



AntMiner T9 Installation Guide

Document Version 0.1

Jan 2017

© Copyright Bitmain Technologies Ltd. 2007 – 2016. All rights reserved.

Bitmain Technologies Ltd. (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.

All text and figures included in this publication are the exclusive property of Bitmain Technologies Ltd. (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 Technologies Ltd.

Tel: +86-400-890-8855

www.bitmain.com



Table of Contents

1.Overview ————————————————————————————————————	4	
1.1 AntMiner T9 Components —	5	
1.2 Specifications	6	
2.Connecting the Power Supply	7	
3.Setting Up the Miner	9	
4.Configuring the Miner	11	
5 .Monitoring Your Miner		
6 .Administering Your Miner	13	
6.1 Checking Your Firmware Version	13 13 14 14	



1.Overview.

1. Overview

The AntMiner T9 is Bitmain's newest version in the AntMiner T9 series. It boasts a state-of-the-art BM1387 custom-made chip using 16nm technology. All AntMiner T9s are tested and configured prior to shipping to ensure easy set up.







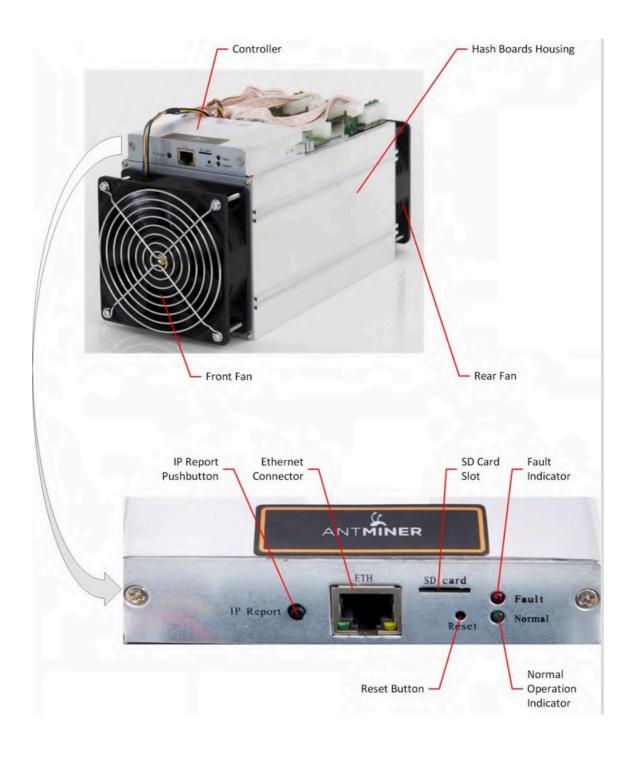
You must provide your own ATX power supply.



1.0verview.

1.1 AntMiner T9 Components

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





1.Overview

1.2 Specifications

Feature	Description
Hash Rate	$11.5\pm5\%$ Th/s
Estimated wall outlet power consumption (with	
APW3, 93% efficiency, 25°C ambient	
temperature)	1349W+7%
Rated voltage	11.60 [~] 13.00V
Estimated wall outlet power efficiency (with	
APW3, 93% efficiency, 25°C ambient	
temperature)	0126J/GH+7%
Dimensions (L x W x H)	350mm x 135mm x 158mm
Net weight	4. 2kg
Operating ambient temperature	0 - 40° C



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



2. Connecting the Power Supply

2. Connecting the Power Supply

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

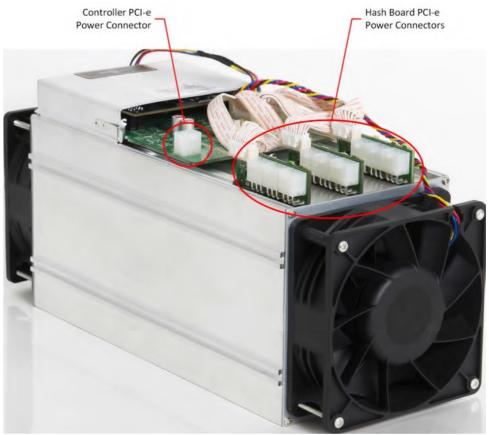
- Nine PCI-e connectors for the hash boards. Each hash board has a set of three PCI-e connectors.
- One PCI-e connector located on the controller.



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



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

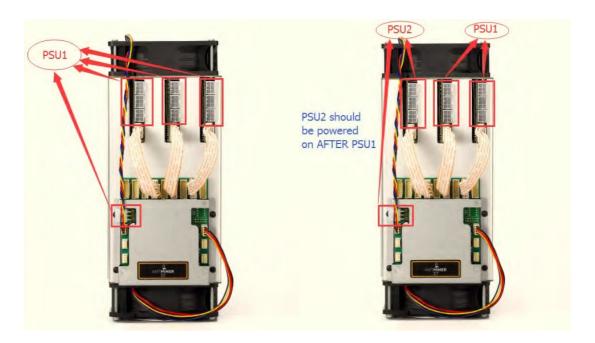


Figure 2-1. PCI-E Connectors - Correct Connection

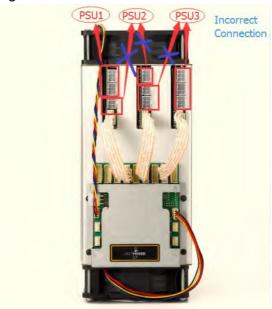


Figure 2-2. PCI-E Connectors - Incorrect Connection



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:

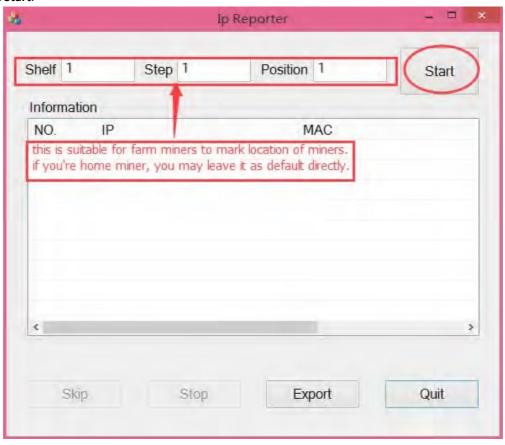
https://shop.bitmain.com/support.htm?pid=00720160906053730999PVD2K0vz0693

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



The default DHCP network protocol distributes IP addresses automatically.

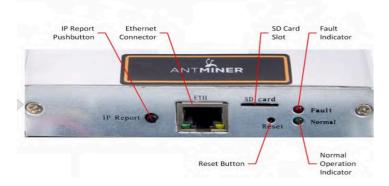
- 4. Right-click IPReporter.exe and run it as Administrator.
- 5. Select one of the following options:
 - Shelf, Step, Position suitable for farm miners to mark the location of the miners.
 - Default suitable for home miners.
- 6. Click Start.





3. Setting Up the Miner

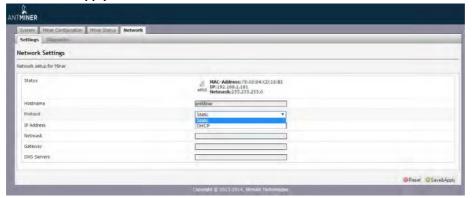
7. On the controller board, click the IP Report button. Hold it down until it beeps (about 5 seconds).



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



- 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.





4. Configuring the Miner

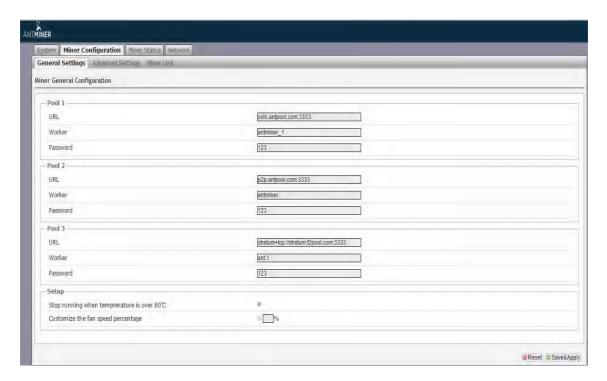
4. Configuring the Miner Setting Up the Pool

To configure the miner:

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

Option	Description
Pool URL	The AntMiner T9 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.





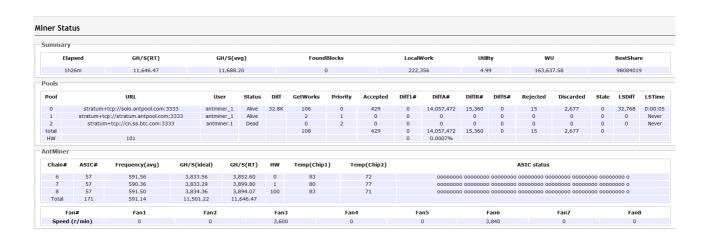
5. Monitoring Your Miner

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 (GH/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:
	• O - indicates OK
	• X - indicates error
	indicates dead



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



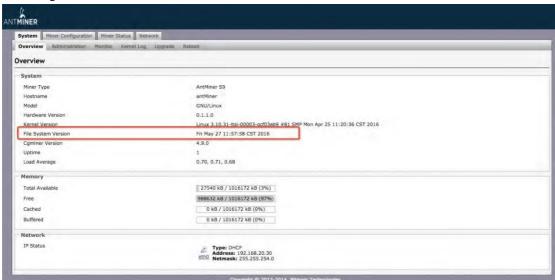
6. Administering Your Miner

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 20170108.



6.2 Upgrading Your System



Make sure that the AntMiner T9 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.

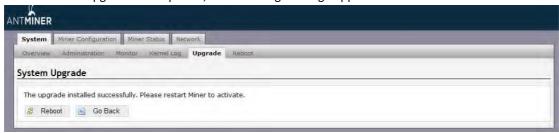




6. Administering Your Miner

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 选择文件 (Browse) button and navigate to the upgrade file. Select the upgrade file, then click Flash image. A message appears notifying you if the AntMiner T9 firmware can be upgraded and if yes, will then proceed to flash the image.
- 4. When the upgrade is completed, the following message appears:



- 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.



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.