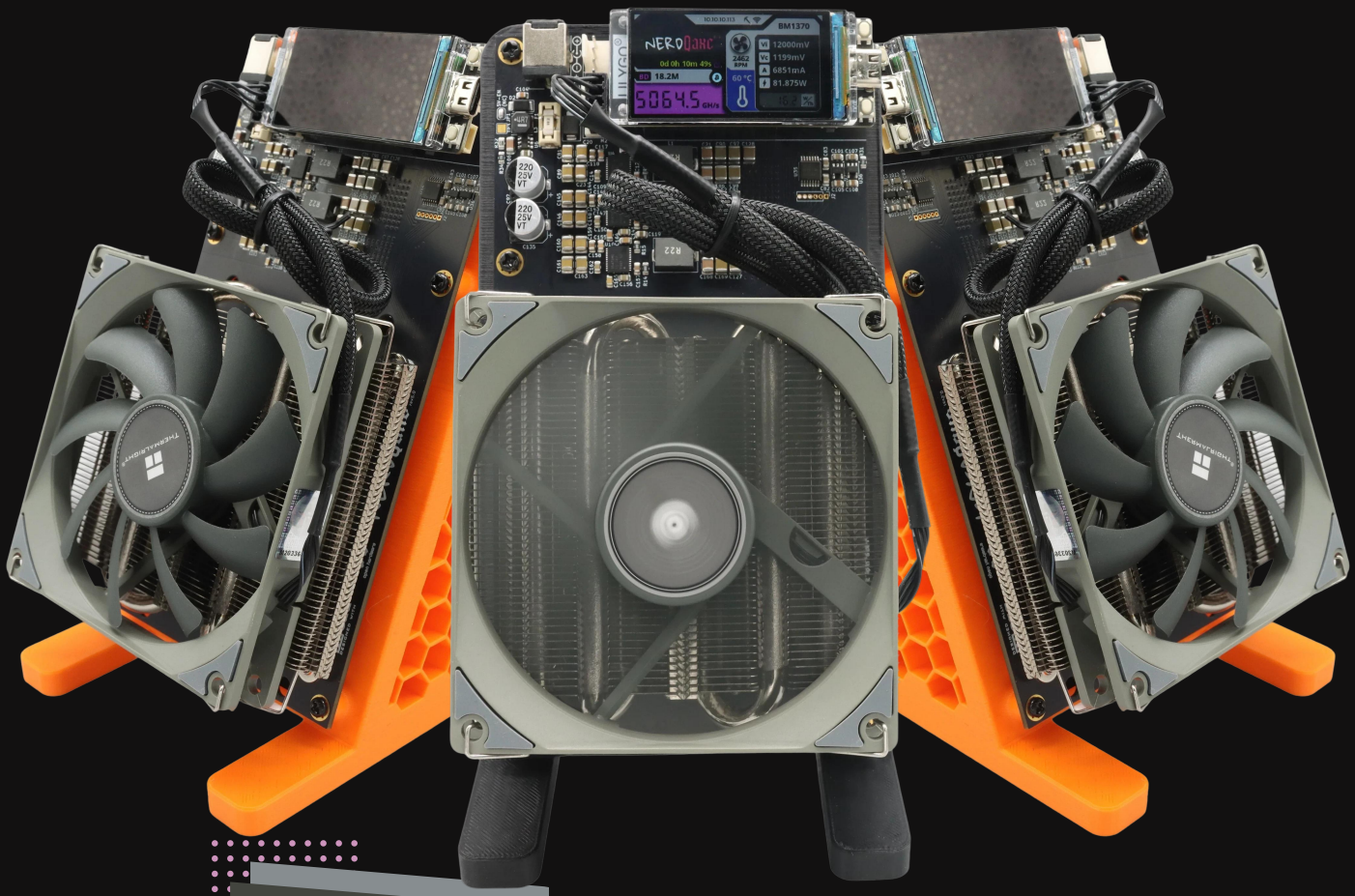
NERDQaxe++



4.8TH/S

NERDQAXE++

NerdQAxe++ is a **fully open-source Bitcoin** ASIC miner equipped with 4 BM1370 ASIC chip from Antminer's S21 Pro.

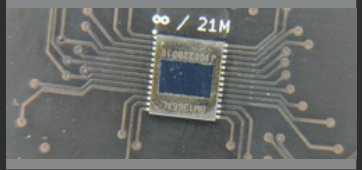
This design ensures efficient and powerful mining capabilities, achieving 4,8TH/s at an energy efficiency of ~20W/TH. It operates using a 12V DC power supply connected via a 2.1/5.5mm barrel jack connector.

At the core of NerdQAxe++ is the combination of ESP-miner and AxeOS, an open-source firmware that empowers you with full control over your mining operations. The intuitive web interface simplifies setting adjustments and performance monitoring, making mining more accessible and streamlined.

NerdQAxe++ is an open-source miner based on Bitaxe project, designed to boost the hashing power of your NerdMiner.

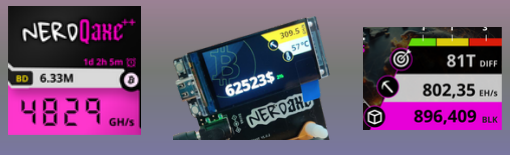
BM1370
ASIC CHIP

1,2TH/s Bitmain ASIC chip working at low temperature with fan



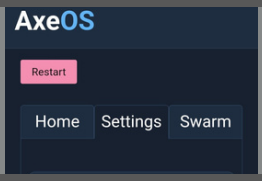
MINER
STATS SCREEN

HASHRATE BITCOIN PRICE SETTINGS



AXEOS
WEBCONFIG

Global minery data current hashrate, miner config, logs...



QUICK SETUP

Required time: 5 minutes

TOOLS NEEDED

1 - Power up your NerdQAxe with its power adapter (12V /10A). **Important** :Don't use any other power adapter.

2 - Wait until the text "**Connect to ssid: NerdQaxe_XXXX**" appears on the screen, and then from a mobile phone search for the **NerdQaxe_XXXX** wifi network and connect to it.

3 - Once connected, the following menu will be shown (3).
Click on ***Settings*** to setup.

4 - Setup miner parameters:

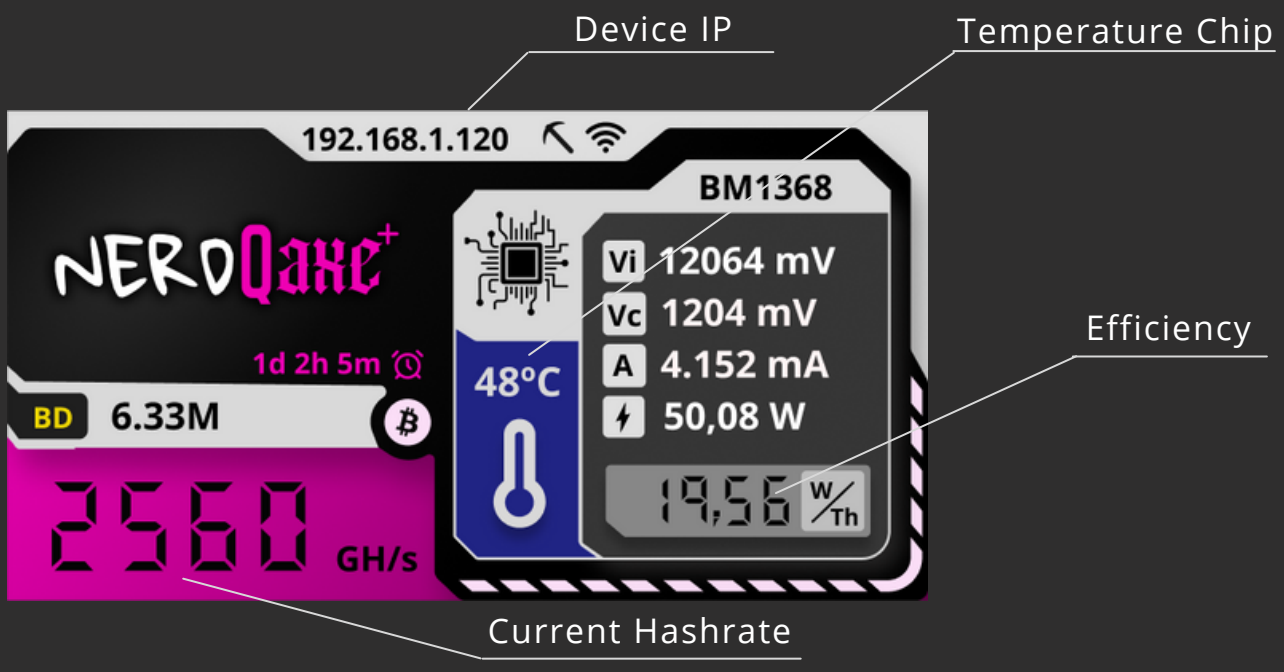
- ***WiFi/Password:*** network credentials were you want to connect to.
- ***Pool url/port:*** introduce your pool settings or leave default
- ***BTC address:*** BTC address where you will receive prize.

4 - Press ***Save*** and ***Restart***. After this **NerdQaxe** will start working.

NERDQAXE SCREENS

MAIN SCREEN

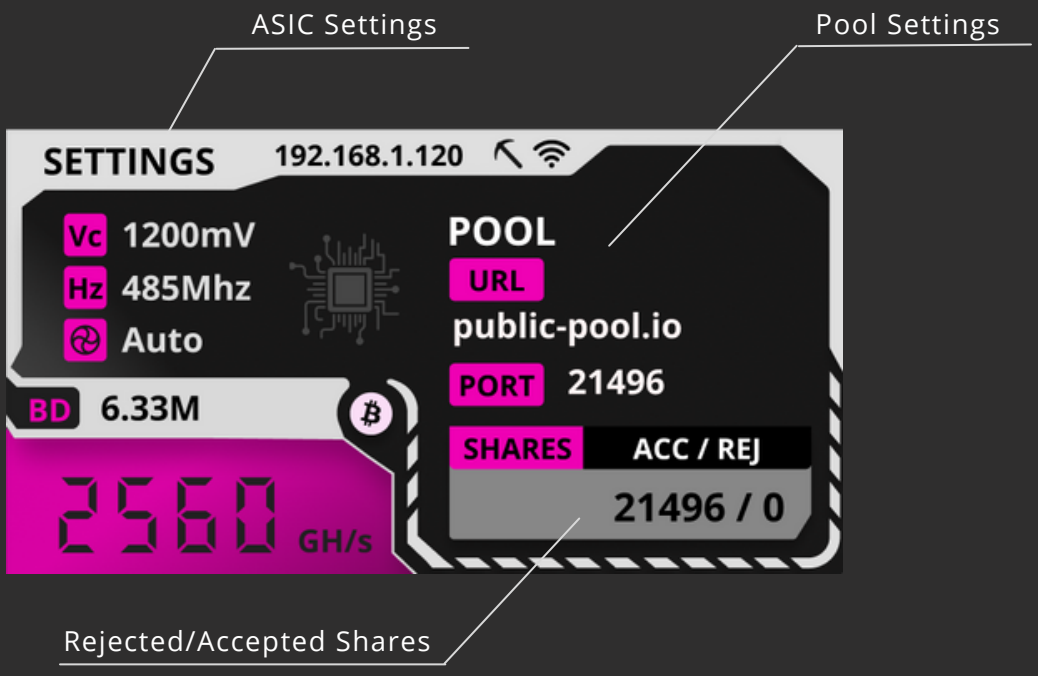
The following screen provides all NerdAxe stats, including mining values, chip temperature, and efficiency, among other details.



BD	**Best difficulty:** Best share gotten by miner
Vi	**Input voltage:** voltage of power supply
Vc	**Core voltage**: voltage readed at ASIC chip
A	**Current**: Current consumption
⚡	**Power**: total power consumption
	**Fan**: revolutions per minute readed

STATS SCREEN

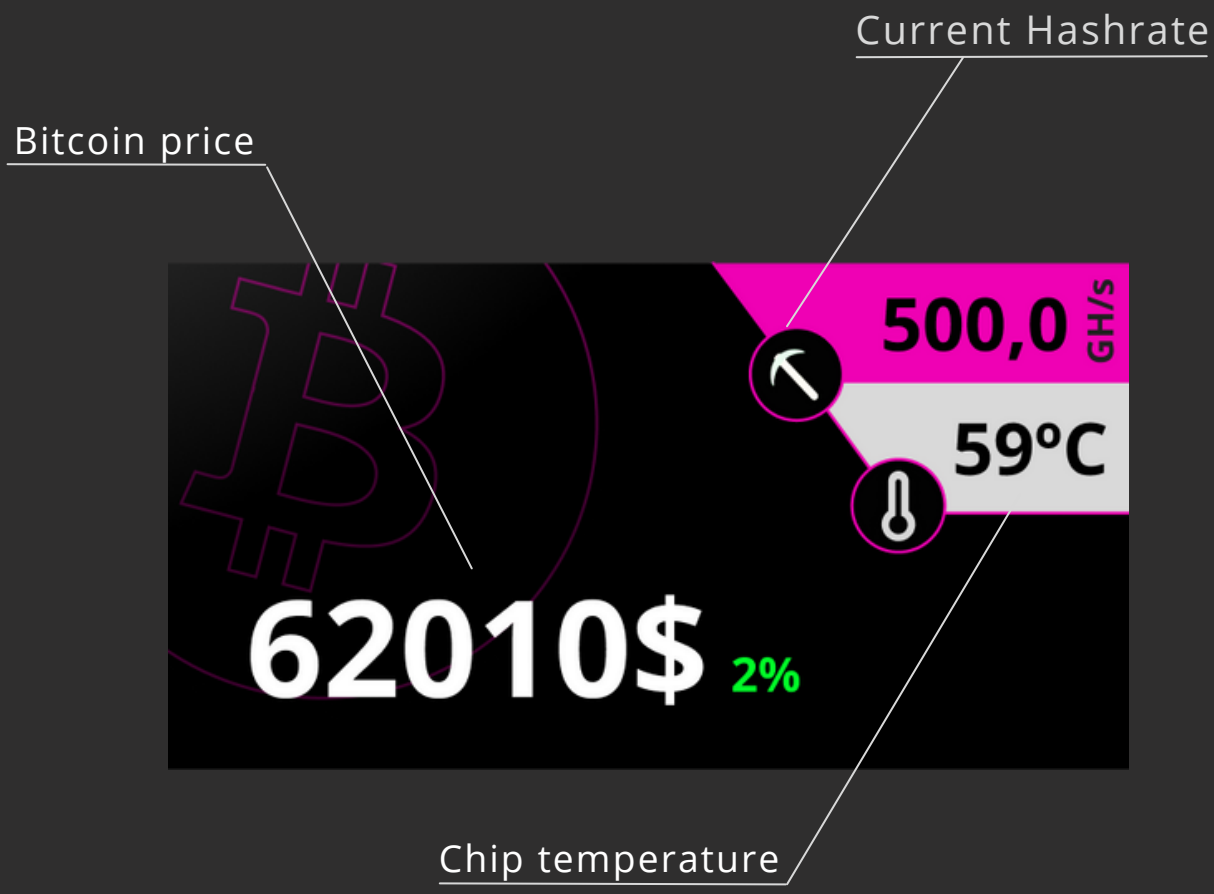
The following screen shows your configured settings, including the pool, IP address, and port for configuring axeOS.



Vc	**Core voltage set:** Configured ASIC core voltage
Hz	**Freq set:** ASIC frequency configured
	Fan: configured fan behaviour
URL	**URL**: Pool configured URL
PORT	**Port**: Pool configured Port
SHARES	**Shares**: Accepted/rejected found shares

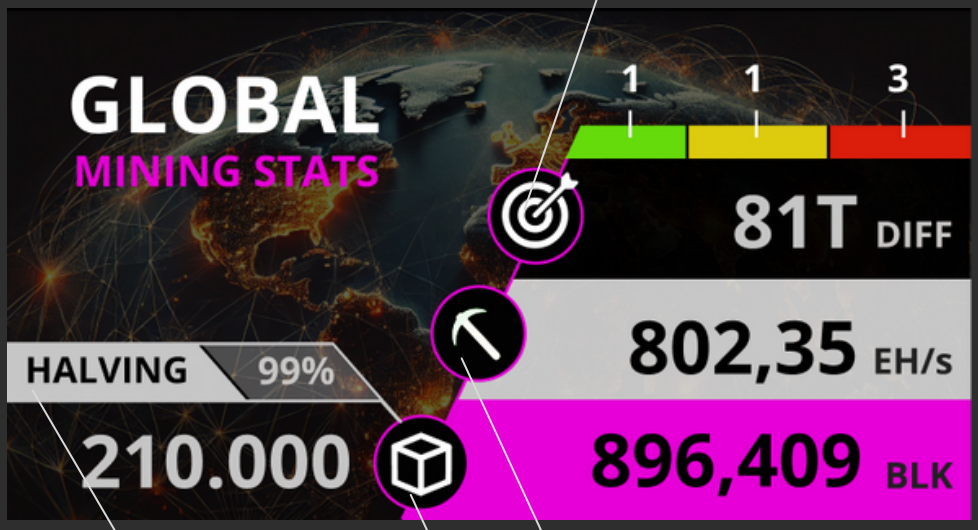
PRICE SCREEN

The following screen shows the actual bitcoin price,also the current hashrate and the chip temperature.



MINING STATS SCREEN

The following screen shows data rlated to mining stats,the next halving, actual blocks and the current Hashrate of the network.



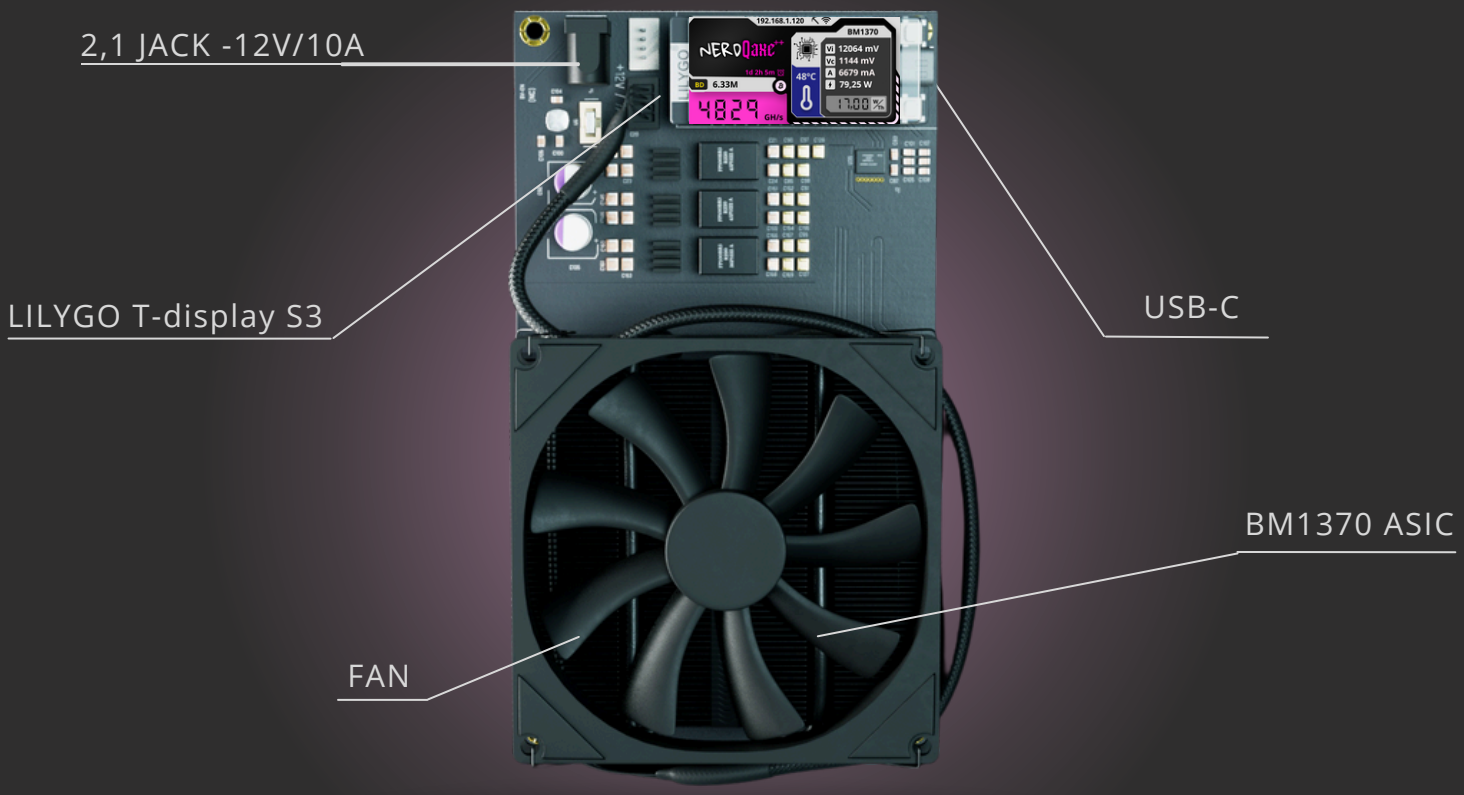
Network Difficulty

Next Halving

Current Total Hashrate

Actual Blocks

ATTRIBUTES



Vcc: 12V ***Imax***:10A ***P***: 80W ***USB type***: USB-C	***Wifi:*** only 2.4GHz ***MCU***: ESP32-S3R8 Dual-core LX7 microprocessor ***ASIC***: BM1370

FEATURES

HIGH PERFORMANCE	Powered by the S21 Pro BM1370 ASIC chip
PLUG PLAY	Easy to setup, fully assembled, configure and play
ASIC TUNNING	ASIC Tunning via config portal, find your work
CONFIG PORTAL	Web config portal to setup your mining data

HEATSINK PREPARATION

To use the case, heatsinks must be installed over the voltage regulator area. Please ensure you add the heatsinks to the marked positions before closing the NerdQaxe++.

WHY IS THIS SO IMPORTANT?

Maintaining good heat dissipation for the voltage regulator is crucial to ensure stable power supply to the ASICs, which is important for the safety and longevity of your miner. Proper cooling prevents overheating, which can lead to hardware failure and reduce the efficiency and lifespan of your mining equipment