

AvalonMiner 1066 User Manual

Contents

Overview.....	2
Safety Regulation.....	2
Hardware Connection.....	3
Keys and Indicator Lamps.....	5
Keys.....	5
Indicator Lamps.....	6
Work Mode.....	6
Normal Mode.....	6
Configuration Mode.....	6
System Setting.....	8
User Login.....	8
Network Setting.....	8
Mining Pool Setting.....	9
User Password.....	9
Management Software FMS.....	9
Firmware Upgrade.....	18
Reset Mining to Factory Setting.....	18
Warranty	18



Overview

Thank you for choosing AvalonMiners. Please read through this user manual carefully before mining as to ensure the correct operation and installation of the products. Please keep the manual properly for future reference.

Model Name	AvalonMiner 1066
Hashrate	50TH/s, -3%~+3%
Power Efficiency	63J/T, -5%~+5%@25°C
	65J/T, -5%~+5%@35°C
Power Consumption	3250W, -5%~+8%@Wall-Plug, 185~280V AC 50~60Hz
Power Supply AC Input	185~280V AC 50~60Hz 16A (Max)
Chips	342 x A3205 16nm ASIC
Smart Controller	Canaan Kendryte K210 Artificial Intelligence SOC
Connection	RJ45 Ethernet 10/100M, Daisy-Chain Connection
Air-intake Temperature	-5°C~+35°C
Cooling	4 x 12038 FAN
Noise	75dB (Typical)
Operation Humidity	5%~90% Non-Condensing
Cubic Feet Per Minute	250CFM
Net Weight	11.4kg
Net Dimensions	331mm x 195mm x 292mm
AC Input	Suitable for C19 plug

Safety Regulation

Caution: In order to prevent human safety accidents, such as miner and power damage, fall, electric shock and fire, please install and use the miner strictly in accordance with the instructions. It's prohibited to modify the miner or power and replace the components personally.

- Don't use the power supply beyond the rated voltage range.
- Don't put the miner in unstable places.
- When inspecting and repairing the miner or the power supply, please entrust professional personnel for the operation.
- When abnormal phenomena of miner or power supply occurs, cut off the power immediately and contact the support@canan.io.

Hardware Connection

Connect the power supply and products as below Figs.



Power Connection

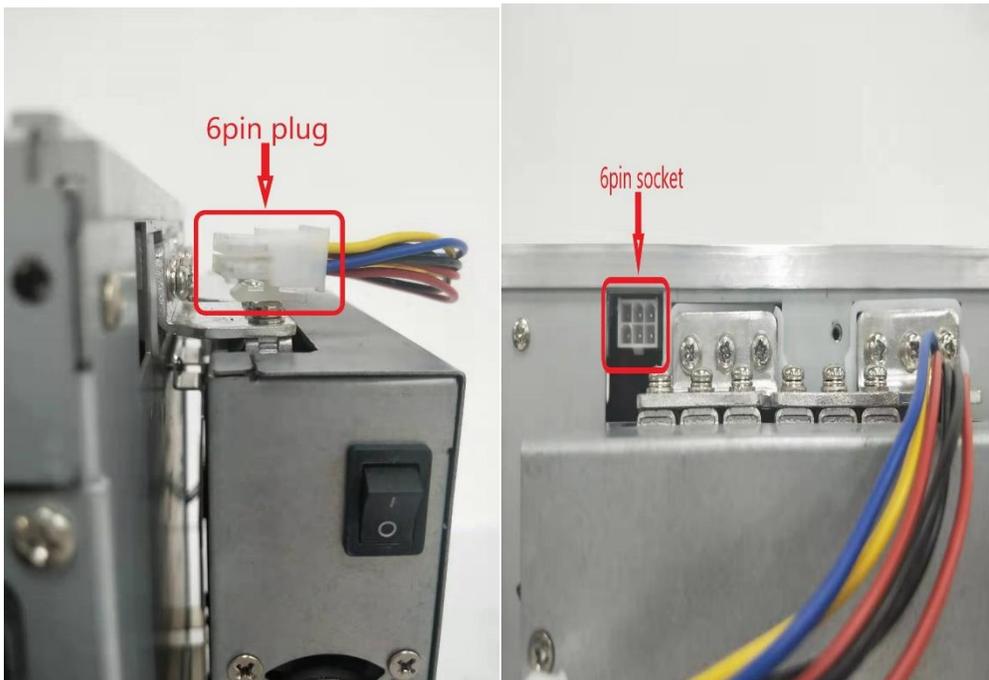
Please fix the conversion card with the miner via 6 M3*4 screws and insert the PSU into the slot as below Figs.



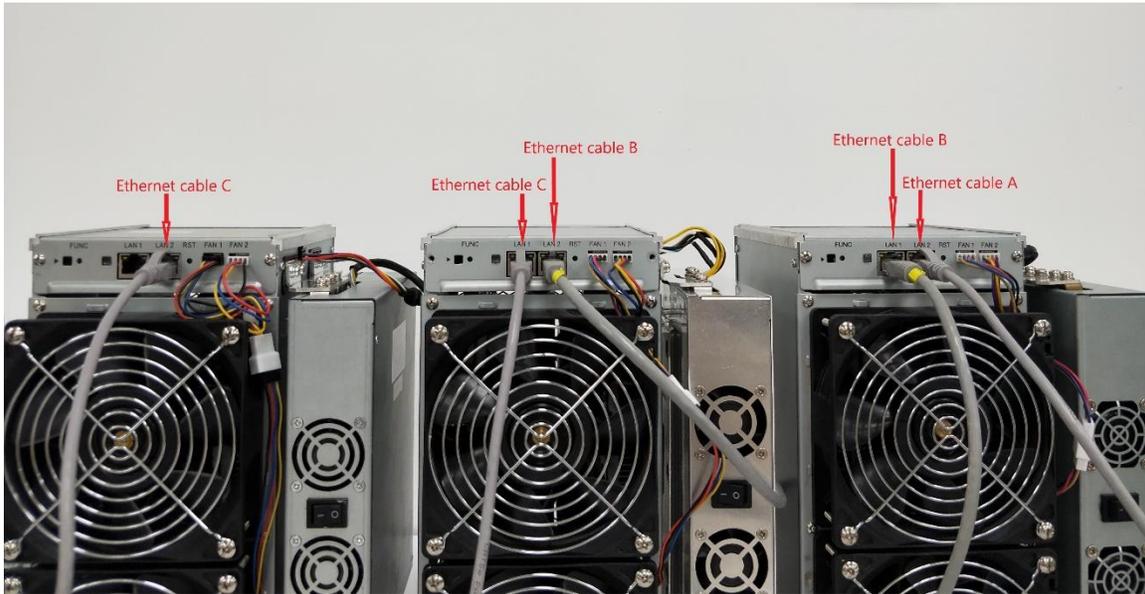
Please stretch the output copper wire to connect the PSU with the miner via 12 M4*8 screws as the below Fig.



Please insert the 6-pin plug into the matching socket.

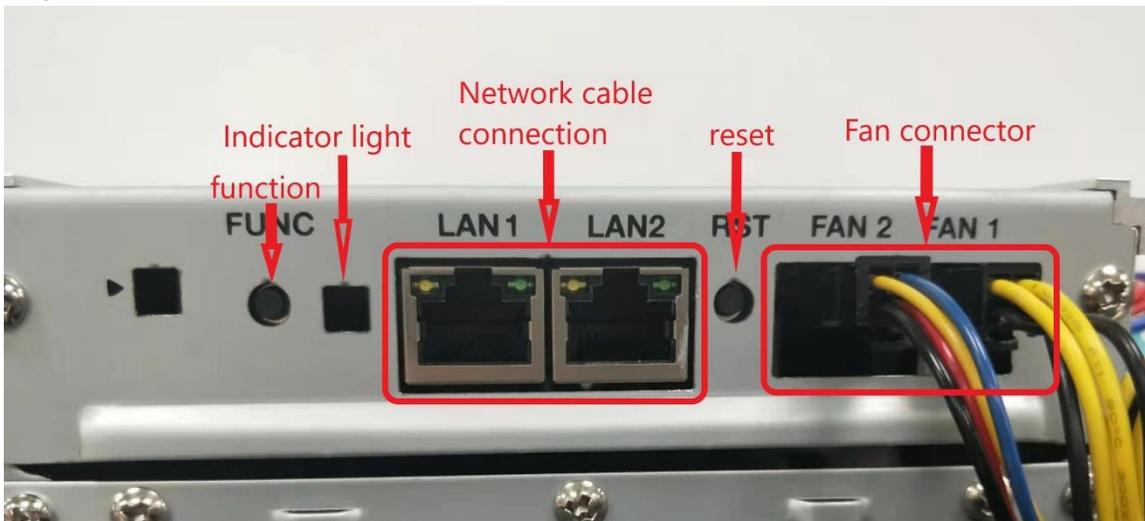


Each unit is born with 2 RJ45 ports available for a daisy-chain (suggestion: better to be 12 units at most as one group). Let's take an example as follow, RJ45 cable relates to the switch at one end while the other one linking with the first miner that goes with the second miner and so on so forth, to form a multiple connection.



Keys and Indicator Lamps

Keys



RESET: System reset key, and system reset will not affect network series connection

FUNC: Functional keys can be used to reset the miner back to the factory settings, enter the configuration mode, and switch lighting status in operation, etc.

Indicator Lamps

- The indicator lamp flashes in red several times after power-on
- After device startup, the indicator lamp turns white for about three secs. During this period, press the FUNC key, then device will enter the configuration mode.
- The indicator lamp is green under normal mining condition.
- The indicator is yellow during system preparation.
- The indicator lamp is red when the system is overheated.
- During system operation, the indicator lamp turns white by FMS software or manually pressing the FUNC key, and the lamp reset to original color after the key pressed again.

Reset Mining to factory settings: Press the FUNC function key (before the red indicator lamp flashing) when power on for five seconds till the white lamp flickers that means the success., and then press the RESET or power to restart.

Work Mode

The device has two work modes: “normal mode” and “configuration mode”.

Normal Mode

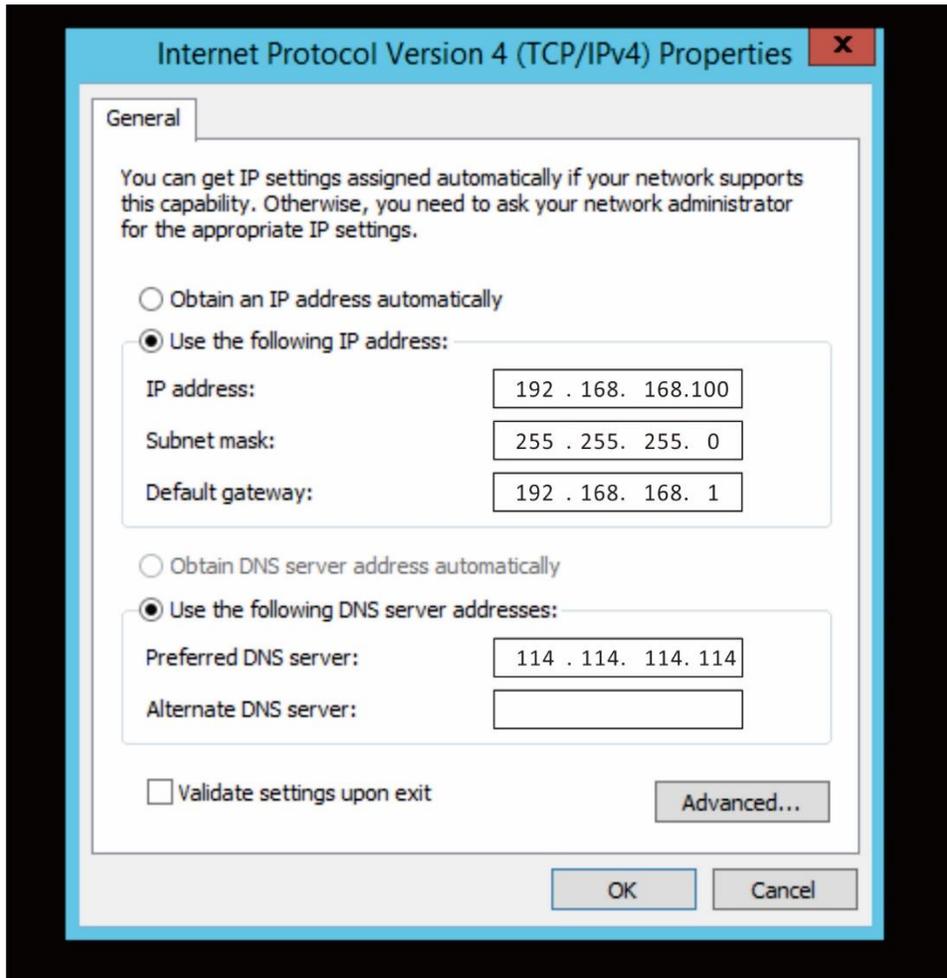
In normal mining mode, the device runs in this mode most of its life cycle, which network can use DHCP (dynamic acquisition) or static IP, and the default is set to DHCP.

Configuration Mode

Press the FUNC key when the lamp is white (about three secs.) after startup, and the device will enter this mode.

In this mode, the IP address is static (address: 192.168.168.168, subnet mask: 255.255.255.0). The built-in Web service of the device can be accessed through PC browser to configure network, mining pool, password and other information.

Set PC to static IP address: 192.168.168.100 (or any other non-conflicting address with the same segment), subnet mask: 255.255.255.0, connect to the same network with the device (under the same switch or router, or directly connect PC to the device network).



1. Please right click  to “open network & internet settings”;
2. Go to “change adapter options” to disable WLAN and enable Ethernet.

Then use browser to access <http://192.168.168/> to configure the device. (Modify static IP, etc.)

After configuration, nothing will take effect unless miner rebooted. Users are free to either click Reboot key on the left part of the interface or power off manually. Note: please do remember to switch internet connection, otherwise there won't be access to internet for miners.

Please input the IP address modified into the browser. The indicator lamp will turn green under correct operations.

System Setting

Access the device's built-in Web service through browser and enter the device interface after login.

User Login

Default username: root, default password: root, it can enter the Overview page after login.



Network Setting

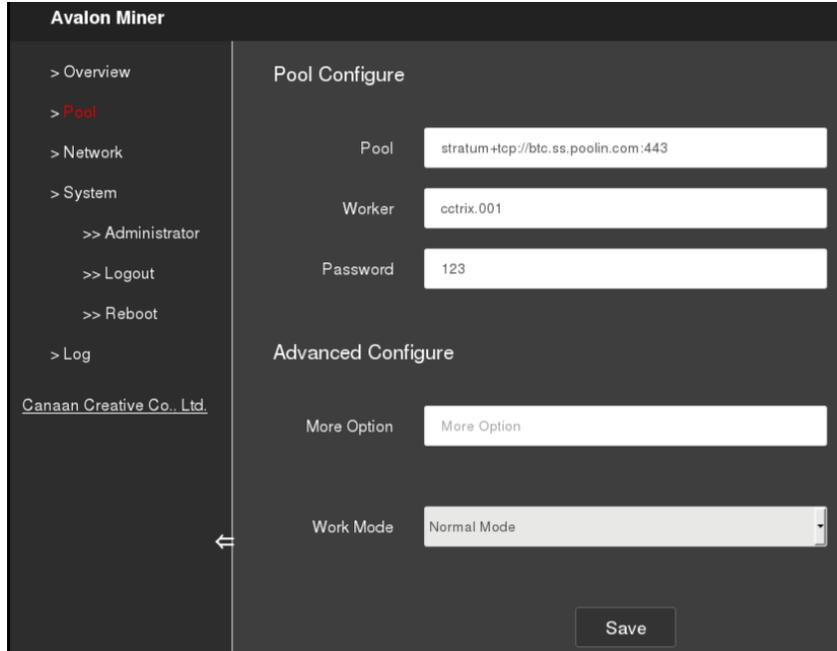
Click the Network in the left to set it to DHCP (dynamic acquisition) or IP(Static).

Note: After pressing the save key, please remember to restart the miner to make sure your network setting effective. To restart it, users can click Reboot on the left, or press RESET key (on the miner), or power off and on.

Mining Pool Setting

The following Fig is the factory settings. There are two modes here: Normal Mode and High-Performance mode. When using the high-performance mode, please be noted to use high consumption power supply for output in case of any hardware damage.

Note: After pressing the save key, please remember to restart the miner to make sure your mining pool configuration effective. To restart it, users can click Reboot on the left, or press RESET key (on the miner) or restart the miner physically.



The screenshot displays the 'Avalon Miner' web interface. On the left is a dark sidebar with a navigation menu: '> Overview', '> Pool' (highlighted in red), '> Network', '> System', '>> Administrator', '>> Logout', '>> Reboot', '> Log', and 'Canaan Creative Co., Ltd.' at the bottom. The main content area is titled 'Pool Configure' and contains three input fields: 'Pool' with the value 'stratum-tcp://btc.ss.poolin.com:443', 'Worker' with 'ocatrix.001', and 'Password' with '123'. Below this is the 'Advanced Configure' section with a 'More Option' input field and a 'Work Mode' dropdown menu currently set to 'Normal Mode'. A 'Save' button is located at the bottom right of the main content area.

User Password

Default username: root, default password: root

Click Administrator on the left side of the interface to set a new password and save it.

Management Software FMS

FMS User Guide

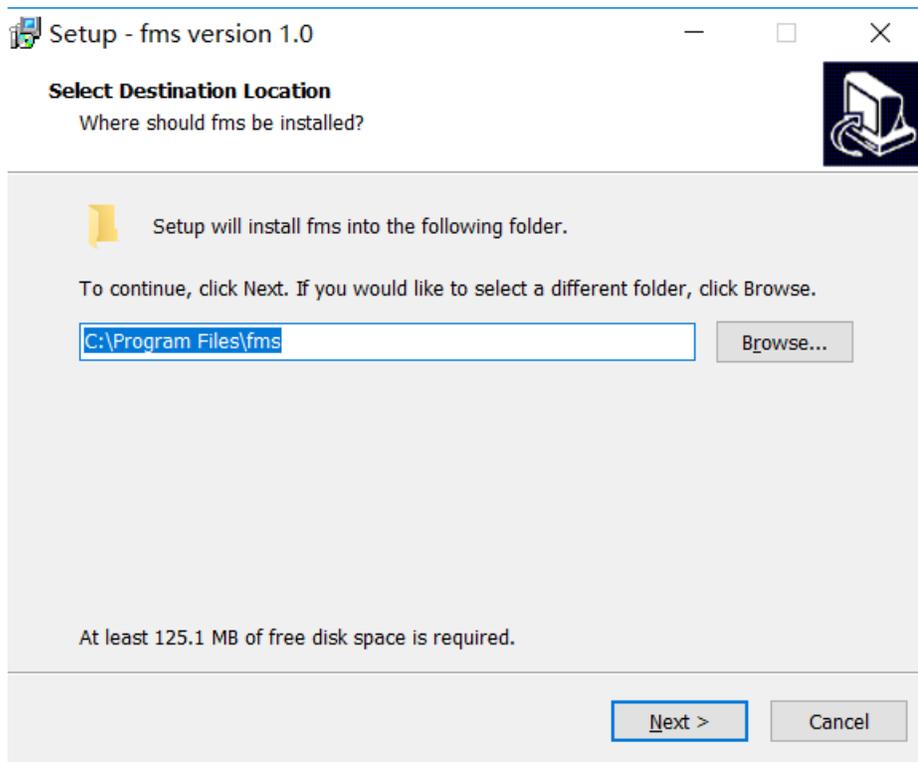
- Installation



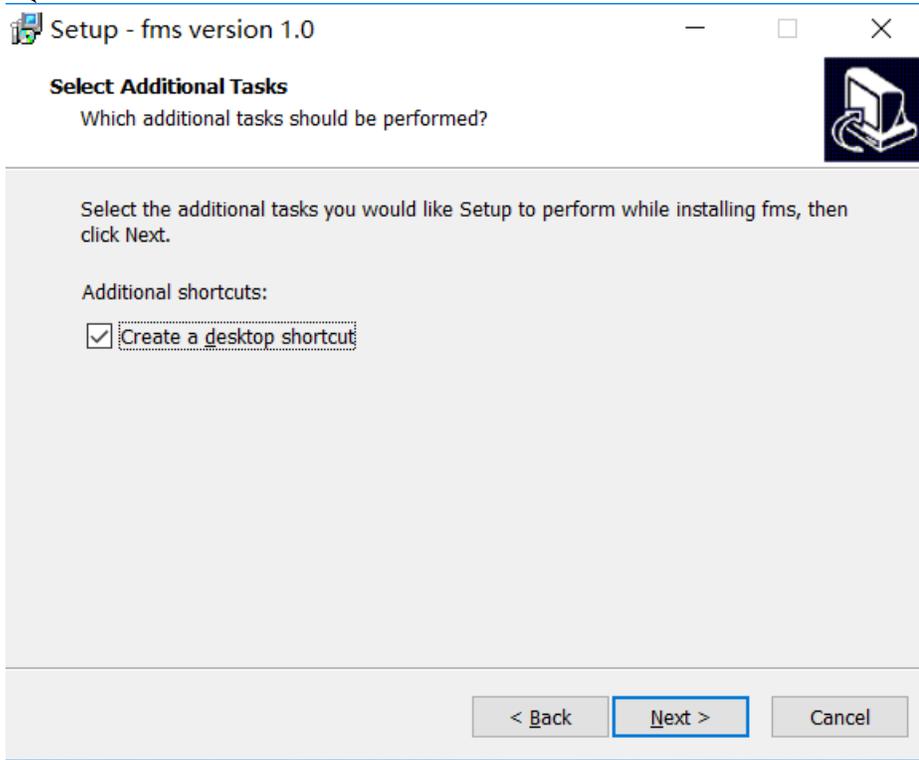
1. Double click fms.exe icon to start the installer.



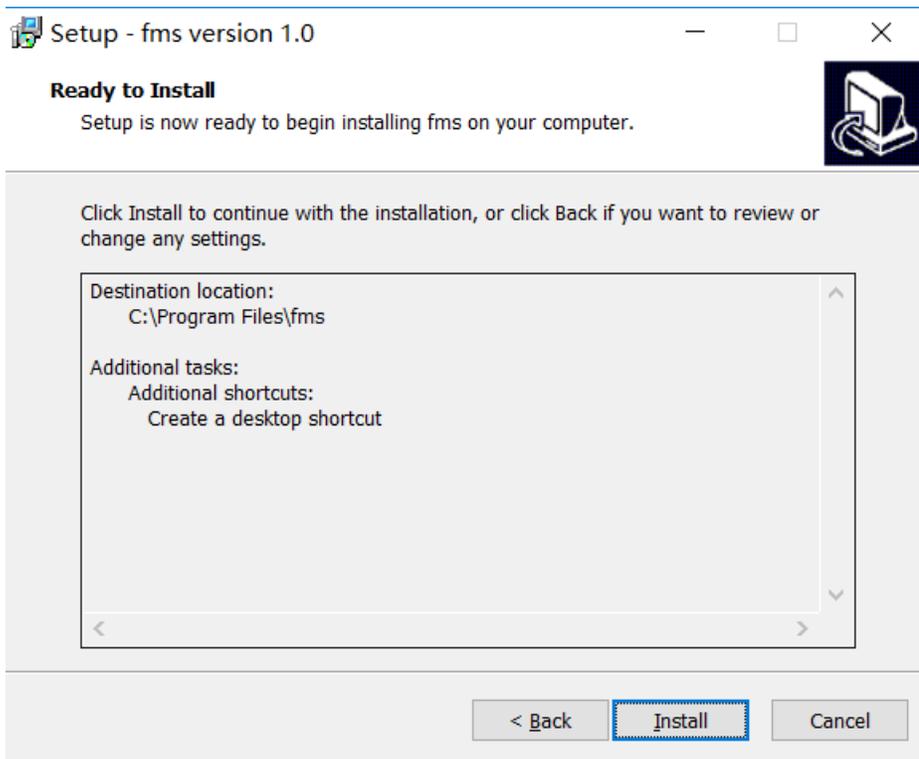
2. Specify the installation directory in the following installer window:



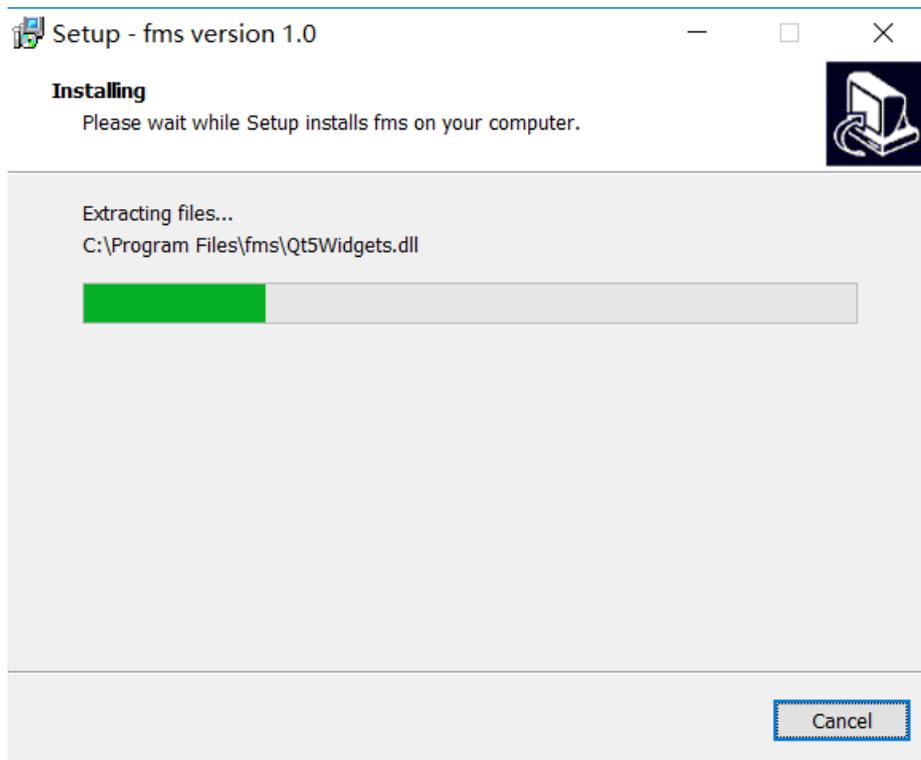
3. Click Next:



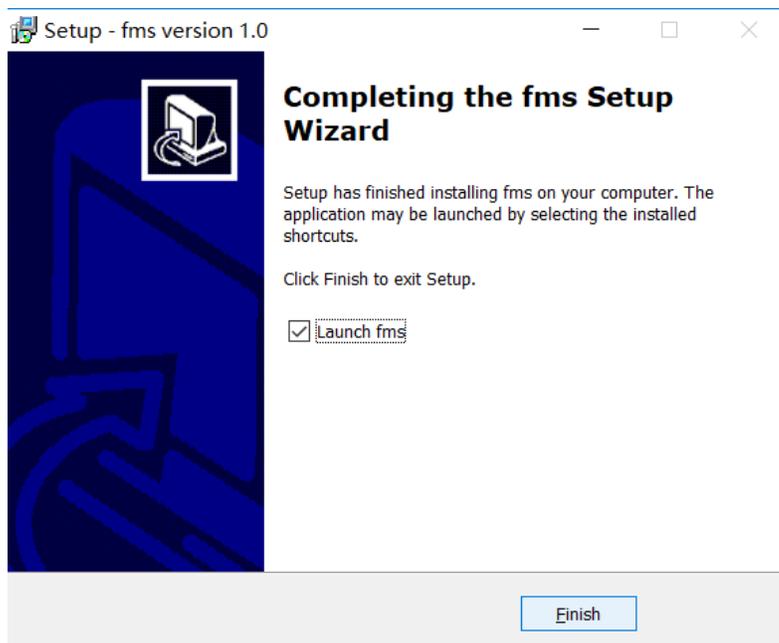
4. Click Next:



5. Click Install to start installation:



Once the progress is done:

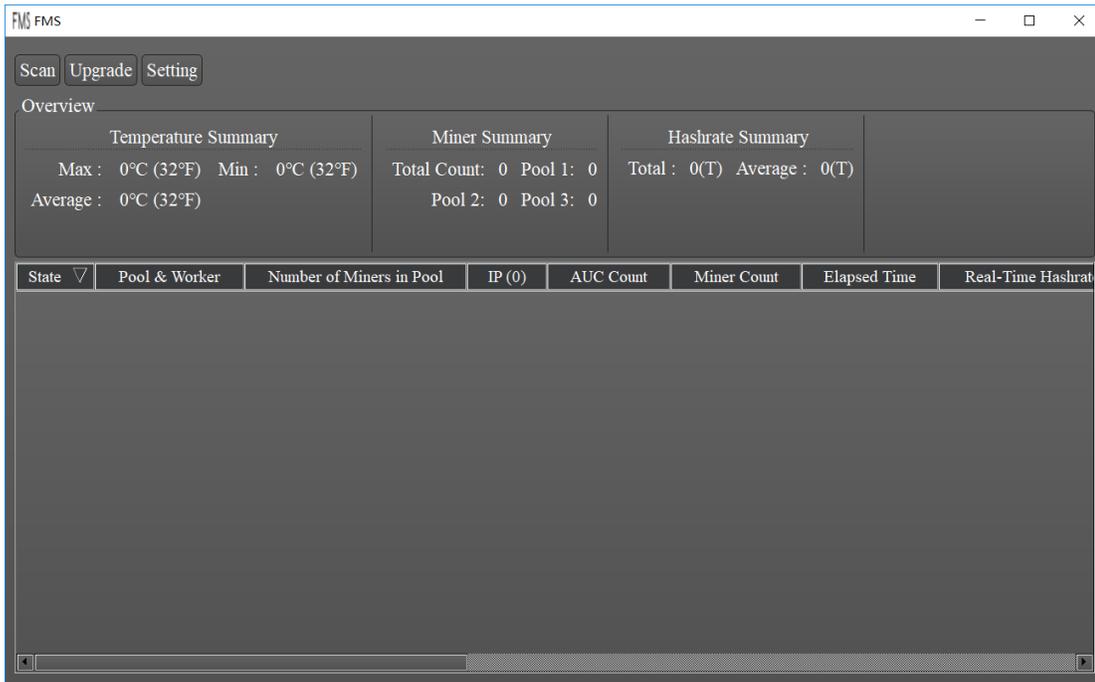


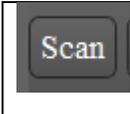
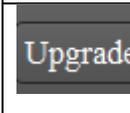
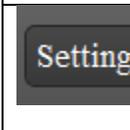
Click finish to complete the installation

- User interface Introduction



1. Double click the desktop icon to enter FMS:



		manual scanning
		firmware upgrade
		change settings

<p style="text-align: center;">Temperature Summary</p> <p>Max : 0°C (32°F) Min : 0°C (32°F)</p> <p>Average : 0°C (32°F)</p>		temperature monitoring
<p style="text-align: center;">Miner Summary</p> <p>Total Count: 0 Pool 1: 0</p> <p>Pool 2: 0 Pool 3: 0</p>		miner monitoring
<p style="text-align: center;">Hashrate Summary</p> <p>Total : 0(T) Average : 0(T)</p>		hash rate monitoring

state: current status (marked or normal)

Pool & Worker: pool configured and miner operator No.

Number of Miner in Pool: how many miners in pool

IP address: miner IP address

AUC count: number of AUC

Miner Count: number of miners

Elapsed Time: current operating time

Min Ambient Temperature(°C) : the ambient temperature of the air-in

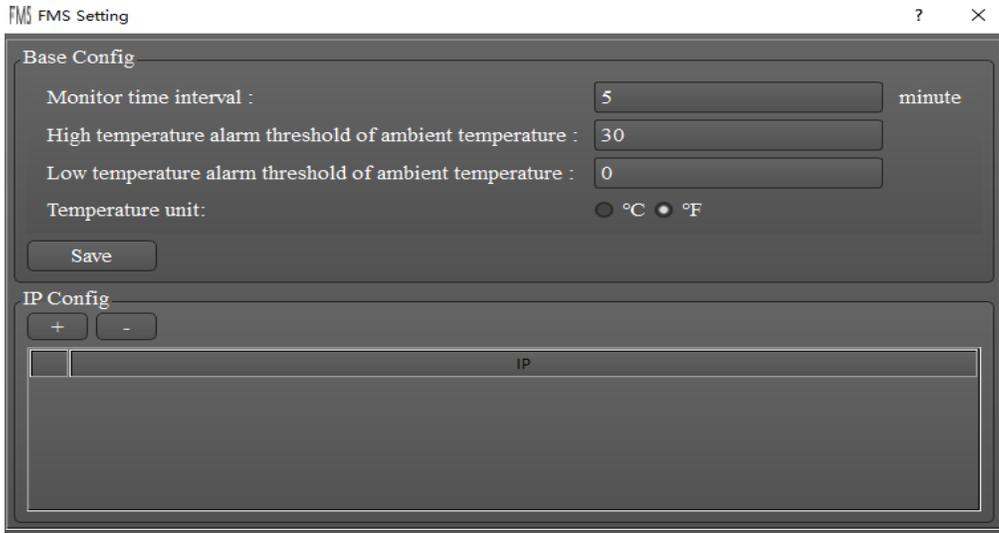
Max Ambient Temperature(°C): the ambient temperature of the air-in

Miner: Model number

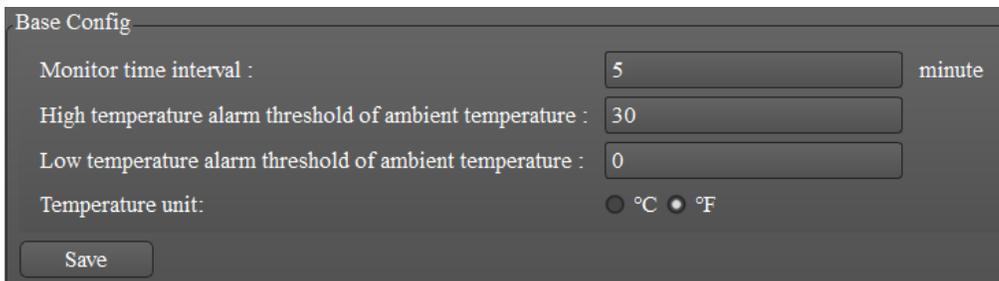
- Usage

1. Miner Discovery

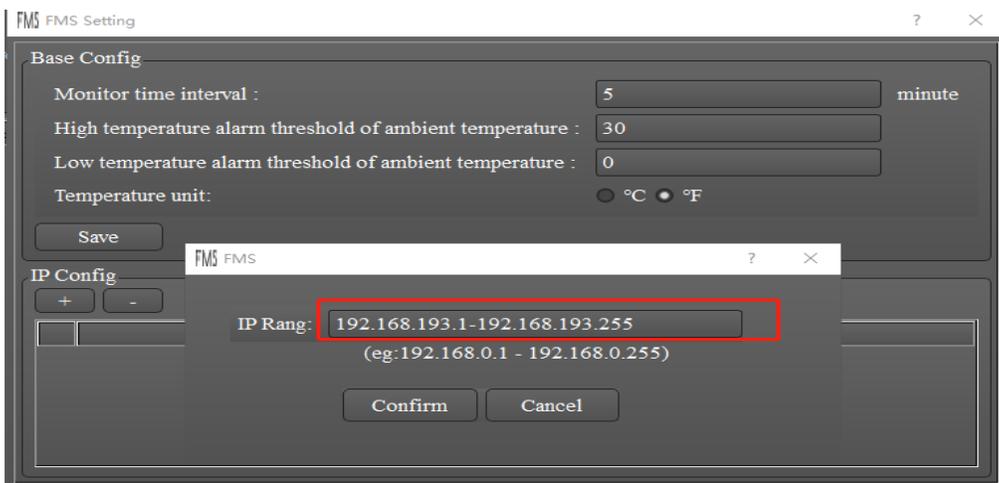
If the miners and the management PC are in the same network, use the following procedure to discover the miners. Click Settings to bring up the Base Config window:



The following figures represent: the monitoring time interval (minutes); the high temperature alarm threshold for ambient temperature; the low temperature alarm threshold for ambient temperature; the temperature unit configuration (Celsius, Fahrenheit)

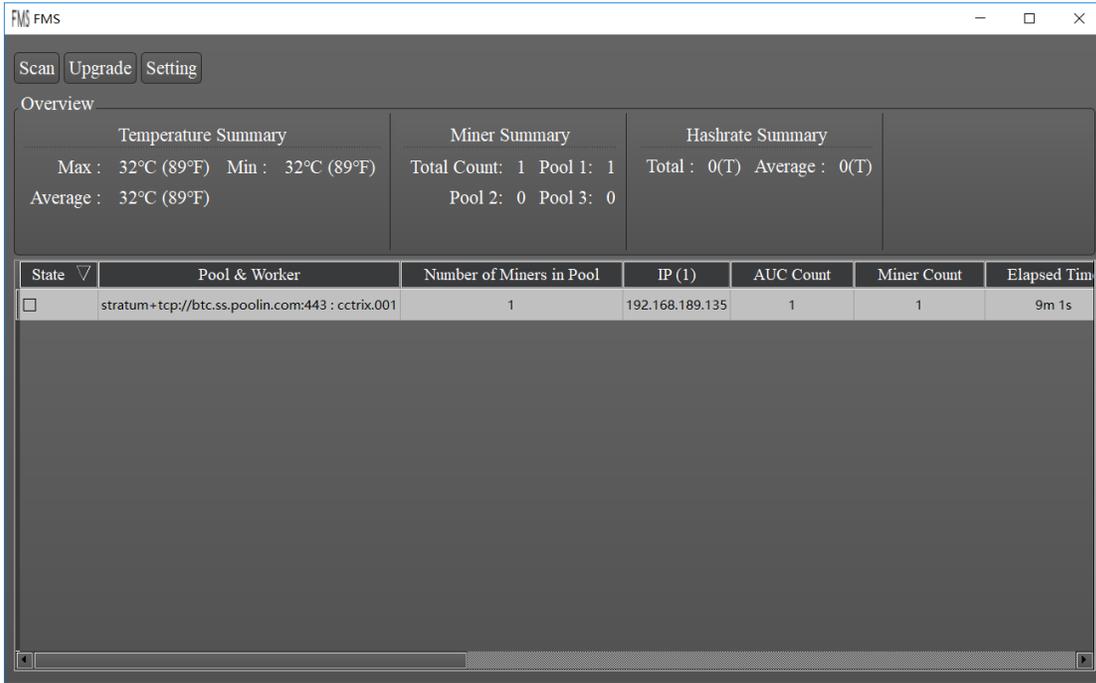


Click “+” button and enter the subnet IP range for the miners (e.g. 192.168.193.1-192.168.193.255) and click Confirm to auto-discover the miners.



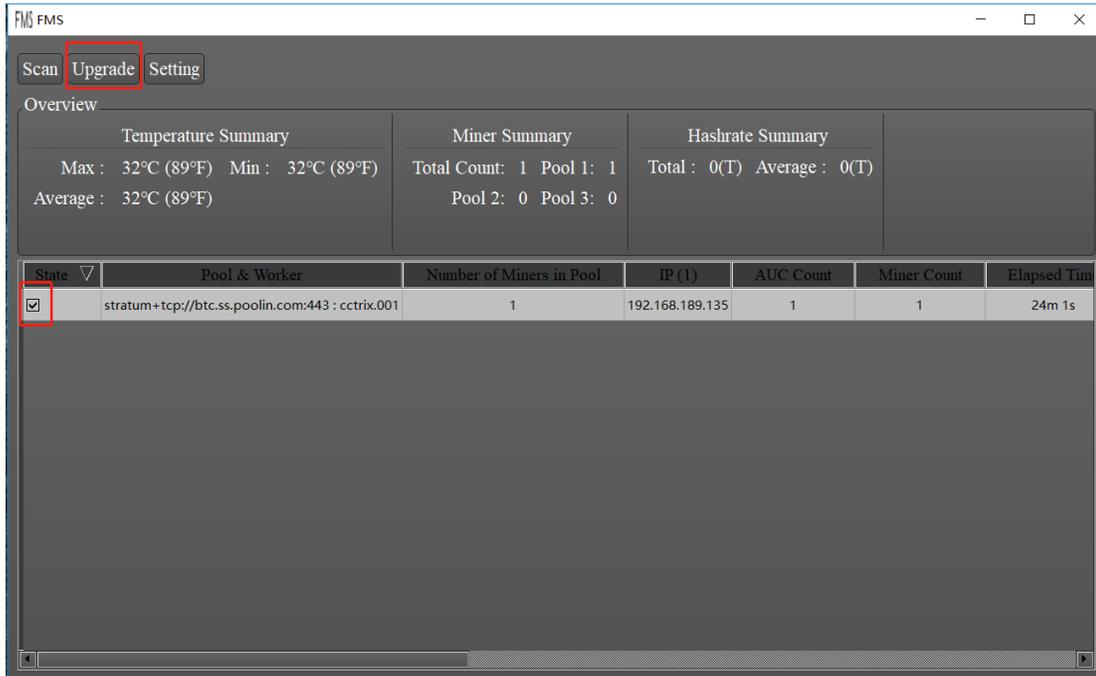
Select miners and click Save, the discovered miner’s IP addresses will be shown in the main window:

Every miner under this IP segment can be displayed when users go back to the main window.

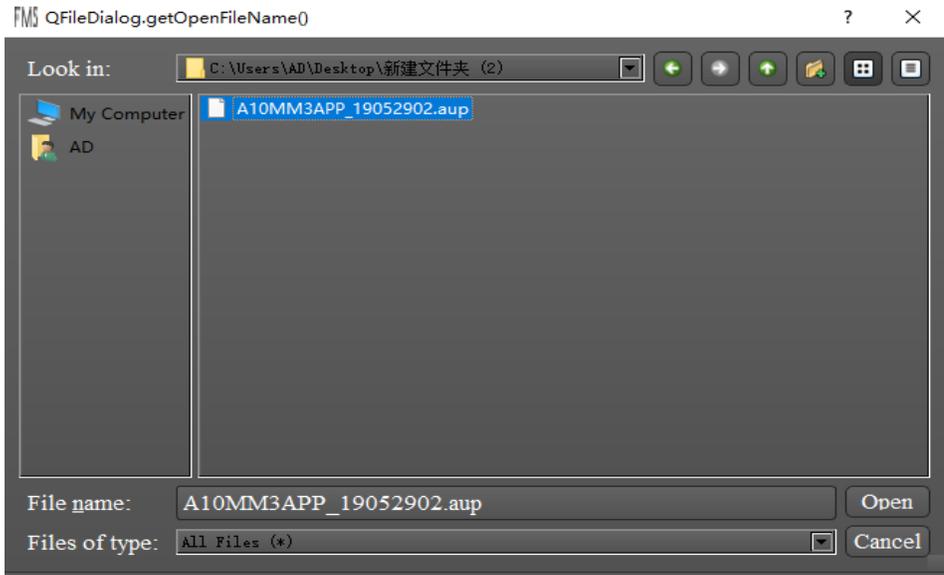


2. Firmware Upgrade

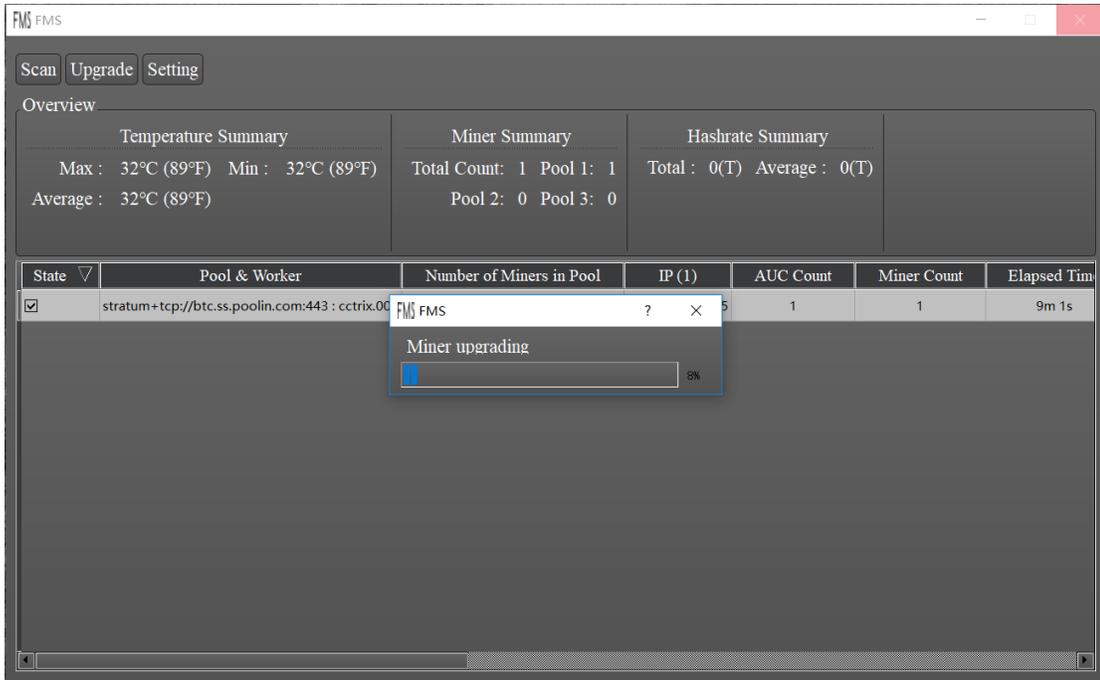
Select the miner to be upgraded in the main window, and click Upgrade



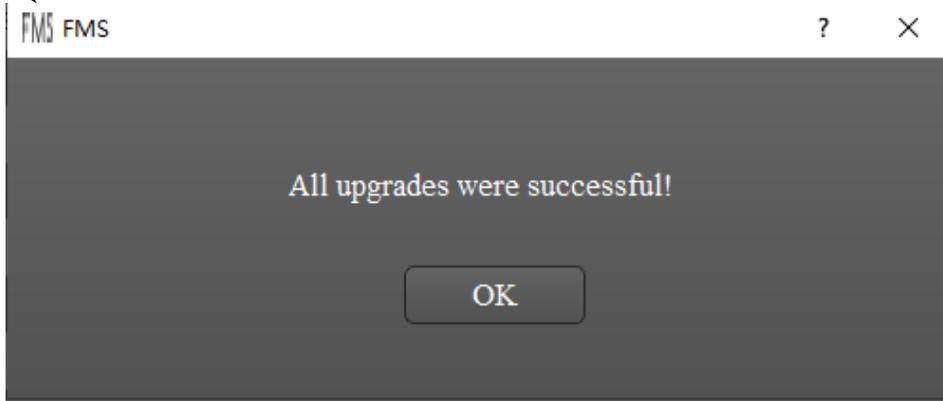
Select the firmware file in the popup window:



Click Open to begin the upgrade process.



The following dialog will be shown if the upgrade is successful:



Firmware Upgrade

The upgrade package file's format of this device is *.aup, which can be downloaded through the official website or via customer service.

The device's firmware upgrade can only be implemented through FMS software.

Rest the Miner to Factory Setting

Press the FUNC key for five to ten secs (Before the indicator lamp turning red) when the power is on, and the system will automatically clear the saved configuration, including network, mining pool, password and other information. After the configuration cleared, the white indicator lamp will flash frequently indicating that the recovery configuration is successful. After loosening the FUNC key, press the RESET key to restart, or cut off the power supply to restart, and the system will use the default factory configuration to work.

Warranty

After the miner having run for some time, such miner glitches as loosened connection or abnormal damage shall be taken into consideration. For this, users are free to troubleshoot it themselves after consulting our professional engineers. If the device is damaged within the scope of warranty, contact our after-sales personnel for quick repairs.



We guarantee a 180-day warranty of the product since the date the customer receives the goods, but the followings will invalidate the warranty:

1. Any physical damage caused by self-disassembly of the products or other causes (including but not limited to breakage, fragmentation, parts or components missing, etc.)
2. Damage caused by lightning, voltage surge, etc.
3. Burn marks on the PCB or the chips burnt down.
4. Damage caused by water intake and immersion
5. PCBs are damped and corroded
6. Over the warranty period

Unfortunately, if the above circumstances occur, we can still provide fee-based maintenance services for the devices, and users can also contact after-sales personnel to purchase the parts to repair by themselves.