Contents

1. INTRODUCTIONS

E300 miner is a FPGA mining machine, manufactured by Osprey Electronics. The device is capable of 14GB/s hashrate of the kHeavyHash algorithm, 210 MH/s on etchash/ethash algorithm, (and 24GH/s for TON algorithm but TON is not mineable now)

E300 miners is designed for both newbie miner and professional miner.

For newbie miners, we developed WebUI functions and you guys just need to login and change wallet address for mining

For professional miner, we also released all of documents/source code for developing purpose. The beautiful of FPGAs is come from changing algorithm capacity, and developers can develope a new bitstream for E300.

There are three hash boards in a E300 box. Each hash board has one Xilinx VU35P. Each VU35P includes 872K LUT, 224Mb on-chip RAM, 8GB HBM2. With the active air cooling, E300 is plug and play, no PC needed for mining program.

2. E300 FUNCTIONS.

2.1. Log into E300 miner.

Step 1: Get E300 IP address by login your network router or download and install the IP scanner tool (*https://www.advanced-ip-scanner.com*).

Step 2: Now that you have the E300's IP address, open web browser (should Chorme/Firefox suggested) and type/paste http://E300_ip_address/ into the address bar. Your E300 login panel will then load within the browser window.

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User name: root

Password: password
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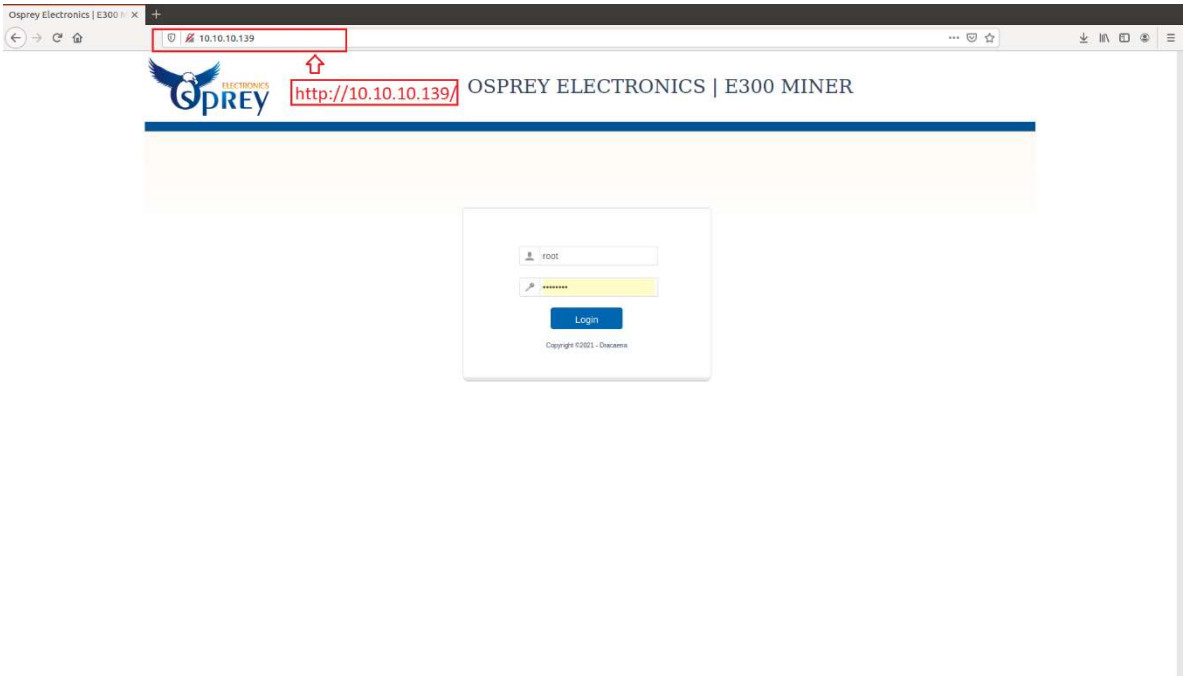
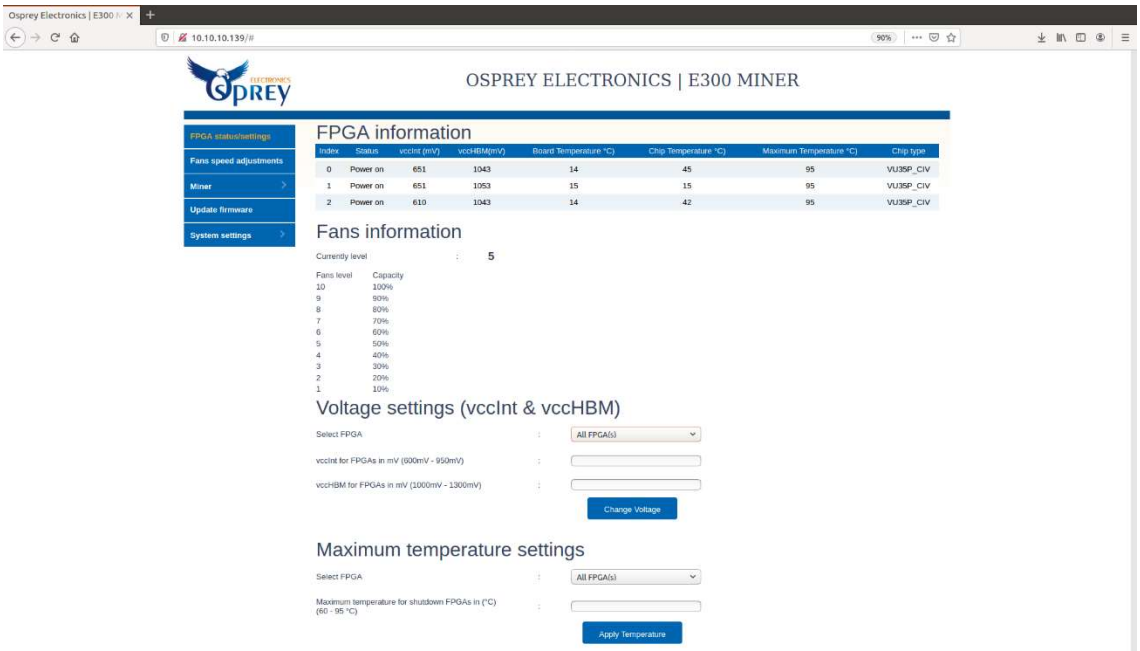


Login window of the E300 miner

2.2. FPGA status/settings.

2.2.1. Get FPGA and Current fan level Information

Click submenu "FPGA status/settings" to get all of FPGAs and current fans level.

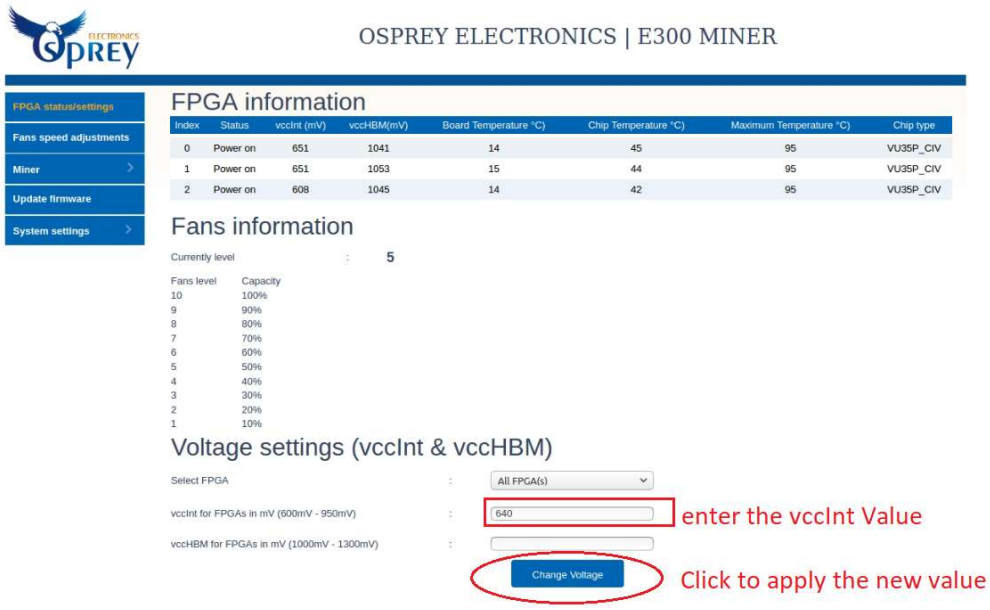


2.2.2. Set vccInt and vccHBM functions .

E300 miner supported to change vccInt/vccHBM of FPGAs

The vccInt/vccHBM influences a lot on total power consumption. Depending on running clock and algorithms, you should set them in difference values. We recommend values as table below

Algorithm	Clock	vccInt	vccHBM
kHeavyHash (Kaspa)	650 MHz	620-650 mV	Kaspa doesn't use HBM
	600 MHz	600-620 mV	Kaspa doesn't use HBM
	550 MHz	600 mV	Kaspa doesn't use HBM
Etchash	600 MHz	800 mV	1150 mV
	550 MHz	750 mV	1100 mV

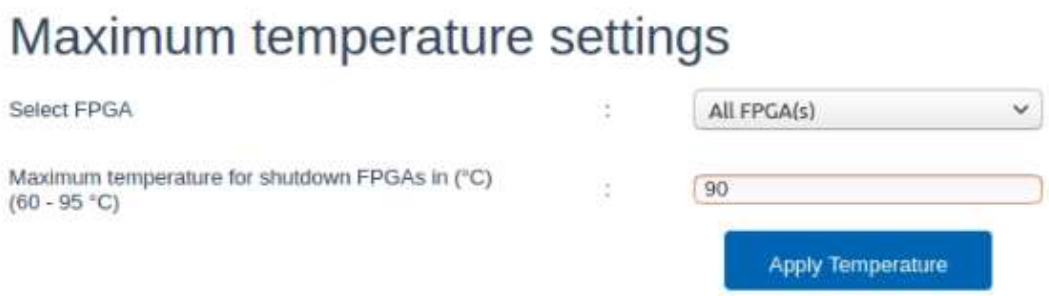


Setting vccint/vcchbm example image.

2.2.3. Maximum temperature settings.

For safety reason, E300 miner supported automatically shut down FPGAs functions. Clients can go to submenu “FPGA status/settings” -> “Maximum temperature settings” then filling the maximum temperature value.

When FPGA(s) is over maximum temperature value, the controller service will power off FPGAs. Then when the temperatures reduce under maximum, the controller service will power up automatically FPGAs.

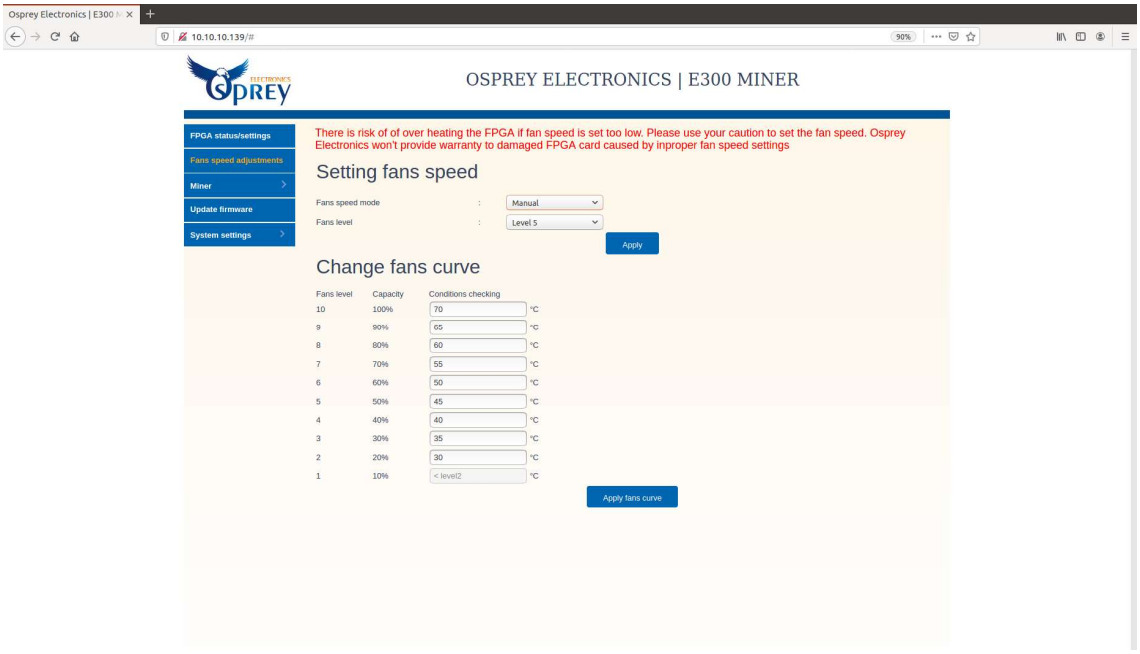


2.3. Fans speed adjustments.

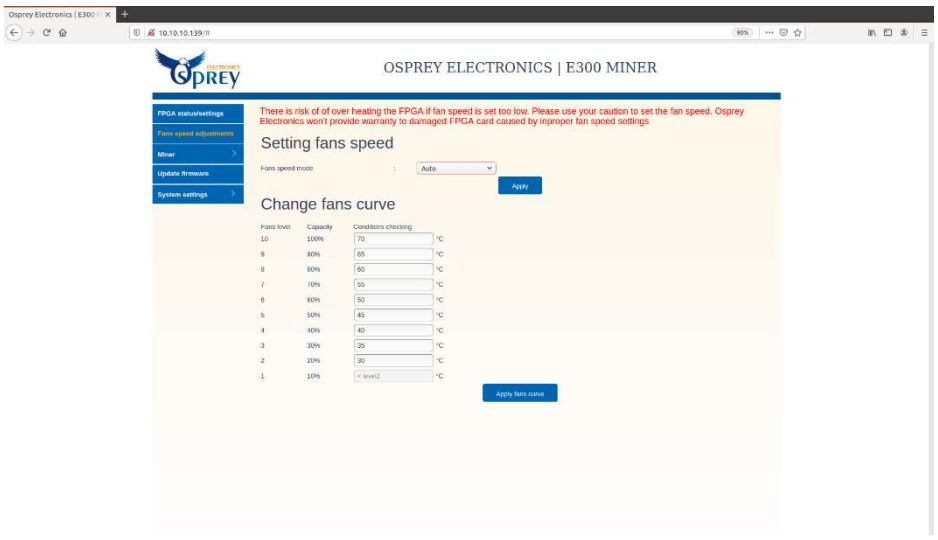
2.3.1. Setting fans speed.

E300 miner supported both manual and auto fan modes

Manual mode: Clients have to choose the fan level, we recommend set fan from level 5



Auto mode: By default, fans are running with auto mode, and depending on fans curve tables, fans will be ran with speeds corresponding

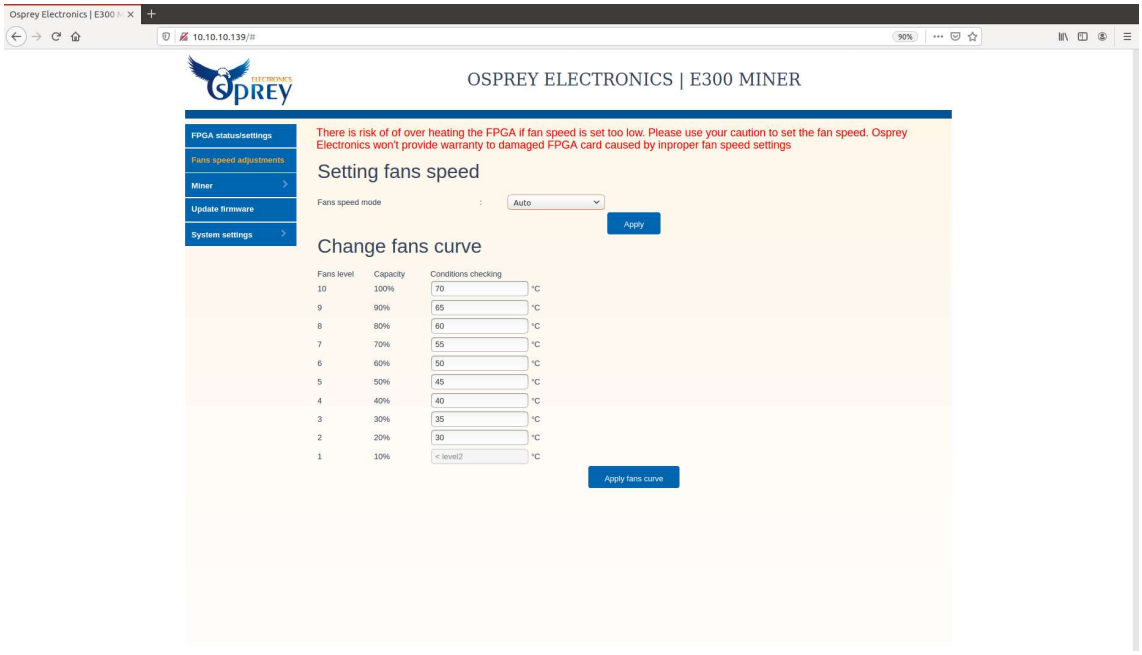


Click “Fans speed adjustments” submenu to configure fans.

2.3.2. Change fans curve.

In the fan “auto” mode, the controller service bases on fans curve table and current chip temperature to decide which fan level will be ran for E300 box. Depending on temperature environment, client can set fans curve by yourself.

Goto submenu“Fans speed adjustments” -> “Change fans curve” for configurations.



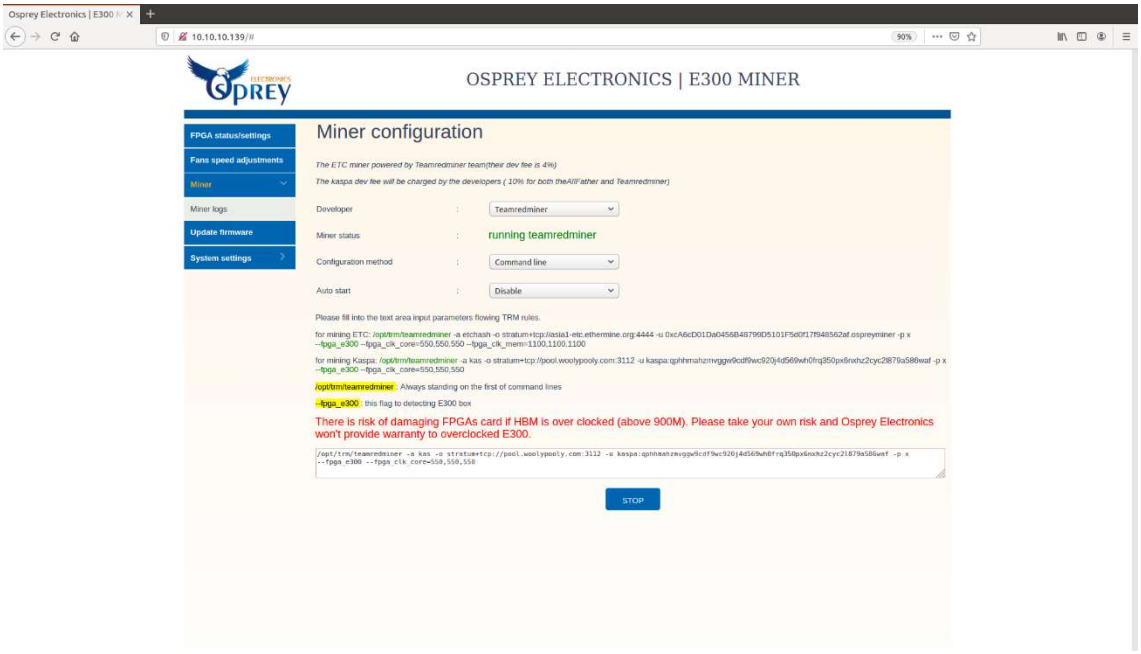
2.4. Miner configuration and miner logs.

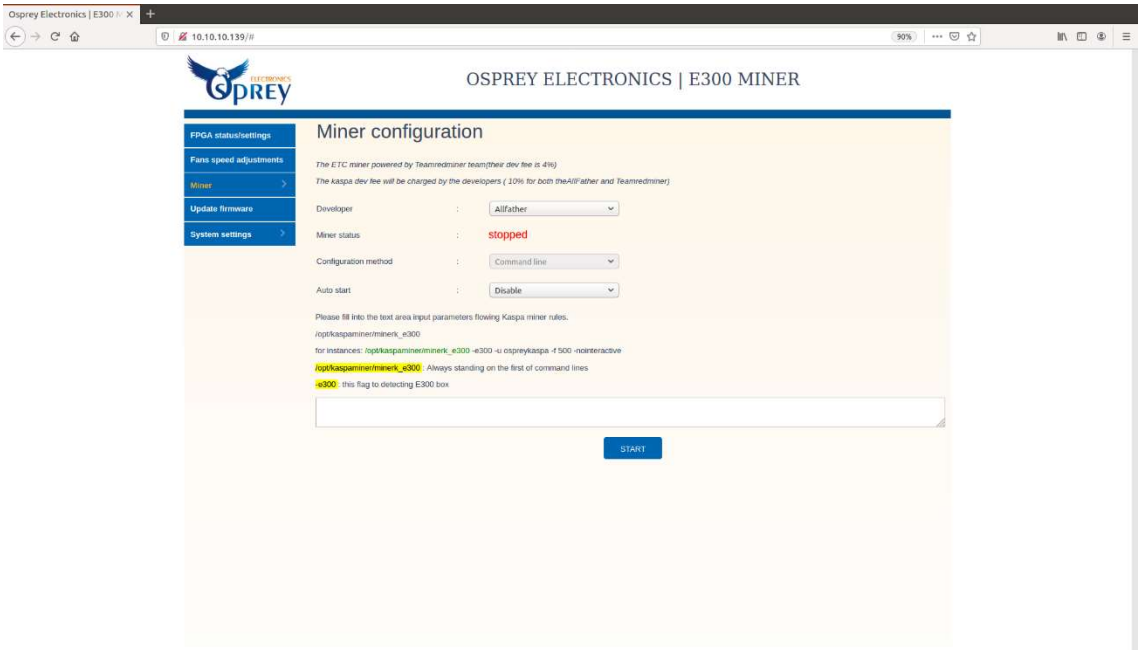
2.4.1. Miner configurations.

For the earlier firmware versions, E300 miners supported ETH (210 MH/s) and TON (24GH/s) coins. However, ETH moved to POS. and the final TON token already mined

From version V.1.0.15, E300 boxes are able to mine Kaspa and ETC.

Go to submenu “Miner” and run the mining command line.

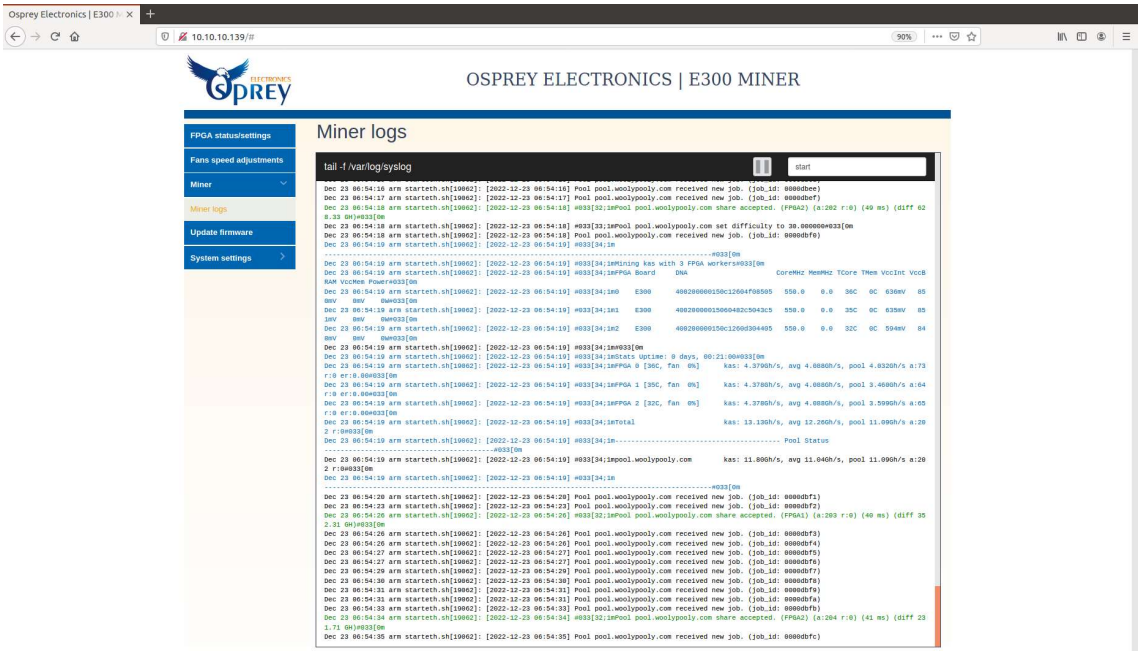




2.4.2. Miner Logs.

Miner log helps users monitor miner via WebGUI. We are streaming all of system log, users also can change the filter and get log of any services on zynq board as well.

Goto submenu “Miner” -> “Miner logs” to checking.



2.5. Firmware update.

2.5.1. Auto update firmware.

By default, all of E300 miners enabled OTA (over-the-air) update and when we release a new firmware version, E300 firmware will be automatically updated. To check the current firmware version and OTA status, please go to submenu “Update firmware”

2.5.2. Manual update firmware.

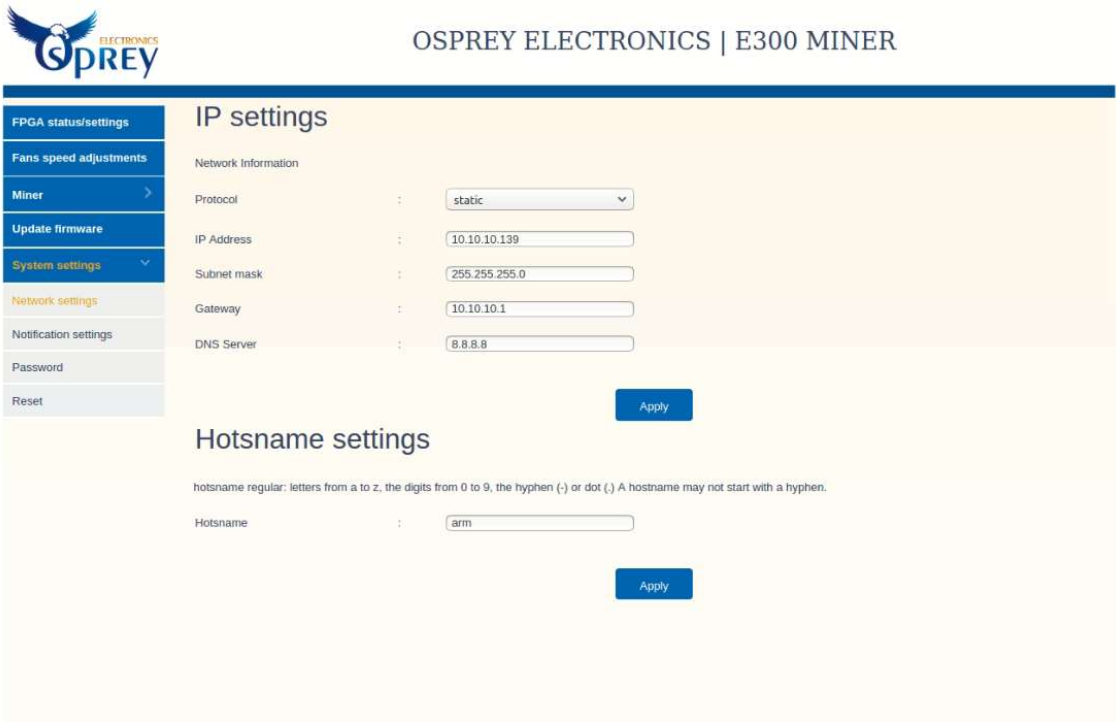
Beside OTA update, E300 also supported manual firmware update method. To enable manual firmware update, Please go to "Update Firmware" menu and untick "Enable auto update firmware"

2.6. SYSTEM SETTINGS

2.6.1. IP settings.

E300 miner supported both static and dhcp mode.

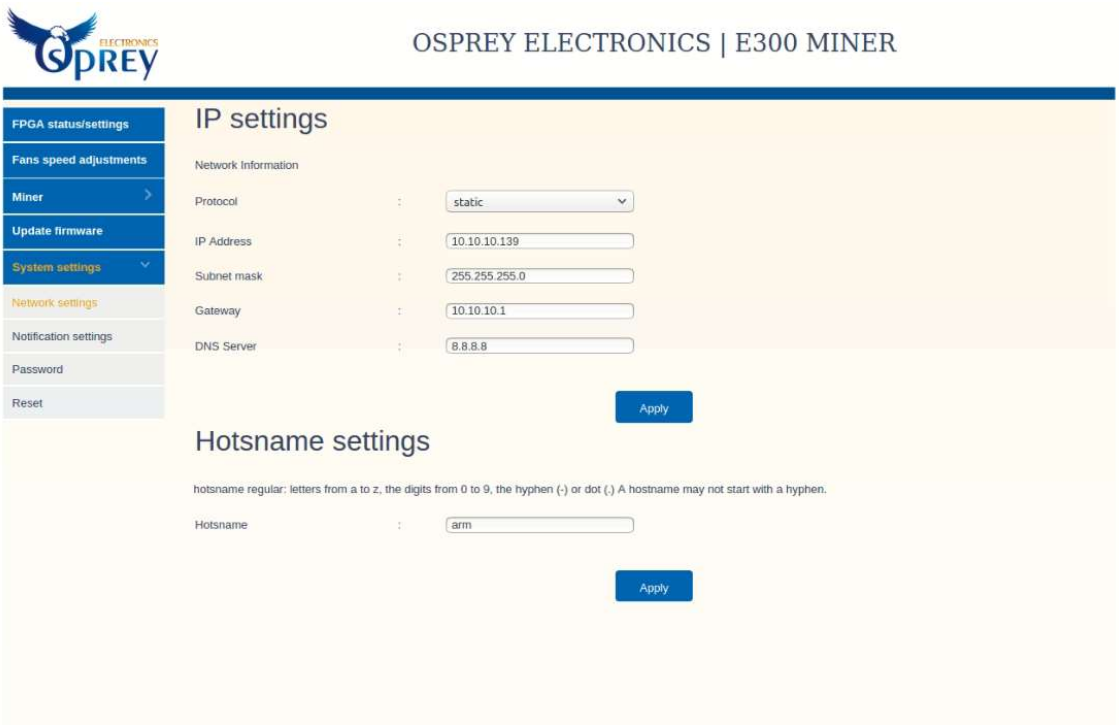
Goto submenu “System settings”-> “Network settings” -> “IP settings” to config IP.



2.6.2. Hostname settings.

In the case of you have more than 2 E300 boxes, you can setup hotsname for them by go to ““System settings”-> “Network settings” -> “Hotsname settings”

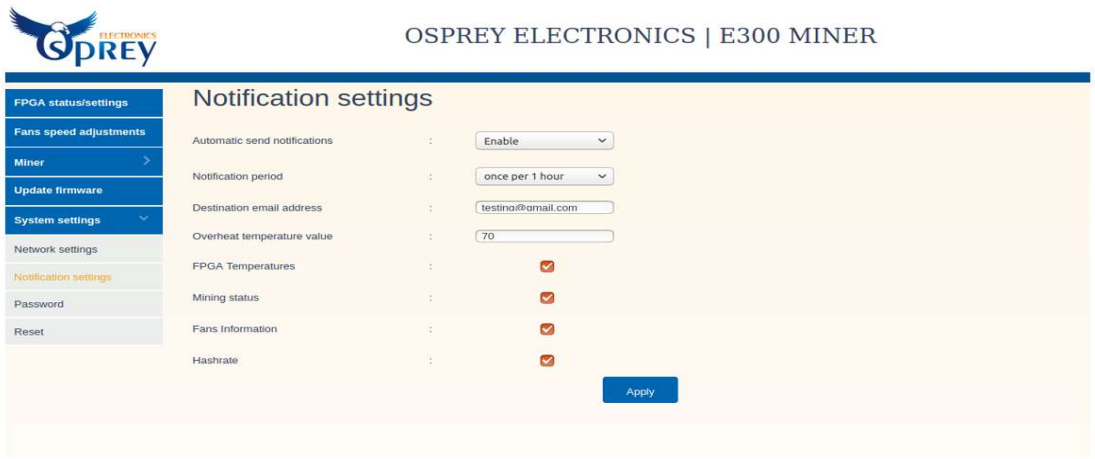
This function helps you avoid away from confuse and easy to detect E300 boxes on the local network.



2.6.3. Notification settings.

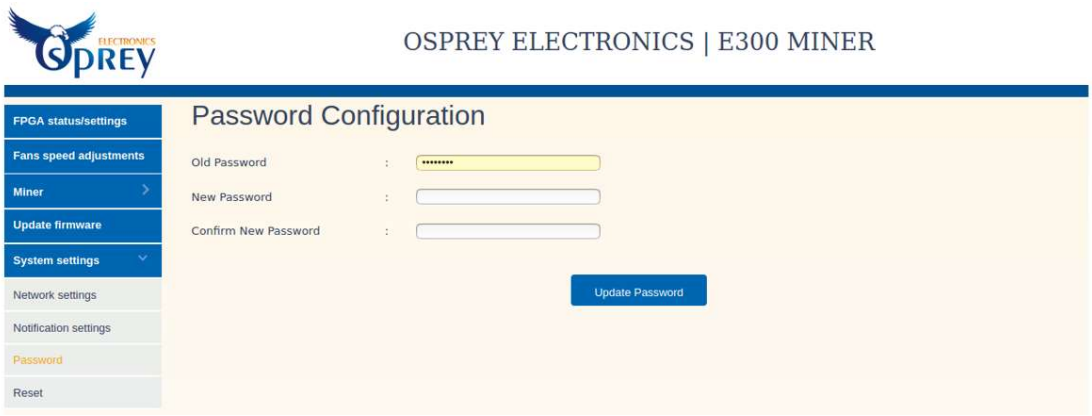
E300 miner supported notification functions. Client can choose type of alarms, notification period … and filling your email address. E300 miner will send alarm in period to your email.

Goto "System settings"-> "Notification settings" for settings type of notifications.



2.6.4. Password.

Clients can change the login password by "System settings"-> "password"


OSPREY ELECTRONICS | E300 MINER
FPGA status/settings
Fans speed adjustments
Miner
Update firmware
System settings
Network settings
Notification settings
Password
Reset
Password Configuration
Old Password :
New Password :
Confirm New Password :
Update Password

2.6.5. Reset.


OSPREY ELECTRONICS | E300 MINER
FPGA status/settings
Fans speed adjustments
Miner
Update firmware
System settings
Network settings
Notification settings
Password
Reset
Reset factory
This function resets FPGAs by default.
Reset

3. SUPPORTING CONTACT

If you have any troubles/issues/questions, there are 3 way you can choose to reach our to our support team:

1. Via email: Please send an email to huong.doan@dracaena.io – Subject: [E300 support] ..(main issue you facing)..
2. Via website: Please open our website www.ospreyelectronics.io and open chatbox/contact. After you fill in all the required information your message will be sent to us automatically.
3. Contact us Osprey Electronics discord channel: https://discord.gg/mE8uNQMkKJ