



# AntMiner L3+

# **Installation Guide**

## **Document Version 0.1**

## April 2017

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# 1. Overview

The AntMiner L3+ is Bitmain's newest version in the AntMiner L3+ series. It boasts a state-of-the-art BM1485 custom-made chip. All AntMiner L3+ miners 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 AntMiner L3+ Components**

The AntMiner L3+ 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 miner does not contain a DC/DC converter; therefore, higher input voltage will cause higher Mining enfficiency.



2. Connecting the Power Supply

# 2. Connecting the Power Supply

Nine PCI-e connectors are located at the top of the AntMiner L3+ 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 AntMiner L3+, ensuring that each hash board is powered by the same PSU.
- 2. Connect a PSU power cable connector to the AntMiner L3+ PCI-e connector on the controller.
- 3. Connect the network cable to the ETH port.
- 4. To power up your AntMiner L3+, 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 Miner

## 3. Setting Up the Miner

To set up the miner:

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

1. Go to the following site:

https://cnshop.bitmain.com/support.htm?pid=007201512210613294744rqn82k7068A

- 2. Download the following file: IPReporter.zip
- 3. Extract the file.3.

The default DHCP network protocol distributes IP addresses automatically.

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

		Ip	Reporter	_ 🗆 ×
Shelf 1	Step	1	Position 1	Start
Information	-			
NO. IP			MAC	
			ark location of miners.	
If you're home r	miner, you	may leav	e it as default directly.	
1.6				
1				
<				>
Skip		Stop	Export	Quit



3. Setting Up the Miner

7. 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.

n		Confirmation		×
r	IP 10.70	).123		
	MAC 6C:EC:E	B:62:39:F2		
POS	SITION 1-1			
	ОК	Skip	Stop	

- 8. In your web browser, enter the IP address provided.
- 9. Proceed to login using root for both the username and password.
- 10. In the Network section, you can assign a Static IP address (optional).

#### 11. Click Save & Apply.

System Hiner Configuration Hiner Status Network Settings Diagnostics		
Network Settings		
letwork setup for Miner		
Status	<ul> <li>MAC-Address:78:A5:04:CD:18:B1</li> <li>IP:192.168.3.181</li> <li>Netmask:255.255.255.0</li> </ul>	
Hostname	antMiner	
Protocol	Static T	
IP Address	Static DHCP	
Netmask		
Gateway		
DNS Servers		
		Reset Save&App

4. Configuring the Miner

# 4. Configuring the Miner

## 4.1 Setting Up the Pool

#### To configure the miner:

- 1. In Miner Configuration, click General Settings.
- 2. Set the options according to the following table:

Option	Description
Pool URL	Enter the URL of your desired pool. The AntMiner L3+ 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.
Worker	Your worker ID on the selected pool.
Password	The password for your selected worker.

#### 3. Click Save & Apply to save and restart the miner.

stem Miner Configuration Miner Status Network.		
neral Settings Advanced Settings Miner Link		
er General Configuration		
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	
Setup		
Stop running when temprerature is over 80°C	8	
Customize the fan speed percentage	%	



4. Configuring the Miner

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

#### To modify the frequency value:

- 1. In Miner Configuration, click Advanced Settings
- 2. Select a frequency. The default frequency for the AntMiner L3+ is 384M

NTMINER		
System Miner Configuration Miner Status Network General Settings Advanced Settings		
General Settings Advanced Settings		
Miner Advanced Configuration		
Settings		
Frequency	384M \$	
		Save&Apply
	Copyright © 2013-2014, Bitmain Technologies	

5. Monitoring Your Miner

# 5. Monitoring Your Miner

To check the operating status of your miner:

1. Click Miner Status.

#### 2. Under AntMiner, monitor your miner according to the descriptions in the following table:

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 miner with fixed frequency)
Temp(Chip)	Temperature of the chips on each hash board (°C).
ASIC status	One of the following statuses will appear:
	• <b>O</b> - indicates OK
	• X - indicates error
	• indicates dead

/stem M	iner Configura	ition Miner Sta	tus Network																	
Summary																				
Ela	apsed	MH/S	(RT)	M	H/S(avg	9)		Foun	dBlocks		LocalW	ork	Util	ity	w	U		BestSha	e	
2h3	3m33s	503.3	375		500.50				0	7,036 9.66				6	450,6	94.97		120260842		
Pools								•												
Pool		URL		Us	er i	Status	Diff	GetWorks	Priority	Accepted	Nonce#	DiffA#	DiffR#	DiffS#	Rejected	Discarded	Stale	LSDiff	LSTi	
0		://stratum-ltc.antp ://stratum-ltc.ant		antmi		Alive	65.5K	201	0	1,413	276,087	69,098,496 0	67,584 0	0	3	4,844	0	65,536 0	0:00: Nev	
2		cp://stratum.f2po						1	2	70	198	35,840	0	0	0	2	22	512	2:33:	
total	Scrucumm	cp.)/ sciucom. zpo	01.0011.0000	Girc	125	Parte	512	204	-	1,483	276.285	69,134,336	67.584	0	3	4,846	22	511	2.00.	
HW		24								-,	0.0087%	0.0000%	,			.,				
AntMiner																				
Chain#	ASIC#	Frequency	MH/S(RT)	нพ	Temp(	(PCB)	Ter	mp(Chip)					AS	IC status						
1	72	384	126.24	6	I:29 0	0:54	I	37 0:61		0000	0000 000000	00 0000000 0	0000000 0	0000000 00	00000 00000	00000000 0000000	00000000	, ,		
2	72	384	125.35	9	I:30 (			38 0:60		0000	0000 000000	00 0000000 0	0000000 0	0000000 00	00000 00000	00000000 00000	00000000	)		
3	72	384	125.87	8	I:28 0			38 0:58		0000	0000 00000	00 0000000 0	0000000 0	0000000 00	00000 00000	00000000 00000	00000000	)		
4	72	384	125.91	1	I:26 (	0:49	1:	34 0:56		0000	0000 00000	00 0000000 0	0000000 0	0000000 00	00000 00000	00000000 00000000	00000000	)		
Fa	n#				Fan	1									Fan2					
Speed	(r/min)				3,16	52									1,752					

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



6. Administering Your Miner

# 6. Administering Your Miner 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 miner use. In the example below, the miner is using firmware version 20170120.

ystem Miner Configuration Miner Status Network	
Overview Administration Monitor Kernel Log Upgrad	le Reboot
Overview	
System	
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
Memory	
Total Available	49964 kB / 231180 kB (20%)
Free	201216 kB / 251180 kB (80%)
Cached	0 kB / 251180 kB (0%)
Buffered	0 kB / 251180 kB (0%)
Network	
IP Status	Type: DHCP Address: 192.168.21.21
	eth0 Netmask: 255.255.254.0

## 6.2 Upgrading Your System

Make sure that the AntMiner L3+ 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 miner's firmware:

#### 1. In System, click Upgrade.

stem Miner Configuration Miner Status Net	vork						
erview Administration Monitor Kernel Log	Upgrade Rebook						
rade							
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:	Generate archive						
leset to defaults: Perform reset							
To restore configuration files, you can upload a previo	usly generated backup archive here.						
Restore backup:	选择文件 未选择任何文件	Upload archive					
Flash new firmware image upload a sysupgrade-compatible image here to replac	e the running firmware. Check "Keep settings" to retain the curr	ent configuration.					
Keep settings:	8						
Image:	选择文件 未选择任何文件	Flash image					



6. Administering Your Miner

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

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

- 5. Click one of the following options:
  - **Reboot** to restart the miner with the new firmware.
  - **Go Back** to continue mining with the current firmware. The miner 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.

NTMINER		
System Miner Configuration Miner Status Network		
Overview Administration Manitor Kernel Los L	lograde Reboot	
Password		
Changes the administrator password for accessing the device		
Current Password	Current Platsword	
New Password	New Plinnword	
Confirmation	Confirmation Plasmaped	
		Reset Save&Apply

## 6.4 Restoring Initial Settings

#### To restore your initial settings

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



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