BITMAIN



X3 Server Installation Guide

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1.0verview

1. Overview

The X3 server is Bitmain's newest version in the X3 server series. It boasts a state-of-the-art BM1700 custom-made chip. All X3 servers are tested and configured prior to shipping to ensure easy set up.



You must provide your own ATX power supply.



1.0verview

1.1 X3 Server Components

The X3 server main components and controller front panel are shown in the following figure:





1.2 Specifications

	Parameters of X3 S	erver
NO.	Parameters	Value
1	Product model	хз
2	Hash chip type	BM1700
3	Total quantity of hash chips	180 pcs
4	Total quantity of hash boards	3 pcs
5	Total hash rate	220 kH/s
6	DC voltage input	11.60~13.00 V
7	DC current input @12V DC	38.8 A +7%
8	DC Power @12V DC input	465 W +7%
9	220VAC Power @25 $^\circ$ C, 93% conversion efficiency of APW3	500 W +7%
10	220VAC Power efficiency @25 $^\circ\!$	2.27 J/kH +7%
11	Weight (without package)	5.5 kg
12	Operation temperature	0-40 ℃
13	Storage temperature	-40-85 ℃
14	Operation humidity	5%RH-95%RH, prevent condensation
15	Noise	76 dB
16	Networking connection mode	Ethernet Cable
		All three PCI-E ports are required to
		power the board. You can use one PSU to power
17	Power connection mode	multiple boards, but do not attempt to power one
		board with two PSUs.
		If u are using more than one PSU, power up the
		PSU connected to the controller after you have
		powered up the other PSU(S).
18	Size (Length*Width*Height)	334mm*125mm*207mm



2. Connecting the Power Supply

2. Connecting the Power Supply

Ten PCI-e connectors are located at the top of the X3 server for connecting the PSU as follows:

- Nine PCI-e connectors for the hash boards. Each hash board has a set of three PCI-e connectors.
- One PCI-e connector located on the controller.

1

Each hashboard must be powered by the same PSU to prevent possible damage and instability.

To connect the power supply:

1. Connect PSU power cable connectors to each of the nine PCI-e connectors on the top of the X3 server, ensuring that each hash board is powered by the same PSU.



- 2. Connect a PSU power cable connector to the X3 PCI-e connector on the controller.
- 3. Connect the network cable to the ETH port.
- 4. To power up your X3 server, 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).



3.Setting Up the Server

3. Setting Up the Server

To set up the server:



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

1. Go to the following site:

https://shop.bitmain.com/support.htm?pid=00720160906053730999PVD2K0vz0693

2. Download the following file: IPReporter.zip

3. Extract the file.



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 servers to mark the location of the servers.
 - Default suitable for home servers.

6. Click Start.

		o Reporter	-
Shelf 1	Step 1	Position 1	Start
Information	1		
NO. IF	0	MAC	
this is suitable	for farm miners to m	nark location of miners.	
if you've barre		us it as default directly	-
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly.	2
if you're home	miner, you may lea	ve it as default directly.	
if you're home	miner, you may lea	ve it as default directly. Export	





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.

helf 1	Step 1	Position	1	Start
1	C	omination		
r				
	IP 100.70.1	23		
	MAC 6C:EC:EB	:62:39:F2		
DOG	ITION 1-1			
PUS	TION 14			
	ок	Skip	Stop	
		-		-
Skip	Stop	-	kport	Quit

- 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 Miner Configuration Miner Status Network Settings Diagnostics		
Network Settings		
Network setup for Miner		
Status	MAC-Address:04:F3:12:67.78:17 eto [P1:192.166.1.10] eto netmass255.255.0	
Hostname	antMiner	
Protocol	DHCP	
IP Address		
Netmask		
Gateway		
DNS Servers		
		Reset Save&Apply



4. Configuring the Server

4. Configuring the Server

Setting Up the Pool

To configure the server:

- 1. Click General Settings.
- 2. Set the options according to the following table:

Option	Description
Pool URL	Enter the URL of your desired pool. The X3 server 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 server.

System Miner Configuration Miner Status Network General Settings Advanced Settings Image: Status Image: Status		
iner General Configuration		
Pool 1		
URL	stratum+tcp://stratum-xmr.antpool.com:555!	
Worker	antminer_1	
Password	123	
Pool 2		
URL	stratum+tcp://stratum-xmr.antpool.com:443	
Worker	antminer_1	
Password	123	
Pool 3		
URL	stratum+tcp://stratum-xmr.antpool.com:25	
Worker	antminer_1	
Password	123	
Setup		
Customize the fan speed percentage	P6	

Note: Fan speed can be adjusted, but we recommend keeping the default setting.



5. Monitoring Your Server

5. Monitoring Your Server

To check the operating status of your server:

1. Click the status marked below.

2. Monitor your server 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 (GH/s)				
Temp(PCB)	Temperature of each hash board (°C).(Applied only to server with fixed frequency)				
Temp(Chip)	mperature of the chips on each hash board (°C).				
ASIC status	One of the following statuses will appear:				
	• O - indicates OK				
	• X - indicates error				
	• indicates dead				

Summary																		
Elap	ised	KH/S(RT)		KH/S(avg)			FoundBlo	des		LocalWork		Utility		wu			BestShare	•
4m)	10s	239.13		235.59			0			159		3.85		9,073,27	7.81		0	
Pools																		
Pool		URL		User	Status	Diff	GetWorks	Priority	Accepted	Nonce#	DiffA#	DiffR#	Diffs#	Rejected	Discarded	Stale	LSDiff	LSTime
0	stratum+tcp://	stratum-xmr.antpool.e	com:5555	antminer_1	Alive	2.097M	4	0	16	0	33,554,431	4,194,303	0	2	135	0	2,097,151	0:00:58
1	stratum+tcp://stratum-xmr.antpool.com:443		antminer_1	Alive	2.097M	2	1	0	0	0	0	0	0	0	0	0	0	
2	stratum+tcp:/	/stratum-xmr.antpool	Lcom:25	antminer_1	Alve	2.097M	2	2	0	0	0	0	0	0	0	0	0	0
Total							8		16	0	33,554,431	4,194,303	0	2	135	0		
HW		0								NaN%	0.0000%							
AntMiner																		
Choin#	aain# ASIC# Frequency KH/S(RT) HW Temp(PCB) Temp(Chip)									ASIC sta	itus							
2	60	400	81.32	0	41	B	55			0	00000 000000	000 00000000	00000000	00000000 000	000000 0000000	0000		
3	60	400	76.41	0	41				00000 0000000 0000000 0000000 0000000 0000									
4	60	400	81.40	0					00000000 00000000 00000000 00000000 0000									
Far				3	Fan1									Fan2				
Speed (fain)				3,690									0				

Note: The X3 server is with fixed frequency 400 MHZ. Firmware will stop running when the Temp(PCB) reaches to 80-85 °C or the Temp(chips) reaches to 125-135 °C, there will be an error message "Fatal Error: Temperature is too high!" shown in the bottom of kernel log page.



6. Administering Your Server

6. Administering Your Server

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 server use. In the example below, the server is using firmware version 20180411.

System Miner Configuration Miner Status Net Overview Administration Monitor Kernel Log		
CALLARM Decimination and the very rol	upprase accost	
verview		
System		
Miner Type	Antminer X3	
Hostname	antMiner	
Model	GNU/Linux	
Hardware Version	1.3.0.10	
Kernel Version	Unux 3.8.13 #22 SMP Tue Dec 2 15:26:11 CST 2014	
File System Version	Wed Apr 11 23:42:20 CST 2018	
COminer Version	4.9.0	
Uptime	4	
Load Average	1.80, 1.00, 0.40	
Memory		
Total Available	49944 kB / 251180 kB (20%)	
Free	201196 kB / 251180 kB (80%)	
Cached	0 kB / 251100 kB (0%)	
Buffered	0 k0 / 253300 k0 (0%)	
Network		
IP Status	20 Type: 04CP ddfrees 192,160,1.01 ft00 Metmank: 253,255.253.0	

6.2 Upgrading Your System

Make sure that the X3 server 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 server's firmware:

1. In System, click Upgrade.

verview Administration Monitor Kernel Log Upgra	Reboot	
grade		
Backup / Restore Click "Generate archive" to download a tar archive of the currer	onfiguration 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 previously gene	id backup archive here.	
Restore backup:	演览流 未透择文件。 Upload archive	
Flash new firmware image Upload a sysupgrade-compatible image here to replace the runn	firmware. Check "Keep settings" to retain the current configuration.	
Keep settings:	×.	
Image:	刻观未选择文件。 IFlash Image	

6. Administering Your Server

- 2. For Keep Settings:
 - Select the check box to keep your current settings (default).
 - Clear the check box to reset the server to default settings.
- 3. Click the 通择文件 (Browse) button and navigate to the upgrade file. Select the upgrade file, then click Flash image. A message appears notifying you if the X3 server firmware can be upgraded and if yes, will then proceed to flash the image.
- 4. When the upgrade is completed, the following message appears:

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

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

System Miner Configuration Miner Status Network		
Overview Administration Monitor Kernel Log Upgrade Reboot		
Password		
Changes the administrator password for accessing the device		
Current Password	Clarrent Pastword	
New Password	New Password	
Confirmation	Confirmation Password	
		Reset Save&Apply

6.4 Restoring Initial Settings

To restore your initial settings

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



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



Regulation:

FCC Notice (FOR FCC CERTIFIED MODELS):

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

EU WEEE: Disposal of Waste Equipment by Users in Private Household in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handling it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information

about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where your purchased the product.

	T	設備名稱	5429 5475 -	, 型號:		
單元	鉛 (Pb)	汞 (Hg)	有音 鎘 (Cd)	害物质 六價路 (Cr+6)	多溴聯苯 (PBB)	多溴二苯 醚 (PBDE)
外殼	0	0	0	0	0	0
電路板組 件	_	0	0	0	0	0
其他線材		0	0	0	0	0
基準 值。 備考 2. "〇	″係指該項[″及"超出0.0 限用物質之百分 限用物質為排隊	◆比含量未超出		「分比含量超出」 「 生 準 値。	百分比含量

台湾 ROHS: