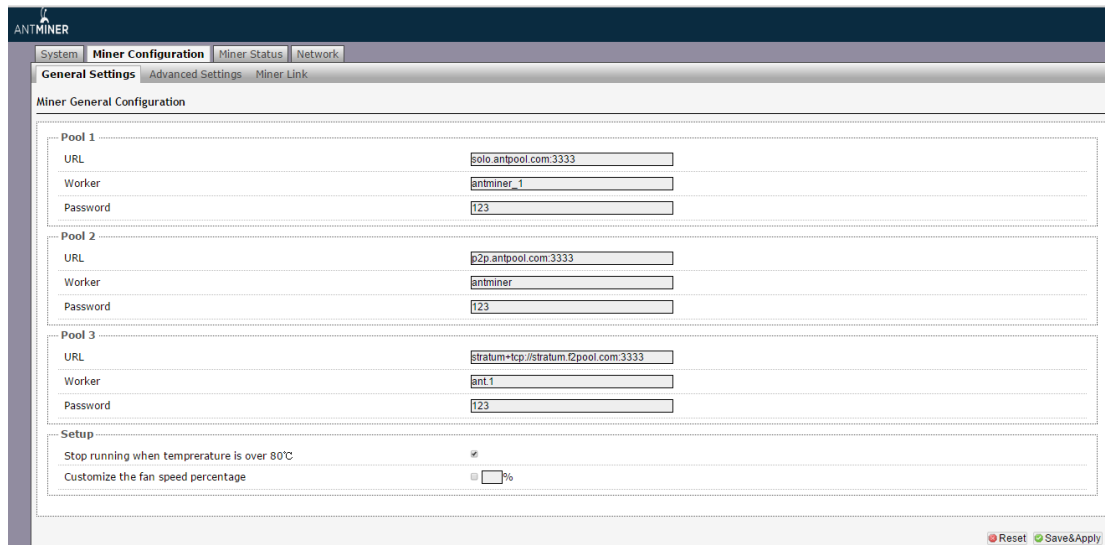
Comment:

4.1.1 The AntMiner S7 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.

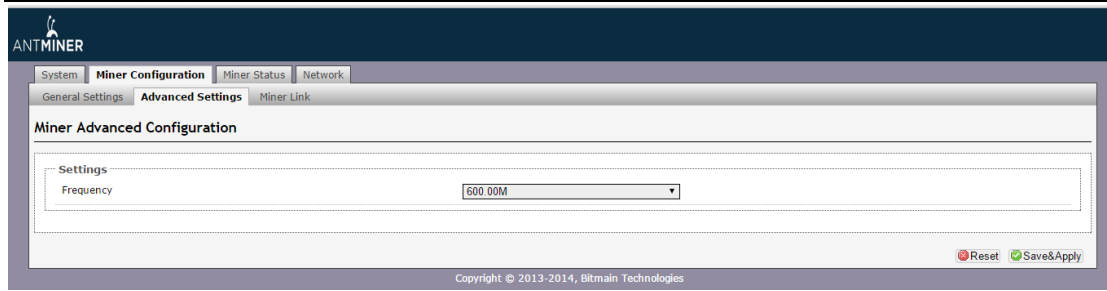
Click 'Save & Apply' to save and restart miner.



5.2 Frequency Modification

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

The default frequency for the AntMiner S7 is 600M.



6 Miner Status

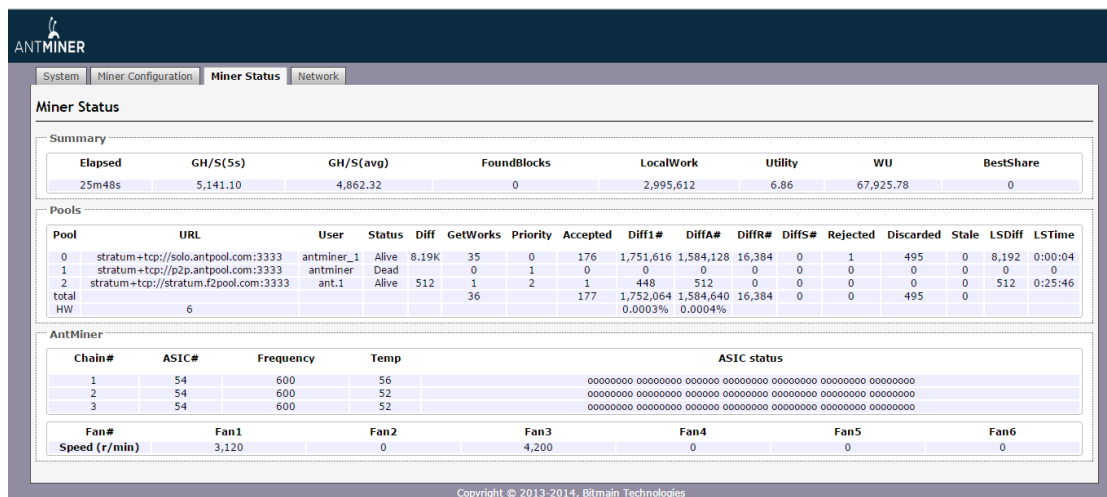
You can check the operating status of your miner on 'Miner Status' page.

ASIC#: Number of chips detected in the chain

Frequency: ASIC frequency setting

Temp: Temperature, centigrade

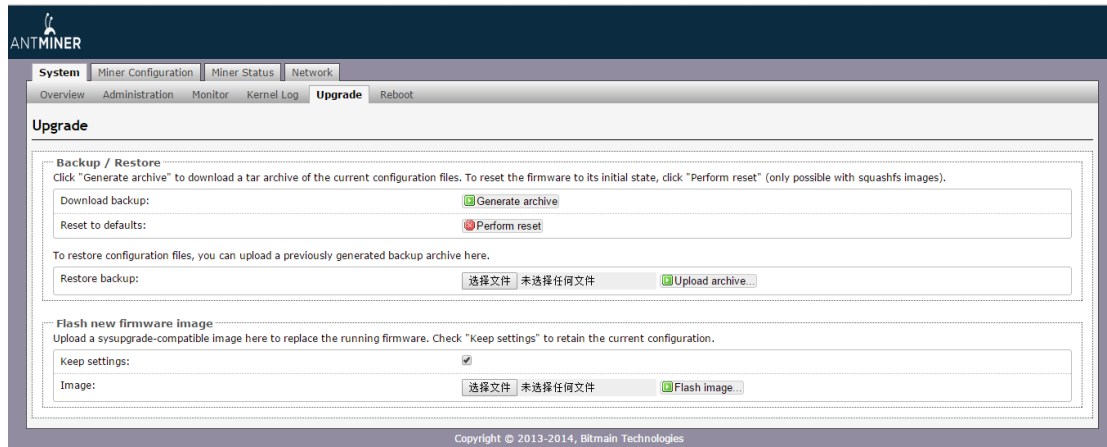
ASIC status: o stands for OK, x stands for error.



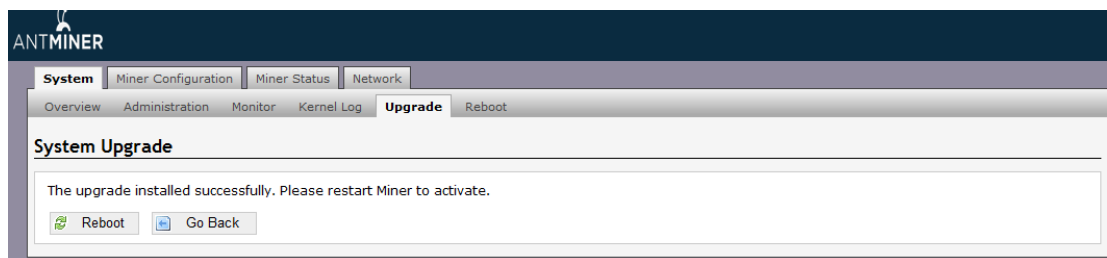
7 System Configuration and status

7.1 System Upgrading

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



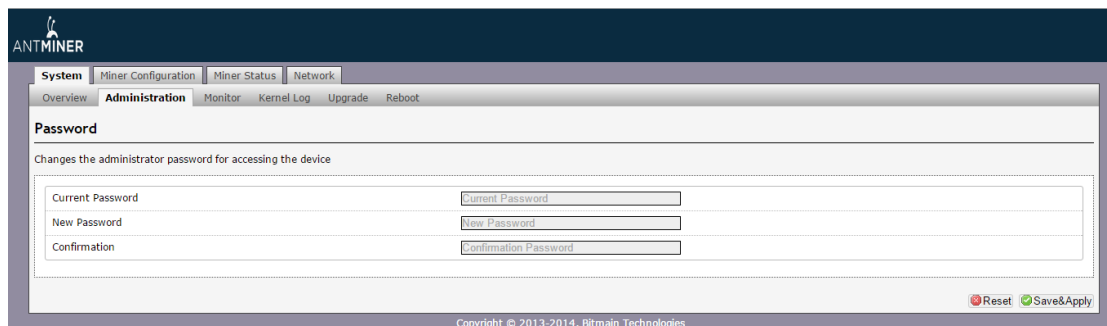
'Keep setting' is chosen by default and should be enabled if you want to keep your current settings. You should deselect this option if you are trying to return the miner to default settings. Click 'Browse' button to choose upgrade file. Select the upgrade and click the 'Flash image...' button. The interface 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.

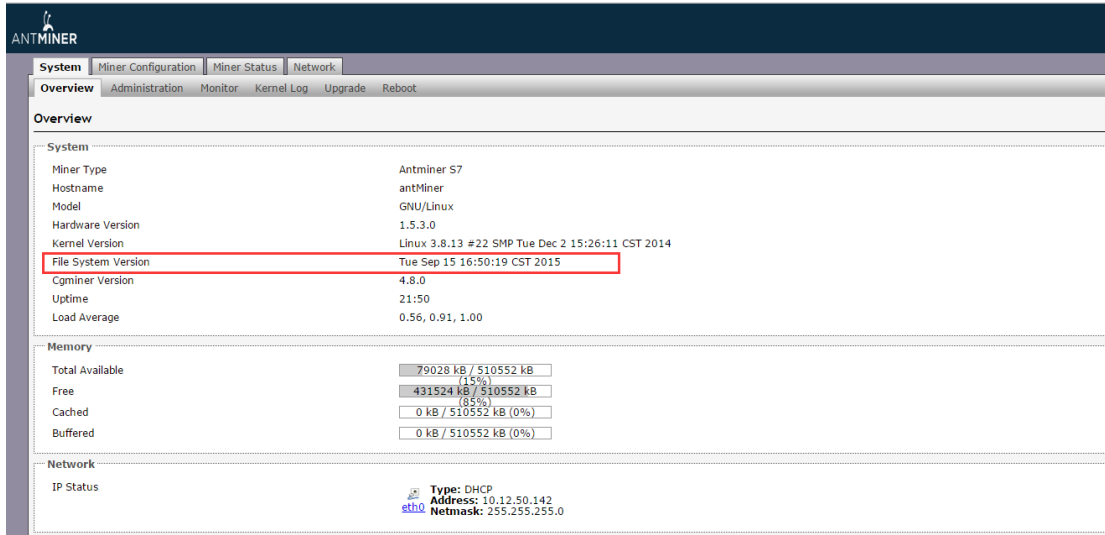
7.2 Password Modification

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 20150915 firmware.



The screenshot shows the AntMiner web interface with the 'System' tab selected. The 'Overview' section displays the following system information:

Miner Type	Antminer S7
Hostname	antMiner
Model	GNU/Linux
Hardware Version	1.5.3.0
Kernel Version	Linux 3.8.13 #22 SMP Tue Dec 2 15:26:11 CST 2014
File System Version	Tue Sep 15 16:50:19 CST 2015
Cgminer Version	4.8.0
Uptime	21:50
Load Average	0.56, 0.91, 1.00

Below the system information, the memory usage is shown as 79028 kB / 510552 kB (15%), with 431524 kB free. Network status is also displayed: Type: DHCP, Address: 10.12.50.142, Netmask: 255.255.255.0.

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.

