D7 Server Installation Guide

Document Version 1.0

Sep. 2021

© Copyright Bitmain Technologies Holding Company 2007 – 2022. All rights reserved.

Bitmain Cayman (hereinafter referred to as 'Bitmain') reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to Bitmain's terms and conditions of sale supplied at the time of order acknowledgment.

Bitmain warrants performance of its products to the specifications applicable at the time of sale in accordance with Bitmain's standard warranty. Testing and other quality control techniques are used to the extent Bitmain deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Bitmain assumes no liability for third-party applications assistance. Customers are responsible for their products and applications using Bitmain components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Bitmain does not warrant or represent that any license, either express or implied, is granted under any Bitmain patent right, copyright or other Bitmain intellectual property right relating to any combination, machine, or process in which Bitmain products or services are used. Information published by Bitmain regarding third-party products or services does not constitute a license from Bitmain to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from Bitmain under the patents or other intellectual property of Bitmain.

Resale of Bitmain products or services with statements different from or beyond the parameters stated by Bitmain for that product or service voids all express and any implied warranties for the associated Bitmain product or service and is an unfair and deceptive business practice. Bitmain is not responsible or liable for any such statements.

All company and brand products and service names are trademarks or registered trademarks of their respective holders.

Table of Contents

1. Overview	4
1.1 D7 Server Components	5
1.2 Specifications	7
2. Setting Up the Server	8
3. Configuring the Server	11
4. Monitoring Your Server	12
5. Administering Your Server	13
5.1 Checking Your Firmware Version	14
5.2 Upgrading Your System	14
5.3 Modifying Your Password	14
5.4 Restoring Initial Settings	14
Environmental Requirements	16
Regulations	17

1. Overview

The D7 server is Bitmain's newest version. Power supply APW12 is part of D7 server. All D7 servers are tested and configured prior to shipping to ensure easy set up.





Front View



Caution:

1. Please refer to the layout above to place your goods in usage in case of any damage.

2. The equipment must be connected to an earthed mains socket-outlet. The socket-outlet shall be installed near the equipment and shall be easily accessible.

3. The equipment has two power inputs, only by connecting those two power supply sockets simultaneously can the equipment run. When the equipment is powered off, be sure to power off all power inputs.

- 4. DO NOT remove any screws and cables tied on the product.
- 5. DO NOT PRESS the metal button on the cover.
- 6. Please note that the actual server shall prevail.





The main components and controller front panel of D7 servers are shown in the following figure:





Control Panel Version 2

Note:

There are two versions of the control panel, please refer to the pictures above to check the differences of SD Card Slots.

APW12 Power Supply:



Note:

- 1. Power supply APW12 is part of D7 server. For detailed parameters, please refer to the specifications below.
- 2. Additional two power cords are needed.

1.2 Specifications

Version: D7 1286GH/S

Model No.: 240-Cm

Product Glance	Value
Version	D7
Hashrate, GH/S	1286
power on wall@25°C, Watt	3148
power efficiency on wall @25°C, J/G	2.4
Server Size (Length*Width*Height, w/o package), mm⁽¹⁻¹⁾	400*195.5*290 mm
Net weight, kg ⁽¹⁻²⁾	14.5

Notes:

(1-1)

Including PSU size. Including PSU weight. (1-2)

2. 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.

6

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.

Shelf 1 Step 1 Position 1 Start Information NO. IP MAC No. IP MAC this is suitable for farm miners to mark location of miners. if you're home miner, you may leave it as default directly. < > Skip Stop Export Quit			Ip I	Reporter		-	
Information MAC NO. IP MAC this is suitable for farm miners to mark location of miners. if you're home miner, you may leave it as default directly. If you're home miner, you may leave it as default directly. > Skip Stop Export Quit	Shelf 1	Step	1	Position	1		tart
NO. IP MAC this is suitable for farm miners to mark location of miners. if you're home miner, you may leave it as default directly. Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">IP MAC Image: style="text-align: center;">Image: style="text-align: center;"/>Image: style="text-align: center;"/>Image: style="text-align: center;"/>Image: style="text-align: center;"/>Image: style="text-align: center;"/>Image: style="text-align: center;"	Information	-					-
this is suitable for farm miners to mark location of miners. if you're home miner, you may leave it as default directly.	NO. IF	>		N	IAC		
Skip Stop Export Quit	this is suitable	for farm mi	ners to ma	rk location of r	miners.		
 Skip Stop Export Quit	ir you're home	miner, you	may leave	it as default o	tirectly.		
< > Skip Stop Export Quit							
< > Skip Stop Export Quit							
 Skip Stop Export Quit							
 Skip Stop Export Quit							
 Skip Stop Export Quit							
Skip Stop Export Quit							
Skip Stop Export Quit	c						>
Skip Stop Export Quit	٢						>
	<						3
	< Skip		Stop	Exp	port	Q	> uit



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.

Shelf 1	Step 1	Position	1	Start
	C	onfirmation		×
	IP 100.70.1	23		
	SCIECIER			
	MAC 00.LO.LD.			
PC	DSITION 1-1			
	OK	Skip	Stop	

- 7. In your web browser, enter the IP address provided.
- 8. Proceed to login using root for both the username and password.
- 9. In the Protocol section, you can assign a Static IP address (optional).
- 10. Enter the IP address, Subnet mask, gateway and DNS Server.
- 11. Click "Save".
- 12. Click <u>https://support.bitmain.com/hc/en-us/articles/360018950053</u> to learn more about gateway and DNS Server.

	Antminer D7 Algorithm X11 Online		Locate Miner 🍞 🕑 Rehesh Timer 2021-09-10 11:11:21 🖶 English 🗸
Dashboard			
E Settings		IP Setting	
10 IP Setting	· · · · · · · · · · · · · · · · · · ·		
BR System	Network Information	MAC-Address:7A:C2:13:57:E6:43 IP Address:172:28:143.92 Subnet Mask:255:255:255:0	
Password	HostNname	Antroiner	
Firmware Upgrade.	Protocol	DHCP *	
		Save	

3. Configuring the Server

Setting up the Pool

To configure the server:

1. Click Settings marked below.

	Antiminer D7 {Algorithm X11}	(n Online)		Locate Miner 🍞 🍈 Refresh Timer 2021-09-10 11:11:01 🎂 English ~
B Dashboard	Pools	Minine Arbhane	Minar Norma	Basever fortions?
학하 IP Setting 성무 System ^	Pool1	TEST	TEST	TEST
Password	Pool3	TEST	TEST	TEST
C Firmware Upgrade	Setup	100		
			Save	

Note:

Fan speed percentage can be adjusted, but we recommend to keep the default setting. The server will adjust the fan speed automatically if the fan speed percentage has yet been selected.

2. Set the options according to the following table:

Option	Description					
Mining address	Enter the address of your desired pool. The D7 servers 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.					
Name	Your worker ID on the selected pool.					
Password (optional)	The password for your selected worker.					

3. Click Save after the configuration.

4. Monitoring Your Server

To check the operating status of your server:

1. Click dashboard marked below to check the server status.

ANTHINER	Additional	D7 (Algorithm N3.3)	(Li Outrino)							catté bisses 🗇	Di 🕑 Perter	th Yomer 2021	09-10 11 0	0:46 🐠 English
	Real Time	Hashrate	-	Network Status		-	Fan Sper	ed	-		Miner Temp	erature		-
C. Settings			((1111)			(····	-)				()
161 HP Setting	1.1		\sim			-			_					~
KR System ~						Chains' Rate								
C Pressound	1	1333.15mm	13	03.11		and i can plotted		_						
	239	1.44%	O _d :	L8: 0: 56		ana ana ton Linear Aterary C sheets () sheet2	Paras O sheed	106mm 13	Series Informer	ittian 25	no zite	n Jataran	316m	y Septem
	Pool													
	Pool	Mining Address 11	Miner Nation	Post Connect	non titalian 1	and .	Priority	Accepted	(DIRA	Lores .	Anopasted	Intele	LODIE	LISTIM
	1	TEST	TEST	(14)		2048.00	0	9609	19501760	284672	139	0	2048	0.00.00
	2	TEST	TEST	C. 141	rmat	32.000	3	0	0	0	0	0	0	D
	3	TEST	TEST	-		32.000	2	0	0	0	0	0	0	0
	Antminer	D7												
	Hisids Board	1) (A	Number of Chips	Realitionarie Rotan	Frequency	Russi Tan	e manicate	1	Nonettial Hoph/fals	states, by	ing:	Challet Terrus		Creat analysis
	2		70	7004	625	43	A HO GEN		428.75 GHUS	47	50	77.75		Petermat
			70	5955	625	43	7.803 (014/5)		428.75 GH/s	46	61	80 76		Teirrreat 💼
	4		70	4934	625	43	0.08 GRM		428.75 GH/s	47	52	78 76		Normal 💼
	Fam			Fani Speed		Fand	Spend		Famil Spr	eral.		Fat	a Speed	
	Speedp/m	siesty		3000		36	00		3000			3	000	
Miner Log	Photosoph Streptor	Fil Aug 27 19 23-42 GST	2021 (P.Johnson 172.2	8.143.52 MAG 7A/C2	33572643	Type Debug					Portfala	e Families Sk	dings	Fleatant Manua

Note: The D7 server is with fixed frequency 625 MHz. Firmware will stop running when the Temp (Outlet) reaches to 75° C, there will be an error message "over max temp, pcb temp (real-time temp)" shown on the bottom of kernel log page. Meanwhile, the server temperature on the dashboard interface turns to abnormal and shows "Temp is too high".

2. Monitor your server according to the descriptions in the following table:

Option	Description					
Number of chips	lumber of chips detected in the chain.					
Frequency	SIC frequency setting.					
Real Hashrate	Real-time Hashrate of each hash board (GH/s).					
Inlet Temp	Temperature of the inlet (°C).					
Outlet Temp	Temperature of the outlet (°C).					
Chip state	One of the following statuses will appear:					
	The Green Icon - indicates normal					
	The Red Icon- indicates abnormal					

5. Administering Your Server

5.1 Checking Your Firmware Version

To check your firmware version:

- 1. Enter the backstage of your server, find the firmware version on the bottom.
- 2. **Firmware Version** displays the date of the firmware your server uses. In the examples below, the server is using firmware version 20210827.

2	TEST	TEST		Normal	32.000	1	0	0	0	0 0	0	0
3	TEST	TEST		kormal	32.000	2	0	0	0	0 0	0	0
Antminer D7												
Hash Board		Number of Chips	Hardware Error	Frequency	Real Time	Hashrate		Theoretical HashRate	Inlet Temp	Outlet Temp		Chip state
2		70	7004	625	434	89 GH/s		428.75 GH/s	47 50	77 75		Normal
3		70	5955	625	437	83 GH/s		428.75 GH/s	46 51	80 76		Normal 📕
4		70	4934	625	436	08 GH/s		428.75 GH/s	47 52	78 76		Normal
Fan			Fan1 Speed		Fan2 S	peed		Fan3 Speed		Fan	4 Speed	
Speed(r/min)			3000		300	0		3000)	3000	
Fernance Version PriA	kig 27 19:23:42 C	ST 2021 IP Address 172	28.143.92 MAC 7A	C21357E6/43 Tv	e Debug					Restore Factory Se	timas	Restart Min

5.2 Upgrading Your System

Make sure that the D7 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:

i

1. In System, click Firmware Upgrade.

ANT MINER	Firmware upgrade
†å∲ IP Setting	
片 System · ^	Firmware File
Password	Keep settings
C Firmware upgrade	Update

2. For Keep Settings:

- Select "keep settings" to keep your current settings (default).
- Unselect "keep settings" to reset the server to default settings.
- 3. Click the button and navigate to the upgrade file. Select the upgrade file, then click **Update**.
- 4. When the upgrade is completed, restart the server and it will turn to the setting page.

	E Antoiner D? (Algorithm X11)	(T000)		Locare More 🌐 🕘 Maherah Timer 2021-08-10 11 11 01 🖶 English
BS Deshboard	Pools			
₩ IP Setting	Pool1	Mining Address	Minut Name YEST	Password (optional) Tabut
녌 System 스	Pool2	TEST	TEST	TEST
Password	Poor -	TEDI	JESI	(ES)
0	Fan Spred (%)	100		
			564	
	-			

5.3 Modifying Your Password

To change your login password:

- 1. In System, click the Password tab.
- 2. Set your new password, then click **Save**.

The Settings	Reset Password		
있? IP Setting	Current Patoward		
BR System · ^	New Password		
Parentee	Contine Passaord		
C Firmware Ubgrade		Terro	
	A second		

5.4 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.

Environmental Requirements

Please run your server in accordance with the following requirements

1. Basic Environmental Requirements:

1.1. Climatic Conditions:

Description	Requirement
Operating Temperature	0-40℃
Operating Humidity	10-90%RH (non-condensing)
Storage Temperature	-20-70°C
Storage Humidity	5-95%RH (non-condensing)
Altitude	<2000m

1.2. Site Requirements of the Server Running Room:

Please keep the server running room away from industrial pollution sources:

For heavy pollution sources such as smelters and coal mines, the distance should be more than 5km.

For moderate pollution sources such as chemical industries, rubber and electroplating industries, the distance should be more than 3.7km.

For light pollution sources such as food factories and leather processing factories, the distance should be more than 2km.

If unavoidable, the site should be chosen in the perennial upwind direction of the pollution source.

Please do not set your location within 3.7km from the seaside or the salt lake. If unavoidable, it should be built as airtight as possible, equipped with air conditioning for cooling.

1.3. Electromagnetic Environmental Conditions:

Please keep your site away from transformers, high-voltage cables, transmission lines and high-current equipment, for example, there should be no high-power AC transformers (>10KA) within 20 meters, and no high-voltage power lines within 50 meters. Please keep your site away from high-power radio transmitters, for example, there should be no high-power radio transmitters (>1500W) within 100 meters.

2. Other Environmental Requirements:

The server running room shall be free of explosive, conductive, magnetically conductive and corrosive dust. The requirements of mechanical active substances are shown below:

2.1 Requirements of Mechanical Active Substances

Mechanical Active Substance	Requirement
Sand	<= 30mg/m ³
Dust (suspended)	<= 0.2mg/m ³
Dust (deposited)	<=1.5mg/m ² h

2.2 Requirements of Corrosive Gas

Corrosive Gas	Unit	Concentration		
H ₂ S	ppb	< 3		
SO ₂	ppb	< 10		
Cl ₂	ppb	< 1		
NO ₂	ppb	< 50		
HF	ppb	< 1		
NH ₃	ppb	< 500		
03	ppb	< 2		
Note: ppb (part per billion) refers to the unit of concentration, 1ppb stands for the volume ratio of				
part per billion.				

Regulations:

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 you purchased the product.

台湾 ROHS:

設備名稱: D7 服務器型號: 240-Cm						
	有害物質					
單元	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (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
備考1. "超出0.1 wt%"及"超出0.01 wt%"係指限用物質之百分比含量超出百分比含量基準 值。 備考2. "〇"係指該項限用物質之百分比含量未超出百分比含量基準值。 備考3. "一"係指該項限用物質為排除項目。						