BITMAIN

# AntMiner S4+ Manual



Last updated: 4/22/2015 Page 2 of 9

## Contents

1	Overvi	ew	.3
2	Feature	es	.3
3	Conne	ct to Miner	.3
4	Miner	Configuration	.6
	4.1	Pool Setting	.6
		Frequency Modification	
5	Miner	Status	.7
6	System	Configuration and status	.7
	6.1	System Upgrading	.7
	6.2	Password Modification	.8
	6.3	Software Version Checking	.9
	6.4	Restore Initial Setting	.9



## **1** Overview

Bitmain is introducing the newest miner: the AntMiner S4+. More powerful and efficient than its predecessor, the S4+ packs quite a punch. It uses the state of the art BM1382 chip powered by ultra-low power 28nm technology, with 2570Gh/s hash rate. S4+ will be shipped out with built-in PSU and it's tested and configured prior to shipping to make it easier for customers to set up.



Please note:

- 1. The included PSU cannot be used in countries with a mains power voltage lower than 205V. The PSU will not start below this voltage.
- 2. Power line is not included, please find one with at least 10A in your local market.

## 2 Features

Ideal Hash Rate (GH/s)	2570
Default chip clock (M)	200
Estimate power on wall (W)	1480
Estimate efficiency on wall (J/GH)	0.58
Dimensions (mm)	432 x 442 x 133
Weight (kg)	14.4

## **3** Connect to Miner

Step 1. The default DHCP network protocol distributes IP addresses automatically. Please download <u>IPReporter.zip</u> from minerlink.com, then please follow below steps to find out the IP of



Page 4 of 9

the miner.

Note: when finding the IP address, the PC and miner should be connected to the same router via Ethernet wire.

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'.

4		Ip Re	porter	- 🗆 ×
Shelf 1	Step	1	Position 1	Start
Information				
NO. IP			MAC	
this is suitable for f				
if you're home min	er, you	may leave it	as default directly.	
<			_	>
Skip		Stop	Export	Quit

2. Press the raised IP Reporter button on right top corner of panel, next to the green and red LED light, you'll hear a beep sound:



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



## AntMiner Manual

Last updated: 4/22/2015 Page 5 of 9

5			IP Reporte	er		_ 🗆 🗡
Shelf 1	S	itep 1	Pos	ition 1		Start ×
In			Command	חכ		
	IP	10-2.70	0.123			
-	MAC	6C:EC:E	EB:62:39:F2			
PO	SITION	1-1				
	OK		Skip		Stop	
Skip		Stop	D	Export		Quit

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.

ANTMINER	
System Miner Configuration Miner Status Network	
Settings Diagnostics	
Network Settings	
Network setup for Miner	
Status	MAC-Address:D0:5F:B8:F7:02:BF IP:10.12.50.47 eth 0 temmesk:255.255.0
Hostname	antMiner
Protocol	DHCP T
IP Address	Static DHCP
Netmask	
Gateway	
DNS Servers	
	Save&Apply
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#### AntMiner Manual Last updated: 4/22/2015 Page 6 of 9

## **4** Miner Configuration

#### 4.1 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 S4+ 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 95  $^{\circ}C$ ' is checked, the miner will stop mining when the temperature exceeds 95  $^{\circ}C$  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.

ANTMINER		
System Miner Configuration Miner Status Network		
General Settings Advanced Settings Miner Link		
Miner General Configuration		
Pool 1		
URL	solo.antpool.com:25	
Worker	K	
Password	123	
Pool 2		
URL	p2p.antpool.com: 3333	
Worker		
Password	123	
Pool 3		
URL	stratum+tcp://stratum.f2pool.com:3333	
Worker	NY NY Y	
Password	123	
Setup Stop running when temprerature is over 95°C	2	

#### 4.2 Frequency Modification

You are able to modify the frequency value through 'Miner Configuration->Advanced Settings'. The default frequency for the AntMiner S4+ is 200M.



### **AntMiner Manual**

Last updated: 4/22/2015 Page 7 of 9

ANTMINER
System Miner Configuration Miner Status Network
General Settings Advanced Settings Miner Link
Miner Advanced Configuration
- Settings
Frequency 200M (default) •
· · · · · · · · · · · · · · · · · · ·
©Reset ⊘Save&Apply
Copyright © 2013-2014, Bitmain Technologies

## **5** 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.

System Miner Confi	guration Mine	r Status	Network														
iner Status																	
Summary																	
Elapsed	GH/S(5s	5)	GH/S	S(avg)		For	IndBlocks	5	Loca	lWork	U	tility	١	vu		BestSha	re
33m30s	2,595.52	2	2,4	95.02			0		1,35	9,007		7.10	34,8	68.39		0	
Pools																	
Pool	URL		User	Status	Diff	GetWorks	Priority	Accepted	Diff1#	DiffA#	DiffR#	DiffS#	Rejected	Discarded	Stale	LSDiff	LSTim
0 stratum+	tcp://c		enhalter.	Dead		0	0	0	0	0	0	0	0	0	0	0	0
1 stratum+te			A	Dead		0	1	0	0	0	0	0	0	0	0	0	0
	://str			Alive	16.4K	102	2	238		1,129,472		0	1	1,141		16,384	0:00:4
total HW	1					102		238		1,129,472 0.0001%	8,192	0	0	1,141	0		
AntMiner																	
				_													
Chain#	ASIC#	Frequ	ency	le	mp						ASIC sta	tus					
1	51	20		5				0	000000000000000000000000000000000000000	000 00000 0	0000000	0000000	00000000 00	000000			
2	51	20		5						000 00000 0							
3	51	20		5						000 00000 0							
4	51	20	0	5	8			(	000000000000000000000000000000000000000	000 00000 00	0000000 0	0000000	00000000 00	000000			
Fan#		Fan1				Fa	n2			F	an3				Fan4		
Speed (r/min)		4,080				4.0	080			3.	960				3,960		

## 6 System Configuration and status

#### 6.1 System Upgrading

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



## AntMiner Manual

Last updated: 4/22/2015 Page 8 of 9

( INER	
ystem Miner Configuration Miner Status Netwo	
verview Administration Monitor Kernel Log L	rade Reboot
grade	
	urrent configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).
Download backup:	Generate archive
Reset to defaults:	Perform reset
To restore configuration files, you can upload a previous	generated backup archive here.
Restore backup:	选择文件 未选择任何文件 III Upload archive
Flash new firmware image Upload a sysupgrade-compatible image here to replace Keep settings:	running firmware. Check "Keep settings" to retain the current configuration.
Image:	选择文件】未选择任何文件 IIIFlash image
	Copyright @ 2013-2014, Bitmain Technologies

'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.

ANTMINER							
System Miner Configuration Miner Status Network							
Overview Administration Monitor Kernel Log Upgrade Reboot							
System Upgrade							
The upgrade installed successfully. Please restart Miner to activate.							

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.

#### 6.2 Password Modification

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

ANTMINER	
System Miner Configuration Miner Status Network	
Overview Administration Monitor Kernel Log Upgrade Reboot	
Password	
Changes the administrator password for accessing the device	
Current Password	Current Password
New Password	New Password
Confirmation	Confirmation Password
	Reset Save&Apply
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#### 6.3 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 20150402 firmware.

Miner Configuration Miner Status Network	
Administration Monitor Kernel Log Upgrade Reboot	
pe Antminer 54+	
e antMiner	
GNU/Linux	
e Version 5.4.3.0	
ersion Linux 3.8.13 #22 SMP Tue Dec 2 15:26:11 CST 2014	
em Version Thu Apr 2 09:50:30 CST 2015	
Version 4.8.0	
3:56	
rrage 0.34, 0.28, 0.32	
allable 79584 kB / 510552 kB	
(16%) 430968 kg/510552 kB	
(6436) 0 k8/510552 k8 (0%6)	
0 kB / 510552 kB (0%)	
s <b>Type:</b> DHCP Address: 10.12.50.47 <u>eth0</u> Netmask: 255.255.255.0	

#### 6.4 Restore Initial Setting

There is a 'Reset' button on the left hand side of the IP Reporter button, 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.

