BITMAIN

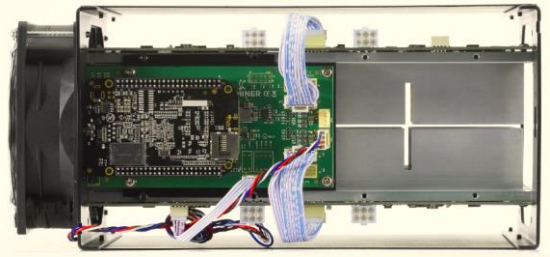
AntMiner S5 Manual

Contents

1 Overview 3
2 Features....3
3 Power Supply....4
4 Connect to Miner 4
5 Miner Configuration....7
5.1 Pool Setting 7
5.2 Frequency Modification 7
5.3 Miner Link Connection 7
6 Miner Status....8
7 System Configuration and status....9
7.1 System Upgrading 9
7.2 Password Modification....9
7.3 Software Version Checking....10
7.4 Restore Initial Setting 10

1 Overview

The AntMiner S5 is Bitmain's 5th generation of Bitcoin mining rig and uses the state of the art BM1384 chip powered by ultra-low power 28nm technology. S5's 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

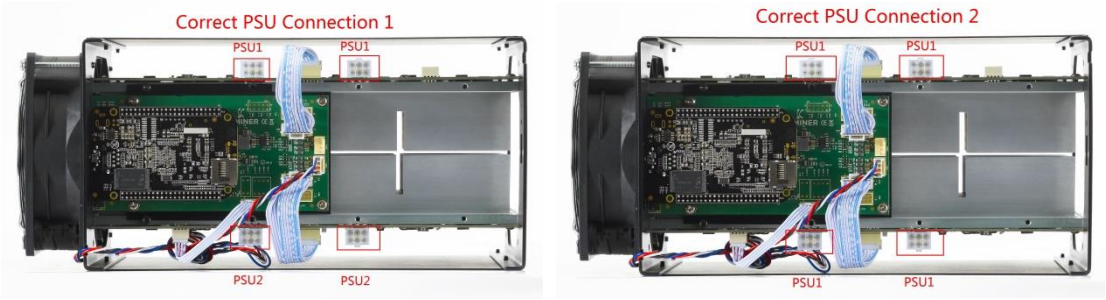
Ideal Hash Rate (GH/s)	1155
Default chip clock (M)	350
Input Voltage (V)	12.00 ~ 12.50
Typical Input Current (A)	45
Typical Input Power (W)	540
Estimate power on wall (W) -- assume AC/DC efficiency is 90%	590
Estimate efficiency on wall (W/GH)	0.51
Dimensions (mm)	298 x 137 x 155
Weight (kg)	3.5
Operating ambient temperature (°C)	0 ~ 35

Notes: Input voltage should not be less than 12.00V, 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.

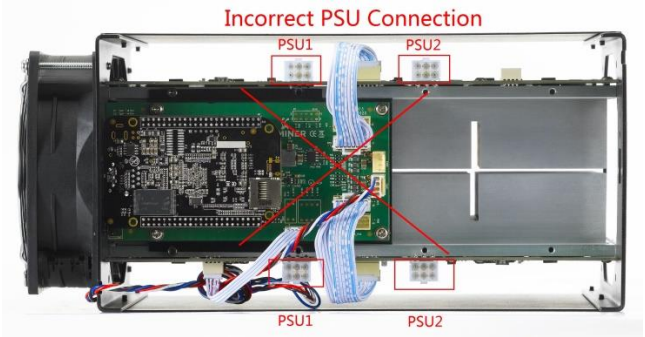
3 Power Supply

Each AntMiner S5 has four PCI-e connectors for +12V/15A DC **STABLE** input and all four are required. **Do not connect more than one PSU to the same hashing board to prevent possible damage and instability.** See below screenshot for the CORRECT and INCORRECT connection of the PCI-E connectors:

Correct connection:



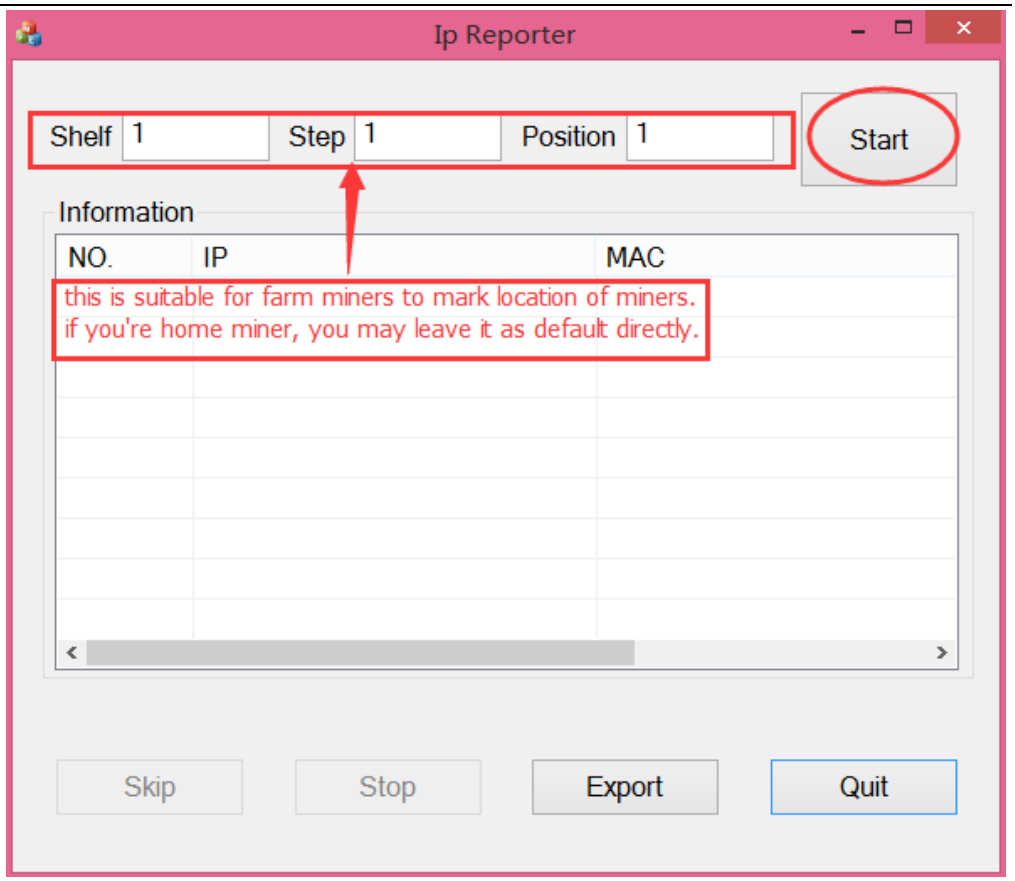
Incorrect connection:



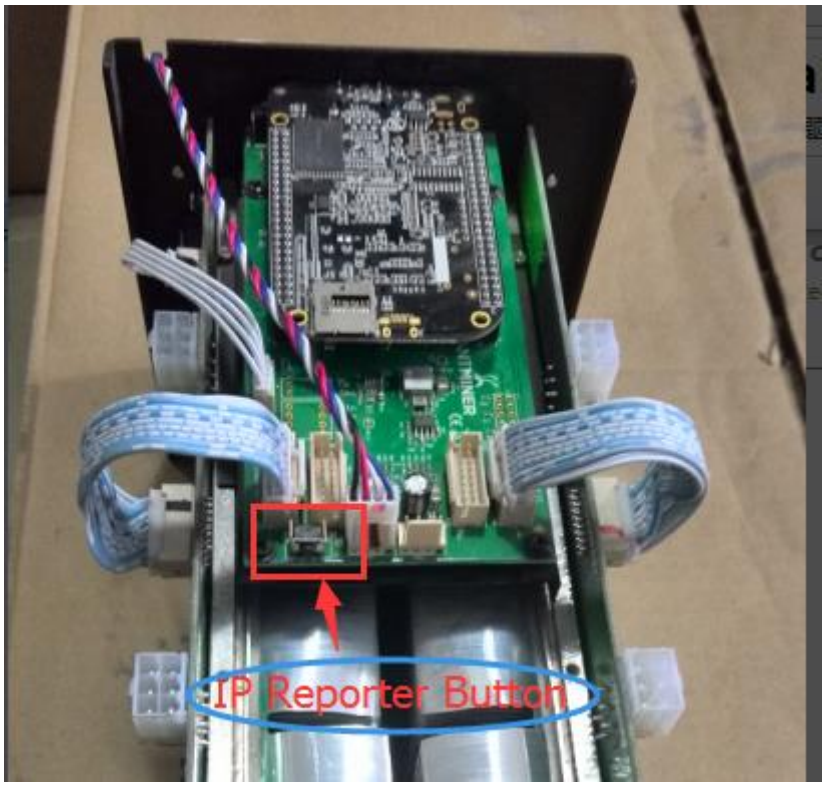
4 Connect to Miner

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.

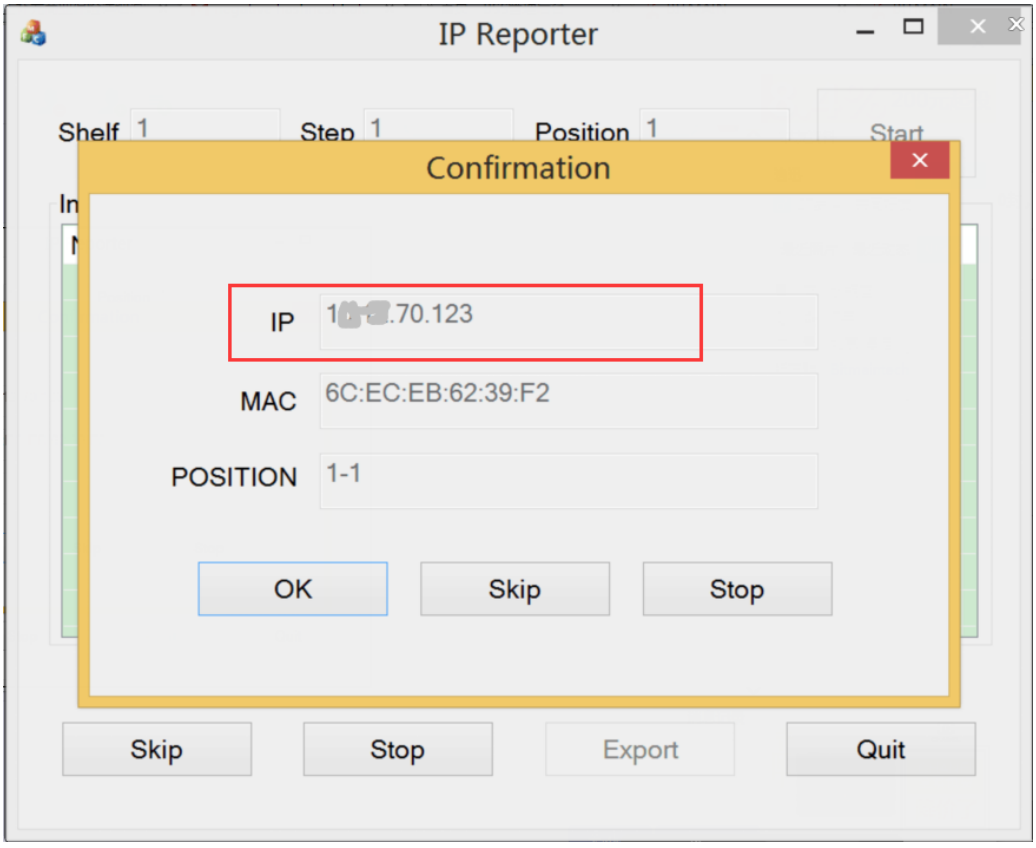
1. Extract the file and double click 'IPReporter.exe'.
   The 'Shelf, Step, Position' options are suitable for farm miners to mark the location of the miners. For home miners, it can be left as default.
   Then click 'Start'.



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

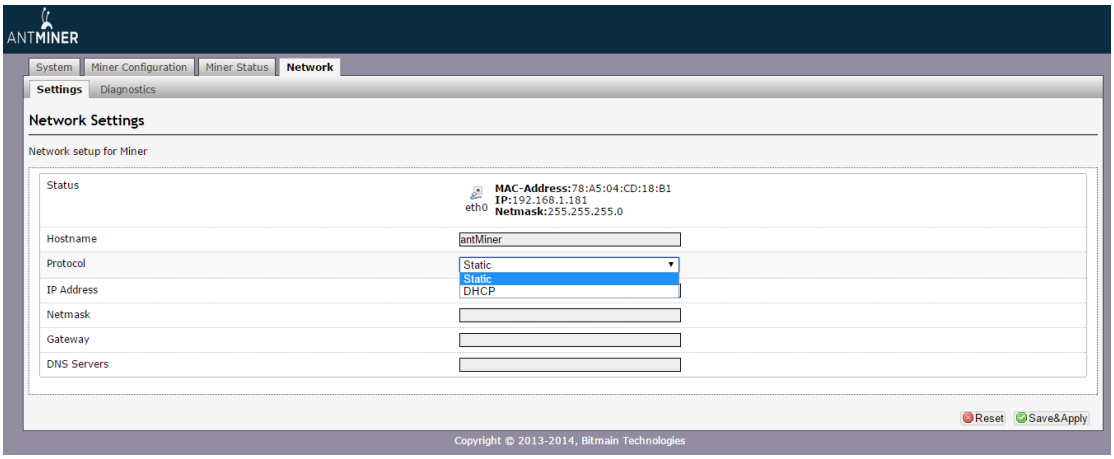


3. Check your PC, you'll see the IP address showing in the pop-up window.



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.



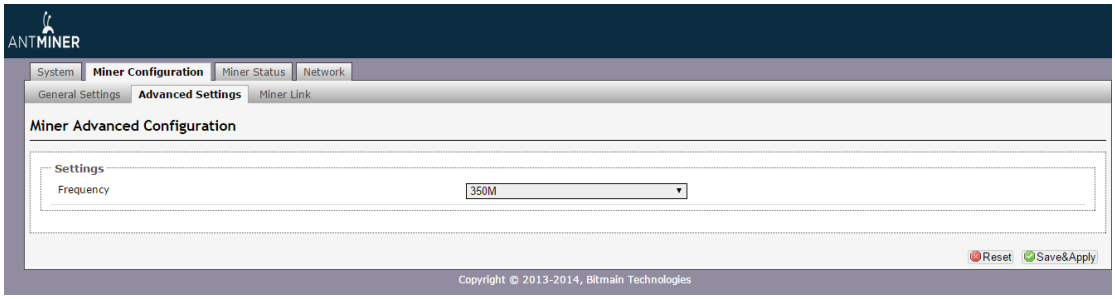
5 Miner Configuration

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 'Beeper ringing' is checked, a beeper will ring when the miner stops mining, otherwise it won't ring even if the miner stops mining.
4.1.3 When 'Stop running when temperature is over 80℃' is checked, the miner will stop mining when the temperature exceeds 80℃ to protect the miner. If it's unchecked, the miner will still mine even in high temperature.
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 350M.

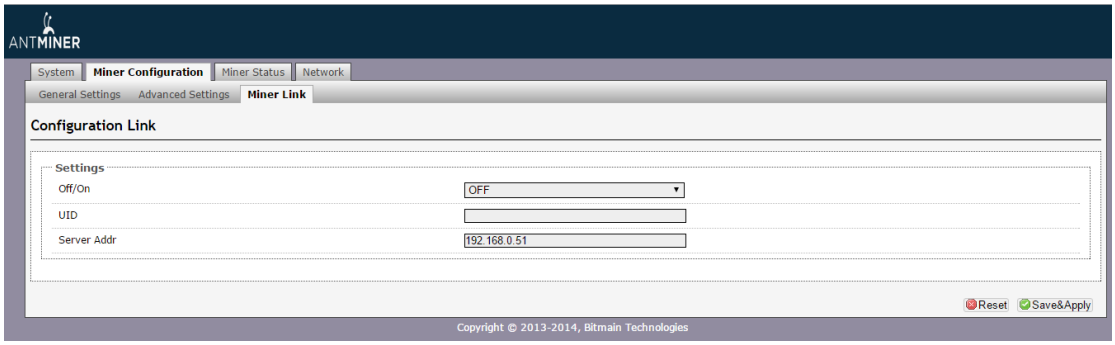


5.3 Miner Link Connection

4.3.1 Go to 'Miner Configuration' tab, and the 'Miner Link' tab in order to configure the relevant settings.
4.3.2 You can enable or disable Miner Link in the Off/On drop-down list provided. You can fill in your Bitmain username(your passport email registered on Bitmain platform) in the UID blank. (Register here if you don' have an account yet: http://passport.bitmain.com)
4.3.3 After filling in your Bitmain username and enabling Miner Link, click 'Save&Apply' tab. The

software will take approximately 10 seconds to connect to the server, and then the client software continues to run after settings are saved. If either the Off/On is selected to 'OFF' or the UID is left blank, Miner Link will remain disabled.

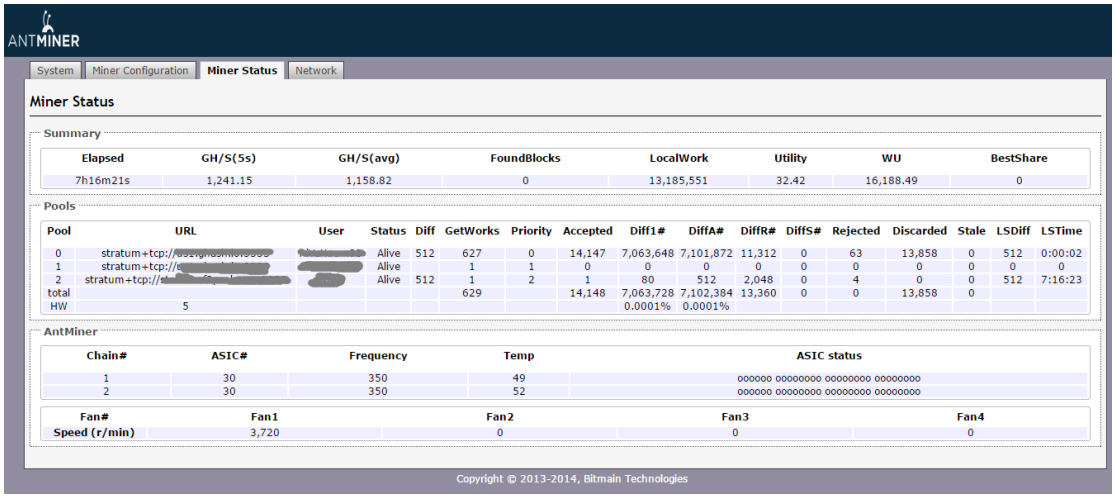
4.3.4 Once 'Miner Link' is enabled, the 'Server Addr' will become fixed and cannot be updated by customers. This refers to Bitmain's monitoring server address.



6 Miner Status

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

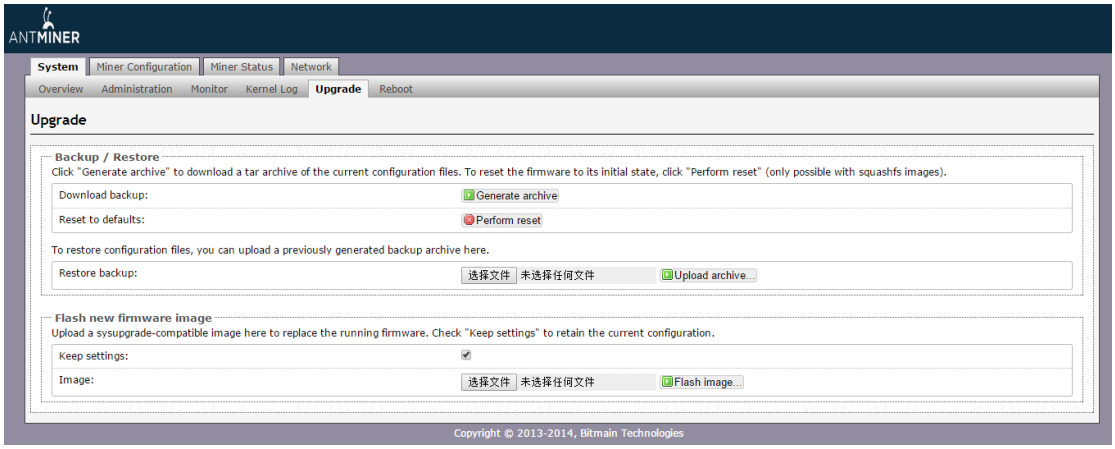
ASIC#: Number of chips detected in the chain
Frequency: ASIC frequency setting
Temp: Temperature, centigrade
ASIC status: o stands for OK, x stands for error.



7 System Configuration and status

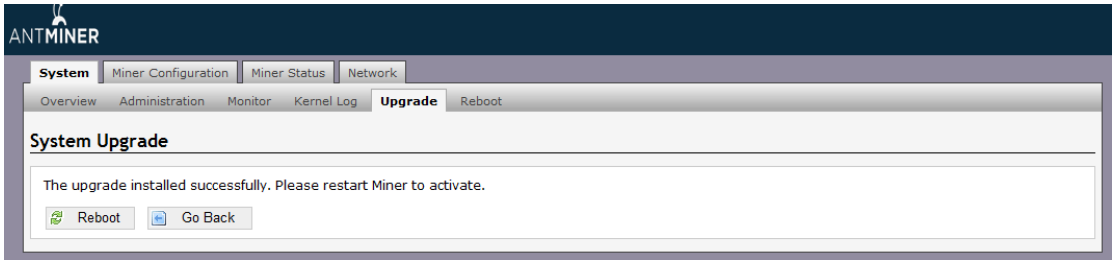
7.1 System Upgrading

You can upgrade he 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.

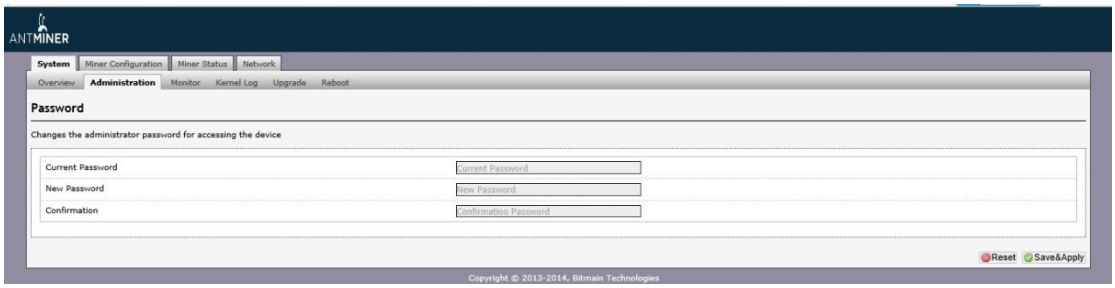
Click 'Browse' button to choose upgrade file. Select the upgrade and click the 'Flash image...' button. The interface will display if the firmware can be upgraded and download the software. During the upgrade process, you need to **wait patiently, and must keep power on, otherwise, the AntMiner can only 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.

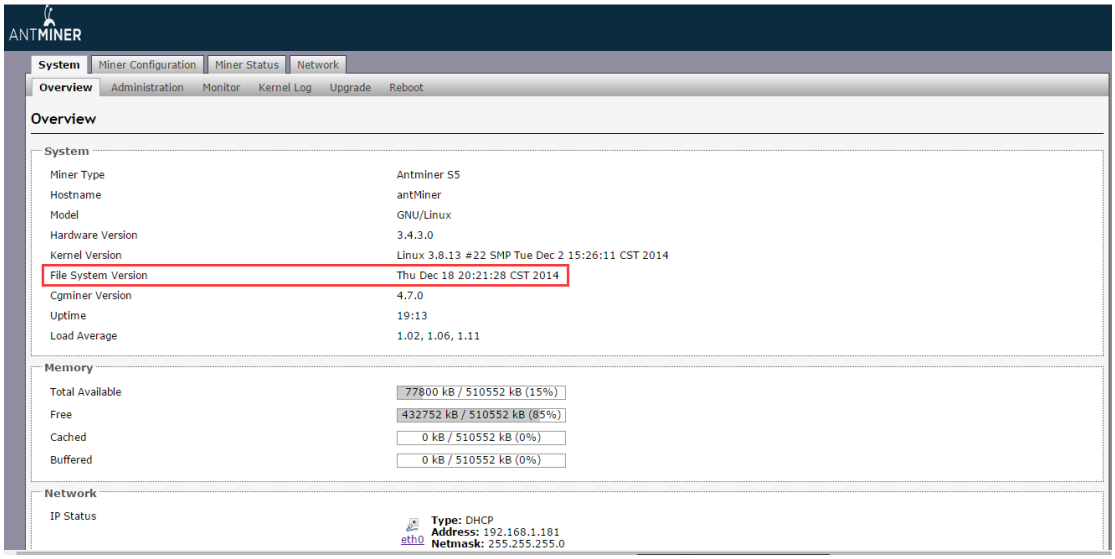
7.2 Password Modification

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 20141218 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, press and hold the button for 5 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.

Reset Button