



BITMAIN Antminer T9 12.5Th Profitability ASIC Miner Value Installation Guide

[Home](#) » [BITMAIN](#) » BITMAIN Antminer T9 12.5Th Profitability ASIC Miner Value Installation Guide 



T9 Server

Installation Guide

Document Version 1.0

Jan 2017

© 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 thirdm 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 thirdm 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.

All text and figures included in this publication are the exclusive property of Bitmain, and may not be copied, reproduced, or used in any way without the express written permission of Bitmain. Information in this document is subject to change without notice and does not represent a commitment on the part of Bitmain.

Although the information in this document has been carefully reviewed, Bitmain does not warrant it to be free of errors or omissions. Bitmain reserves the right to make corrections, updates, revisions or changes to the information in this document.

Bitmain

Tel:+86-400-890-8855

www.bitmain.com

Contents

1 Overview

2 Connecting the Power Supply

3 Setting Up the Server

4 Configuring the Server

5 Monitoring Your Server

6 Administering Your Server

7 Documents / Resources

7.1 References

Overview

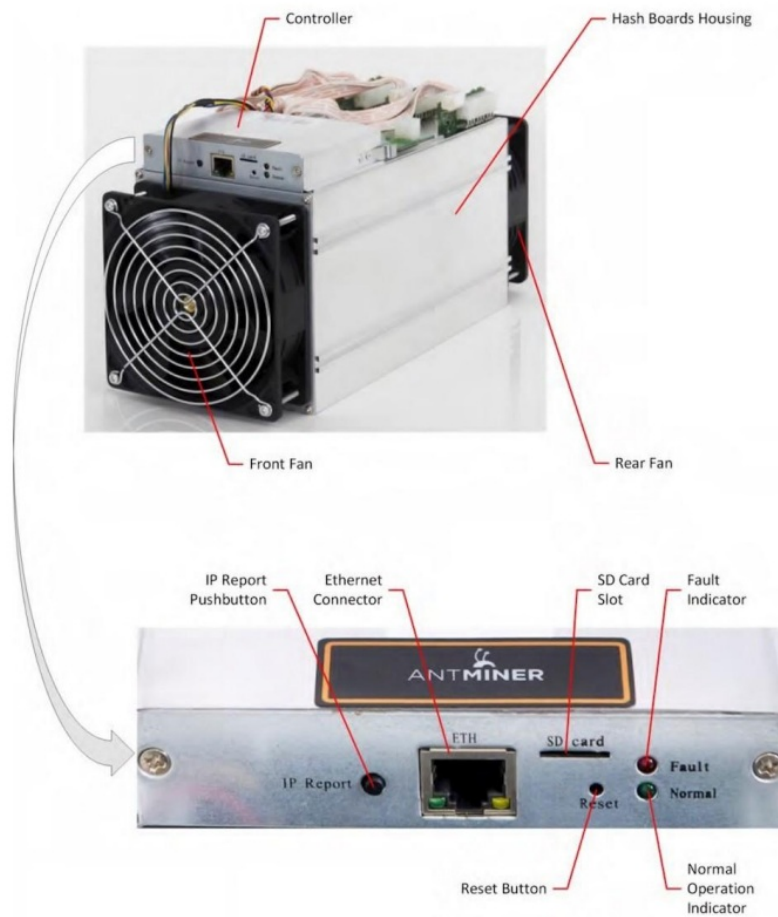
The T9 server is Bitmain's newest version in the T9 server series. It boasts a state-of-the-art BM1387 custommade chip using 16nm technology. All T9 servers are tested and configured prior to shipping to ensure easy set up.



You must provide your own ATX power supply.


1.1 T9 Server Components

The T9 server main components and controller front panel are shown in the following figure:



1.2 Specifications

Feature	Description
Hash Rate	11.5 ± 5% TH/s
Estimated wall outlet power consumption (with APW3, 93% efficiency, 25°C ambient temperature)	1319 ± 5 W
Rated voltage	11.60 ± 0.05 V
Estimated wall outlet power efficiency (with APW3, 93% efficiency, 25°C ambient temperature)	0.126 ± 0.0117
Dimensions (L x W x H)	350 mm (L) x 135 mm (W) x 158 mm (H)
Net weight	1.2 kg
Operating ambient temperature	0 – 40 °C

 The server does not contain a DC/DC converter; therefore, higher input voltage will cause higher Mining efficiency.

Connecting the Power Supply

Ten PCI-e connectors are located at the top of the T9 server for connecting the PSU as follows:

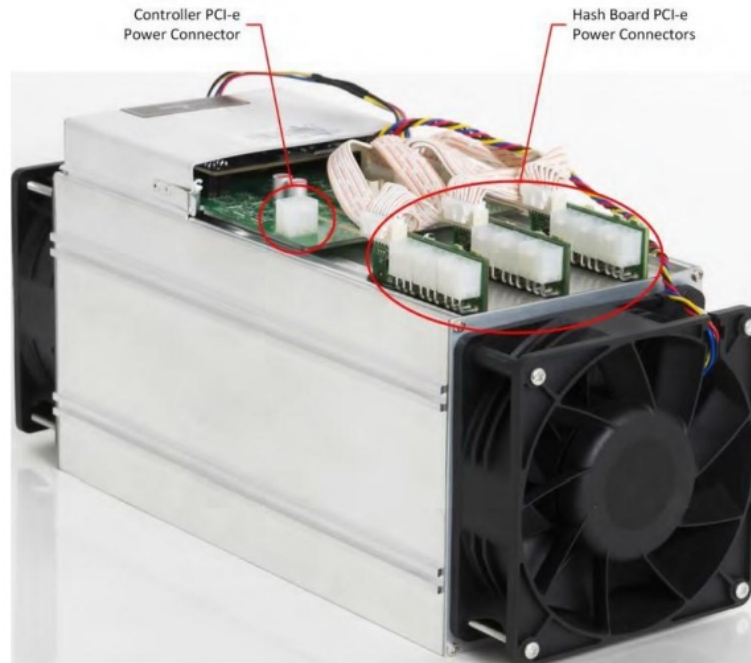
- Nine PCI-e connectors for the hash boards. Each hash board has a set of three PCI-e connectors.

- One PCI—e connector located on the controller.


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 T9 server, ensuring that each hash board is powered by the same PSU.



2. Connect a PSU power cable connector to the T9 PCI-e connector on the controller.
3. Connect the network cable to the ETH port.
4. To power up your T9 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).

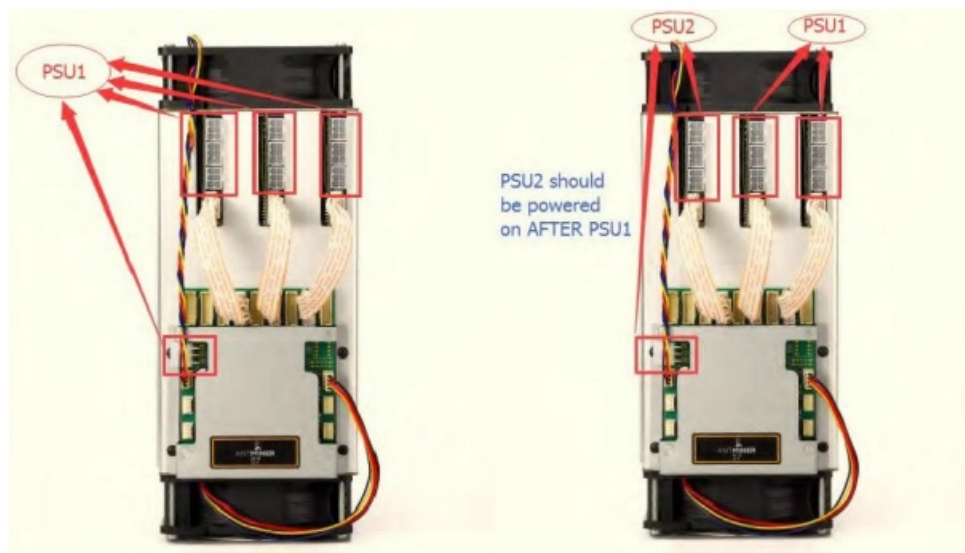


Figure 2---1. PCI---E Connectors --- Correct Connection

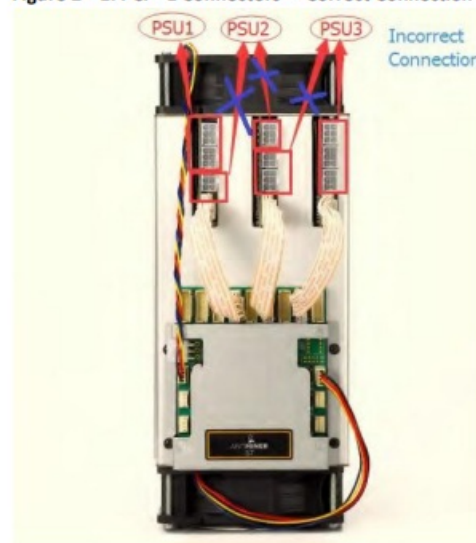



Figure 2---2. PCI---E Connectors --- Incorrect Connection

Setting Up the Server

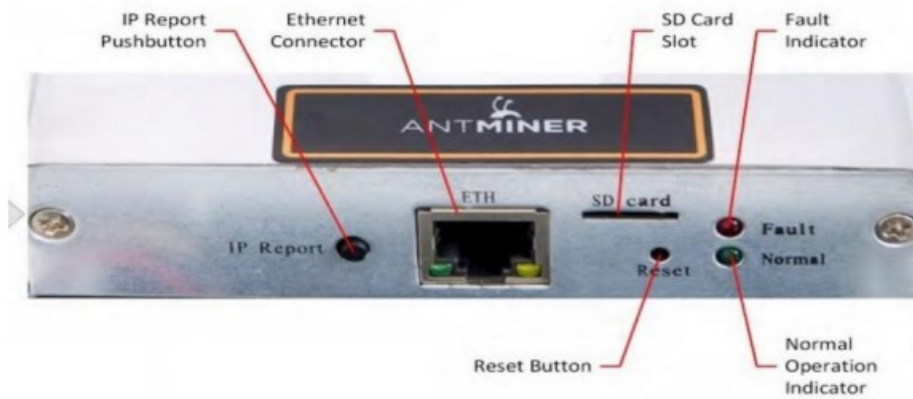
To set up the server:

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

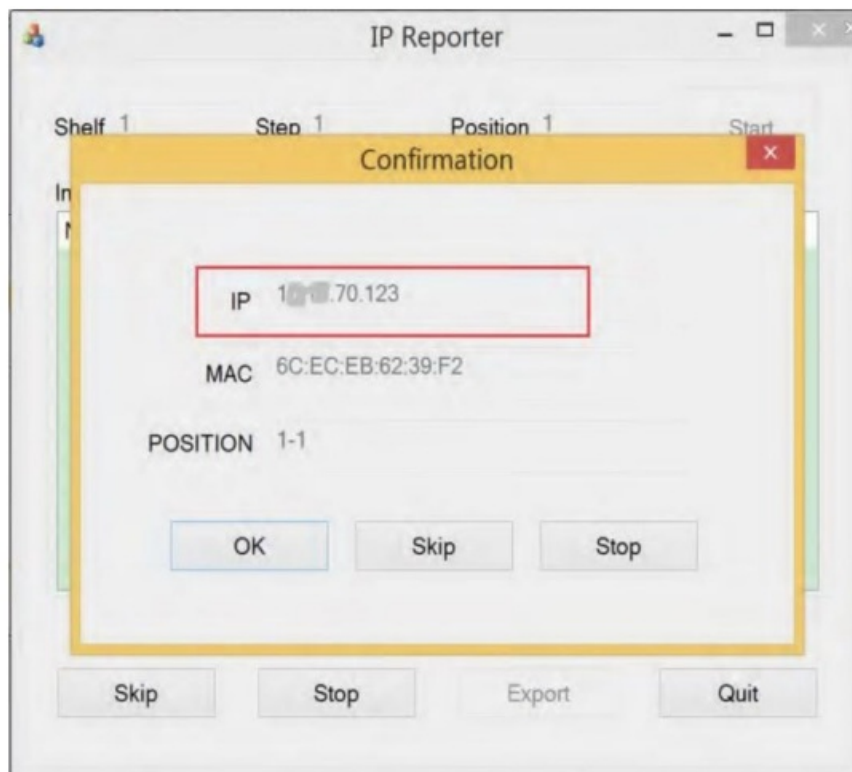
1. Go to the following site: <https://shop.bitmain.com/support/download>
2. Choose 'Others' and download the following file: [IPReporter.zip](#)
3. Extract the file.

 The default DHCP network protocol distributes IP addresses automatically.

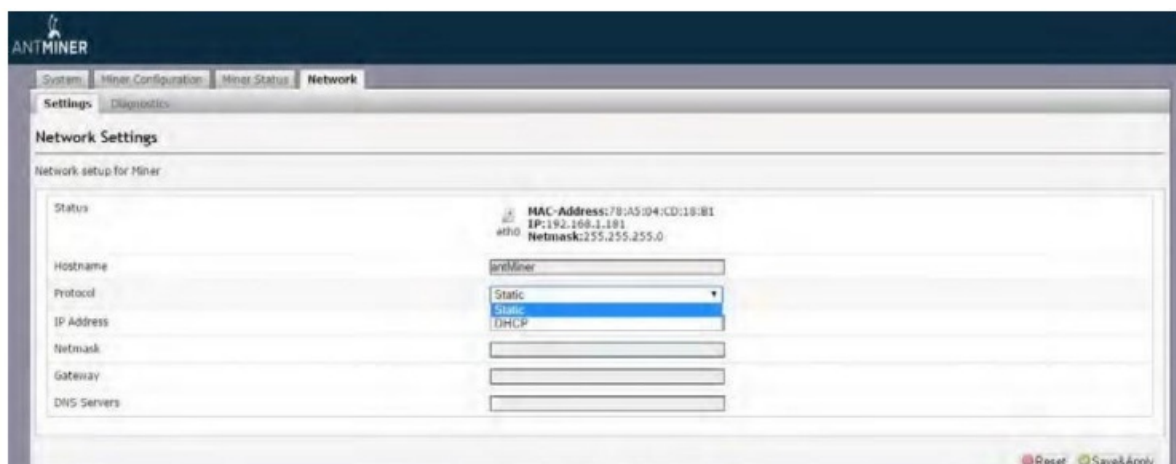
4. Right-click IPReporter.exe and run it as Administrator.
5. Select one of the following options:
 - Shelf, Step, Position – suitable for farm servers to mark the location of the servers.
 - Default – suitable for home servers.
6. Click Start.+
7. On the controller board, click the IP Report button. Hold it down until it beeps (about 5 seconds).



The IP address will be displayed in a window on your computer screen.



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.



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 T9 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.

The screenshot shows the Antminer configuration interface. The 'Miner Configuration' tab is selected, and the 'General Settings' sub-tab is active. The 'Miner General Configuration' section is highlighted with a red box. It contains three pool configuration sections (Pool 1, Pool 2, Pool 3) and a Setup section. Each pool section has fields for URL, Worker, and Password. The Setup section has a checkbox for 'Stop running when temperature is over 80°C' and a slider for 'Customize the fan speed percentage'. At the bottom right, there are 'Reset' and 'Save&Apply' buttons.

Pool	URL	Worker	Password
Pool 1	solo.antpool.com:3333	antminer_1	123
Pool 2	p2p.antpool.com:3333	antminer	123
Pool 3	stratum+tcp://stratum.f2pool.com:3333	ant.1	123

Setup

Stop running when temperature is over 80°C ☐

Customize the fan speed percentage %

Reset Save&Apply

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

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

Miner Status

Summary																	
Elapsed		GH/S(RT)		GH/S(avg)		FoundBlocks		LocalWork		Utility		WU		BestShare			
1h26m		11,646.47		11,688.20		0		222,356		4.99		163,637.58		98084019			
Pools																	
Pool	URL		User	Status	Diff	GetWorks	Priority	Accepted	Diff1#	DiffA#	DiffR#	DiffS#	Rejected	Discarded	Stale	LSDiff	LSTime
0	stratum+tcp://solo.antpool.com:3333		antminer_1	Alive	32.8K	106	0	429	0	14,057,472	15,360	0	15	2,677	0	32,768	0:00:05
1	stratum+tcp://stratum.antpool.com:3333		antminer_1	Alive		2	1	0	0	0	0	0	0	0	0	0	Never
2	stratum+tcp://cn.ss.btc.com:3333		antminer.1	Dead		0	2	0	0	0	0	0	0	0	0	0	Never
total						108		429	0	14,057,472	15,360	0	15	2,677	0		
HW	101							0	0.0007%								
AntMiner																	
Chain#	ASIC#	Frequency(avg)	GH/S(ideal)	GH/S(RT)	HW	Temp(Chip1)	Temp(Chip2)	ASIC status									
6	57	591.56	3,833.56	3,852.60	0	83	72	00000000 00000000 00000000 00000000 00000000 00000000 00000000 0									
7	57	590.36	3,823.29	3,899.86	1	80	77	00000000 00000000 00000000 00000000 00000000 00000000 00000000 0									
8	57	591.50	3,834.36	3,884.07	100	83	71	00000000 00000000 00000000 00000000 00000000 00000000 00000000 0									
Total	171	591.14	11,501.22	11,546.47													
Fan#	Fan1	Fan2	Fan3	Fan4	Fan5	Fan6	Fan7	Fan8									
Speed (r/min)	0		3,600	0	0	3,840	0	0									

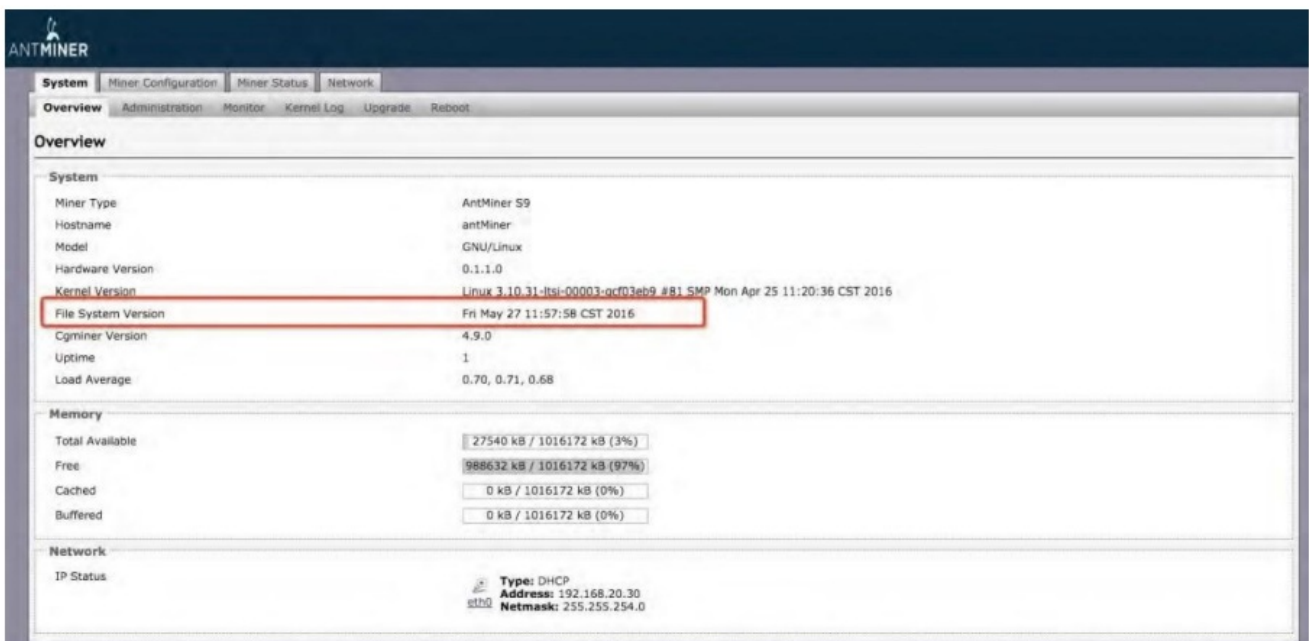
 **Note:** The T9 server with automatic frequency adjustment firmware will stop running when the Temp(Chips) reach to 125m 135°C, there will be a error message “Fatal Error: Temperature is too high!” shown in the bottom of kernel log page.

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 20170108.



6.2 Upgrading Your System

Make sure that T9 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.

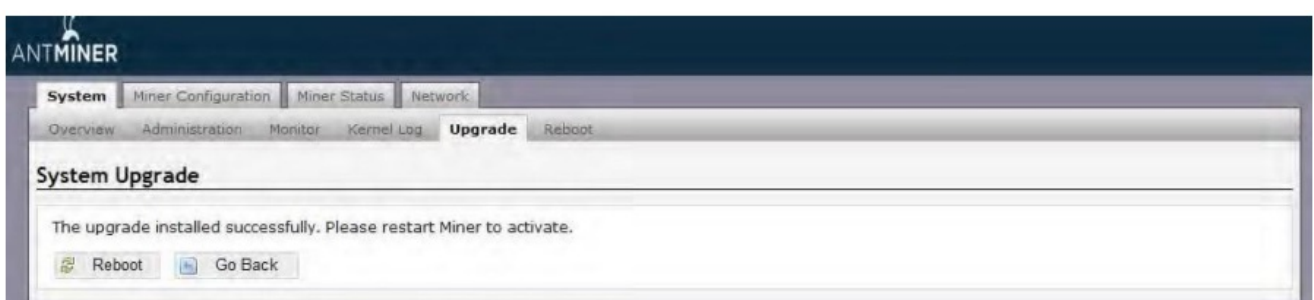


2. For Keep Settings:

- Select the check box to keep your current settings (default).
- Clear the check box to reset the server to default settings.

3. Click

(Browse) button and navigate to the upgrade file. Select the upgrade file, then click Flash image. A message appears notifying you if the T9 firmware can be upgraded and if yes, will then proceed to flash the image.



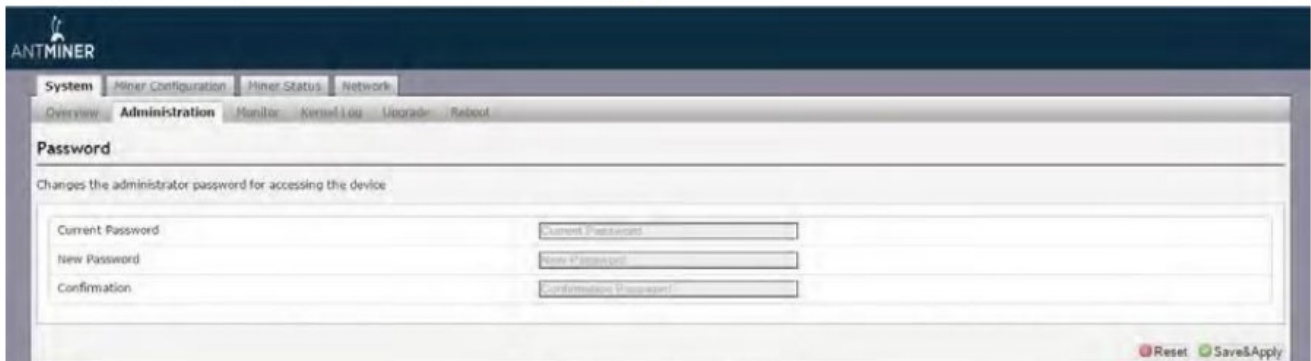
4. Click one of the following options:

- 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.

The screenshot shows the Antminer web interface. At the top, there's a dark blue header with the 'ANTMINER' logo. Below it, a navigation bar contains tabs: 'System', 'Miner Configuration', 'Miner Status', and 'Network'. Under the 'System' tab, there's a sub-menu with 'Overview', 'Administration', 'Monitor', 'Kernel Log', 'Upgrade', and 'Reboot'. The 'Administration' tab is selected, and the 'Password' section is active. The page title is 'Password'. Below the title, it says 'Changes the administrator password for accessing the device'. There are three input fields: 'Current Password', 'New Password', and 'Confirmation'. At the bottom right, there are two buttons: 'Reset' (with a red icon) and 'Save&Apply' (with a green icon).

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 handing 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.

Documents / Resources

	<p>BITMAIN Antminer T9 12.5Th Profitability ASIC Miner Value [pdf] Installation Guide Antminer T9 12.5Th Profitability ASIC Miner Value, Antminer T9, 12.5Th Profitability ASIC Miner Value, Profitability ASIC Miner Value, ASIC Miner Value</p>
-----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

References

-  [BITMAIN](#)
-  [BITMAIN](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.