BITMAIN

ANTMINER

T15 Server

Installation Guide

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1. Overview

The T15 server is Bitmain's newest version in the T15 server series. Power supply APW8 is part of T15 server. All T15 servers are tested and configured prior to shipping to ensure easy set up.







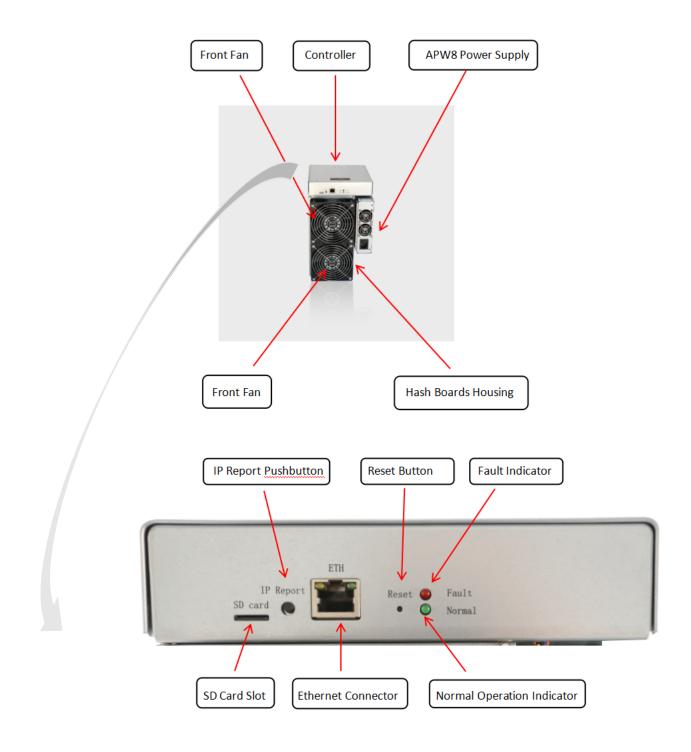
Caution:

- 1. The socket-outlet shall be installed near the equipment and shall be easily accessible.
- 2. Please refer to the layout above to place your goods in usage in case of any damage.



1.1 T15 Server Components

The main components and controller front panel of T15 server are shown in the following figure:





APW8 Power Supply:



Note:

1.Power supply APW8 is part of T15 server. For detailed parameters, please refer to the specifications below.

2. Additional power cord is needed.



1.2 Specifications

Model No.: 240-A

Version: T15

Product Glance	Value				
Crypto Algorithm	SHA	256			
	Normal	Low Power			
Hashrate, TH/s	23.00	17.50~21.00			
Reference power on wall, Watt	1541	1050~1260			
Reference power efficiency on wall @25°C, J/TH	67.00	60.00			

Detailed Characterist		Value		
	Min	Тур	Max	
Hashrate & Power	-			
Hashrata TH/s	Normal		23.00	23.45
Hashrate, TH/s	Low Power		17.50~21	+3% (1-1)
Power efficiency on wall	Normal	67.00		71.69
@25°C, J/TH	Low Power	60.00		64.20
Power efficiency on wall	Normal	70.52		75.46
@40°C, J/TH	Low Power	62.92		67.32
	Normal	1541		1770
Power on wall, Watt ⁽¹⁻²⁾	Low Power	1050		1456
Power supply AC input voltage, Volt (1-	3)	200	220	240
Power supply AC input	Normal		7.00	8.85
current, Amp ⁽¹⁻⁴⁾	Low Power		4.77	7.28
Power supply Input AC Frequency Rang	ge, Hz	47	50	63
Hardware Configuration				
Quantity of hash chips		180		
Quantity of hash boards		3		
Networking connection mode	RJ4	5 Ethernet	10/100M	



Server Size (Length*Width*Height, w/o package),mm ⁽²⁻¹⁾	205*175*279						
Net weight, kg ⁽²⁻²⁾		6.6					
Noise, dBA @25°C ⁽²⁻³⁾				76			
Environment Requirements				-			
Operation temperature, °C	0	0	25	40			
Storage temperature,°C	-40	-40	25	85			
Operation humidity, RH	5%	5%		95%			

Notes:

- (1-1) In Low Power Mode, Max Hashrate should be Typ hashrate *103%
- (1-2) Min condition: 25°C, min J/TH, typical hashrate Max condition: 40°C, max J/TH, max hashrate
- (1-3) Caution: Wrong input voltage may probably cause server damaged
- (1-4) Typ condition: min reference power, typical AC input voltage Max condition: max reference power, min AC input voltage
- (2-1) Including PSU size
- (2-2) Including PSU weight
- (2-3) Max condition: Fan is under max RPM(rotation per minute)



2.Setting Up the Server

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.

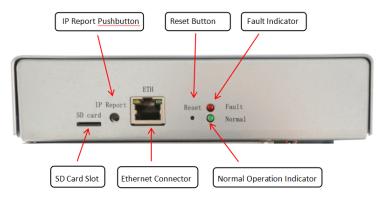


The default DHCP network protocol distributes IP addresses automatically.

- 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	Pos	ition 1			Start
Information							~
NO. I	Р			MAC	:		
this is suitable							
I Voure nom	e miner, you	may leav	e ic as de	rault direc	Juy.		
in youre nom	11						
a joure nom							
a Joure nom							
a Joure note							
a foure note	-						
< .							>
							>
				Export			> Quit





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.

ihelf 1	Step 1 Cor	Position 1 nfirmation	Start
	IP 10.70.123		
	MAC 6C:EC:EB:62		
PO	SITION 1-1		
	ОК	Skip S	top

- 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 DHCP IP address (optional).
- 11. Click Save & Apply.

etwork Settings		
twork setup for Miner		
Status	MAC-Address:C4:F3:12:67:78: IP:192.168.1.101 eth0 Netmask:255.255.255.0	17
Hostname	antMiner	
Protocol	DHCP	•
IP Address		
Netmask		
Gateway		
DNS Servers		

3. Configuring the Server



3. Configuring the Server Setting Up the Pool

To configure the server:

1. click General Settings.

ANTMINER		
System Miner Configuration Miner Status Network Miner General Configuration		٦
Pool 1		
URL Worker	stratum+top://stratum.antpool.com.3333 antminer_1	
Password Pool 2	123	
URL	stratum-top://stratum.antpool.com.443 antminer_1	
Password	123	
Pool 3 URL	stratum+tcp://stratum.antpool.com:25	
Worker Password	antminer_1 123	
Setup Low Power Mode	8	
	Reset Save&Ap	ply



Note: There are two modes of Hashrate which u may adjust for T15 server: Low Power Mode and Normal Mode. Power consumption varies with different mode. Please refer to the specifications above for more details.

2. Set the options according to the following table:

Option	Description
Pool URL	Enter the URL of your desired pool. The T15 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.

4. Monitoring Your Server

4. Monitoring Your server

To check the operating status of your server:

1. Click the status marked below.

INER																				
ystem M	iner Configura	ation Miner Sta	atus Netwo	ork																
ner Stati																				
ner stati	us																			
Summary																				
Elap	sed	GH/S(RT)		GH/S(a	ivg)		Found	Blocks		LocalW	/ork	U	tility	1	wu		BestSha	ire		
1m	7s	18889.06		20174	.37		0			4969			2.69 146722.39		146722.39		146722.39		157376	
Pools																				
Pool		URL		User	Status	Diff	GetWorks	Priority	Accepted	Diff1#	DiffA#	DiffR#	DiffS#	Rejected	Discarded	Stale	LSDiff	LSTim		
0 st	tratum+tcp://	/stratum.antpool.c	om:3333	antminer_1	Alive	65.5K	4	0	3	0	163840	0	0	0	35	0	65536	0:00:3		
1 s	tratum+tcp:/	/stratum.antpool.	com:443	antminer_1	Alive	32.8K	2	1	0	0	0	0	0	0	0	0	0	0		
2 :	stratum+tcp:	//stratum.antpool.	.com:25	antminer_1	Alive		2	2	0	0	0	0	0	0	0	0	0	0		
total							8	3	3	0	163840	0	0	0	35	0				
HW		0									0.0000%									
AntMiner																				
Chain#	ASIC#	Frequency	GH/S(R	г) нw	Temp	(PCB)	Temp	(Chip)					ASIC	status						
1	60	439	6772.80	0 (36-52	-36-53	51-67-	51-68		000000	00 0000000	0 000000	00 000000	00 0000000	00000000 000	00000 0	000			
2	60	442	6398.97			-39-54	53-68-								00000000 000					
3	60	436	5717.29	0	36-50	-35-51	51-65	50-66							00000000 000					
Fan	1#				fan1									fan2						
	r/min)				2760									2760						

Note: The T15 server is with automatic frequency adjustment. Firmware will stop running when the Temp(PCB) reaches to 78°C, there will be an error message "Fatal Error: Temperature is too high!" shown in the bottom of kernel log page.

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)	Temperature 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

5. Administering Your Server

5. Administering Your Server

5.1 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 20181130.

NTMINER	
System Miner Configuration Miner Status Network	
Overview Administration Monitor Kernel Log Upgrade Rel	boot
Overview	
System	
Miner Type	Antminer T15
Hostname	antMiner
Model	GNU/Linux
Hardware Version	13.16394.1.3
Kernel Version	Linux 4.6.0-xilinx-gff8137b-dirty #22 SMP PREEMPT Fri Dec 22 12:25:44 CST 2017
File System Version	Fri Nov 30 02:53:17 CST 2018
CGminer Version	2.0.0
Uptime	6
Load Average	0.22, 0.08, 0.03
Memory	
Total Available	105752 kB / 235792 kB (45%)
Free	130040 kB / 235792 kB (55%)
Cached	14400 kB / 235792 kB (6%)
Buffered	788 kB / 235792 kB (0%)
IP Status	Type: DHCP Address: 192.168.1.99 sthD Netmask: 255.255.255.0

5.2 Upgrading Your System

Make sure that the T15 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.

System Miner Configuration Miner Status Network								
Overview Administration Monitor Kernel Log Upgrade Reboot								
Upgrade								
Backup / Restore Click "Generate archive" to download a tar archive of the current configuration files. To reset the firr	nware to its initial state, click "Perform reset" (only possible with squashfs images).							
Download backup:	C Generate archive							
Reset to defaults:	Perform reset							
To restore configuration files, you can upload a previously generated backup archive here.								
Restore backup:	浏览 未选择文件。 IUpload archive							
Flash new firmware image Upload a sysupgrade-compabble image here to replace the running firmware. Check "Keep settings" t	to retain the current configuration.							
Keep settings:	2							
Image:	浏览… 未选择文件。 IPAsh Image…							

5. 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 道揮文件 (Browse) button and navigate to the upgrade file. Select the upgrade file, then click Flash image. A message appears notifying you if the T15 firmware can be upgraded and if yes, will then proceed to flash the image.
- 4. When the upgrade is completed, the following message appears:

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

- 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.

5.3 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	Current Password
New Password	New Password
Confirmation	Confirmation Password
	Reset Save&Apply

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.



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 your purchased the product.

台湾 ROHS:

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □								
	有害物质							
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	o	0	0	o		
其他線材	_	0	o	0	0	0		

設備名稱: T15 服務器, 型號: 240-A

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. "o" 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