CANAAN · AVALONMINER

Avalon Nano 3S
6 TH/s

Home Bitcoin miner and heater · SHA-256



COIN · ALGORITHM
Bitcoin · SHA-256

COOLING
Air (fans)

POWER
28 V DC (power adapter)

RELEASED
Jan 2025

Product Manual

Setup, operation, maintenance and OneMiners hosting guide

Version 1.0
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Contains manufacturer documentation © Canaan Inc., summarised for customer reference.

About this manual

This manual covers the **Canaan Avalon Nano 3S**, a home miner rated at **6 TH/s** and **140 W**. It is set up with Canaan's **Avalon Family** app.

Each section that reproduces or summarises manufacturer content is marked with a **Source** tag. Values that sources disagree on, or that no source confirms, are marked **Needs verification** and listed in section 1.4. Chapters 8 to 12 cover the OneMiners platform, hosting, warranty and wallet, and are marked **OneMiners**.

Before you start

CHECK	POWER	PHONE	PLACE
Label says Nano 3S	**28 V DC (power adapter)**	**Avalon Family app**	**−5 to 30 °C**
Keep the packing.	Household socket; see 2.2.	Bluetooth on, 2.4 GHz Wi-Fi.	Vents clear, away from water.

How notices are used

DANGER
Risk of electric shock, fire or injury. Do not continue until the condition is met.

CAUTION
Risk of damage to the miner, lost earnings or loss of data. Read before acting.

NOTE
Useful background, limits of a specification, or where to check further.

ONEMINERS
Applies to miners hosted in a OneMiners data center.

Copyright and disclaimer

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Specifications are typical values and may change without notice. Always confirm against the label on your unit and the latest manufacturer documentation. Information about profitability, hosting prices and platform features is for guidance only and is not financial advice. OneMiners' supplementary chapters may not be copied or redistributed without written permission.

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CHAPTER 01

Product Overview

The Avalon Nano 3S is a quiet SHA-256 miner from Canaan's Home series, designed for homes and offices and usable as a heater.



Figure 1-1 Avalon Nano 3S 6 TH/s. Image: OneMiners product photo.

1.1 Key figures

6 TH/s	140 W	23.3 J/TH
Typical hashrate	Power on wall	Efficiency

1.2 Specifications

ITEM	VALUE
PRODUCT	
Model / version	**Canaan Avalon Nano 3S**
Algorithm / coins	**SHA-256 · BTC / BCH / BSV**
Hashrate	**6 TH/s**
Power on wall	**140 W**
Efficiency	**23.3 J/TH**
POWER	
Adapter input	**Household mains via the regional adapter**
Miner input	**28 V DC, USB Type-C**
Power	**140 W**
Cord	**Supplied adapter and cord**

ITEM	VALUE
HARDWARE	
Network	**Wi-Fi (USB module, 2.4 GHz)**
Size (L×W×H)	**205 × 115 × 58 mm**
Weight	**0.86 kg (Canaan) · 1.2 kg (OneMiners)**
Noise	**33–40 dB**
ENVIRONMENT	
Operating temperature	**−5 to 30 °C**

SOURCE D-Central (Canaan Nano 3S listing); Kryptex Avalon Nano 3 / 3S guide; Jingle Mining Nano 3S setup tutorial; OneMiners product page.

1.3 Hardware

Display	Front display shows status and the IP address.
Network	Wi-Fi through the supplied USB module (2.4 GHz only).
Power	Connect the power adapter to the Type-C input. If the unit doesn't start, hold the power button for 2 seconds.

SOURCE Canaan product information; Avalon Family app guides.

1.4 Values that need verification

These values conflict between sources or aren't confirmed by the manufacturer. Check the label on your unit, and ask OneMiners support before planning power or cooling around them.

ITEM	WHAT THE SOURCES SAY	USED IN THIS MANUAL
Efficiency	Kryptex 23 J/TH · one Canaan listing 29 J/TH	≈ 23 J/TH at 140 W
Weight	Canaan 0.86 kg · OneMiners 1.2 kg (packed?)	0.86 kg
Plug	OneMiners lists C13 for the adapter's mains side	Use the supplied adapter

02 CHAPTER Safety and Installation Requirements

The Nano 3S plugs into a household socket. Check the circuit can carry it, and give it free airflow.

2.1 Safety warnings

DANGER · ELECTRICAL

- Use only the supplied power adapter (or Canaan's replacement). The miner itself runs on 28 V DC.
- Plug the adapter into an earthed household socket.

CAUTION · PLACEMENT

- The Nano 3S gives off heat. Keep the air inlet and outlet clear and don't cover the unit or place it against curtains or furniture.
- Keep it away from water, children and pets. Don't open the case.

2.2 Electrical requirements

Adapter input	**Household mains via the regional adapter**
Miner input	**28 V DC, USB Type-C**

Power	**140 W**
Cord	**Supplied adapter and cord**

At 140 W the Nano 3S needs no special circuit.

2.3 Where to put it

CONDITION	REQUIREMENT
Room temperature	−5 to 30 °C
Noise	33–40 dB
Clearance	Keep inlet and outlet vents clear on all sides
Surface	Stable, level, non-flammable

SOURCE D-Central (Canaan Nano 3S listing); Kryptex Avalon Nano 3 / 3S guide; Jingle Mining Nano 3S setup tutorial; OneMiners product page.

03 CHAPTER Initial Setup

These steps take a new Nano 3S from the box to mining. If your miner is hosted by OneMiners, our team does this for you; skip to Chapter 8.

3.1 Unboxing and powering on

- Confirm the label shows **Avalon Nano 3S** and keep the packing.
- Make sure the Wi-Fi module is in the USB port before powering on.

1. **Network**
   Wi-Fi through the supplied USB module (2.4 GHz only).
2. **Power**
   Connect the power adapter to the Type-C input. If the unit doesn't start, hold the power button for 2 seconds.
3. **Start-up**
   The display lights up and the miner starts. Allow a minute or two.

3.2 Pairing with the Avalon Family app

1. Install the **Avalon Family** app (App Store or Google Play). Turn on Bluetooth, and connect your phone to a **2.4 GHz** Wi-Fi network.
2. In the app, tap ≡ or **+**, choose **New device**, select the model and tap **Search**. Pick your miner from the list.
3. Select your Wi-Fi network, enter its password and tap **Save**. The miner restarts and joins the network; its IP address appears on the display or in the app.

4. For a wired connection, choose **Manually add running device** and enter the IP address shown on the display.

3.3 Web dashboard (optional)

- Open the miner's IP address in a browser on the same network, or scan the login QR code with the app.
- Log in with the default password `admin`, then set a new password when prompted.

SOURCE Canaan Avalon Family app; Jingle Mining "Canaan Avalon Nano 3S use & setup tutorial"; Kryptex Avalon Nano 3 / 3S guide; Yesmining Avalon Q setup guide; Hashrate Index Avalon Mini 3 article.

04 CHAPTER Mining Configuration

The Avalon Nano 3S mines SHA-256 coins, mainly Bitcoin (BTC). Many home miners use a solo or small-payout pool.

4.1 Setting up pools

1. Open **Pool Config** in the app (or the pool settings in the web dashboard).
2. Enter three pools: pool address, worker and password. Kryptex recommends the same pool in all three slots if you have only one.
3. Tap **Save** or **Submit**, then **Reboot** to apply. The worker appears on the pool after a few minutes.

FIELD	WHAT TO ENTER
Pool / mining address	The pool's stratum address, in the format `stratum+tcp://host:port`. Copy it from your pool's "Connect" or "Getting started" page.
Worker / user	Your pool account or wallet address plus a worker name, usually `account.worker`, for example `myaccount.nano3s01`.
Password	Optional. Most pools accept any value, such as `x`.

COIN AND POOL
Pool 1 is used first; Pools 2 and 3 are backups. The miner mines SHA-256 coins; this manual assumes Bitcoin (BTC).

CAUTION
Use only pool addresses from the pool's official website, and always add at least one backup pool. A mistyped address mines for nobody.

ONEMINERS
Hosted miners are configured from the OneMiners platform rather than the miner's own dashboard. To change pools, use **Pool Settings** in your account (see 8.2).

SOURCE Canaan Avalon Family app; Jingle Mining "Canaan Avalon Nano 3S use & setup tutorial"; Kryptex Avalon Nano 3 / 3S guide; Yesmining Avalon Q setup guide; Hashrate Index Avalon Mini 3 article.

05 CHAPTER Monitoring Performance

Check the app or the dashboard now and then; judge performance by the average hashrate.

5.1 What normal looks like

≈ 6 TH/s	≈ 140 W	< 1 %
Rated hashrate (±10%)	Power (±10%)	Pool rejection rate

Kryptex: one fixed performance level.

5.2 What to watch

VALUE	MEANING
Average hashrate	Shown in the app and dashboard. The real-time figure moves with every share.
Temperature	Should stay stable. Rising values point to blocked vents or a warm room.
Pool status	Active pool and accepted shares. A worker that disappears from the pool usually means a Wi-Fi or pool problem.

06 CHAPTER Firmware and Maintenance

Keep the firmware current and the vents clean.

6.1 Firmware

- The Avalon Family app offers updates when they are available; the web dashboard has a firmware or system page.
- Use only firmware Canaan publishes for the **Avalon Nano 3S**, from Canaan's download page or the OneMiners library, and keep the miner powered during an update.

6.2 Care

WHEN	TASK
Monthly	Check the vents for dust and vacuum or blow them clean with the miner unplugged.
Regularly	Check the power cord and plug for heat marks. Check for firmware updates in the app.

07 CHAPTER Troubleshooting

Start with the symptom table.

SYMPTOM	CHECK
Doesn't power on	Check the supply is 28 V DC (power adapter) and the power cord is fully seated and rated for the current.
App can't find the miner	Turn on Bluetooth, stay close to the miner, and use a 2.4 GHz Wi-Fi network (5 GHz isn't supported).
No hashrate	Re-check the pool address and worker in Pool Config, save and reboot.
Hot or loud	Clear the vents, move it to a cooler spot, or choose a lower mode.
Smell or smoke	Unplug it immediately and contact service.

SOURCE Canaan Avalon Family app; Jingle Mining "Canaan Avalon Nano 3S use & setup tutorial"; Kryptex Avalon Nano 3 / 3S guide; Yesmining Avalon Q setup guide; Hashrate Index Avalon Mini 3 article.

ONEMINERS
For a hosted miner, send the symptom and your miner's service ID to **service@oneminers.com** or WhatsApp **+1 305 867 6143**. Repairs under warranty are handled on site by our repair team.

08 CHAPTER OneMiners Platform Guide

Miners hosted by OneMiners are monitored and managed from your account at app.oneminers.com or the OneMiners mobile app. Screens in this chapter are from OneMiners platform v1.2 and show example values from other miners, not an Nano 3S.

8.1 Miner details

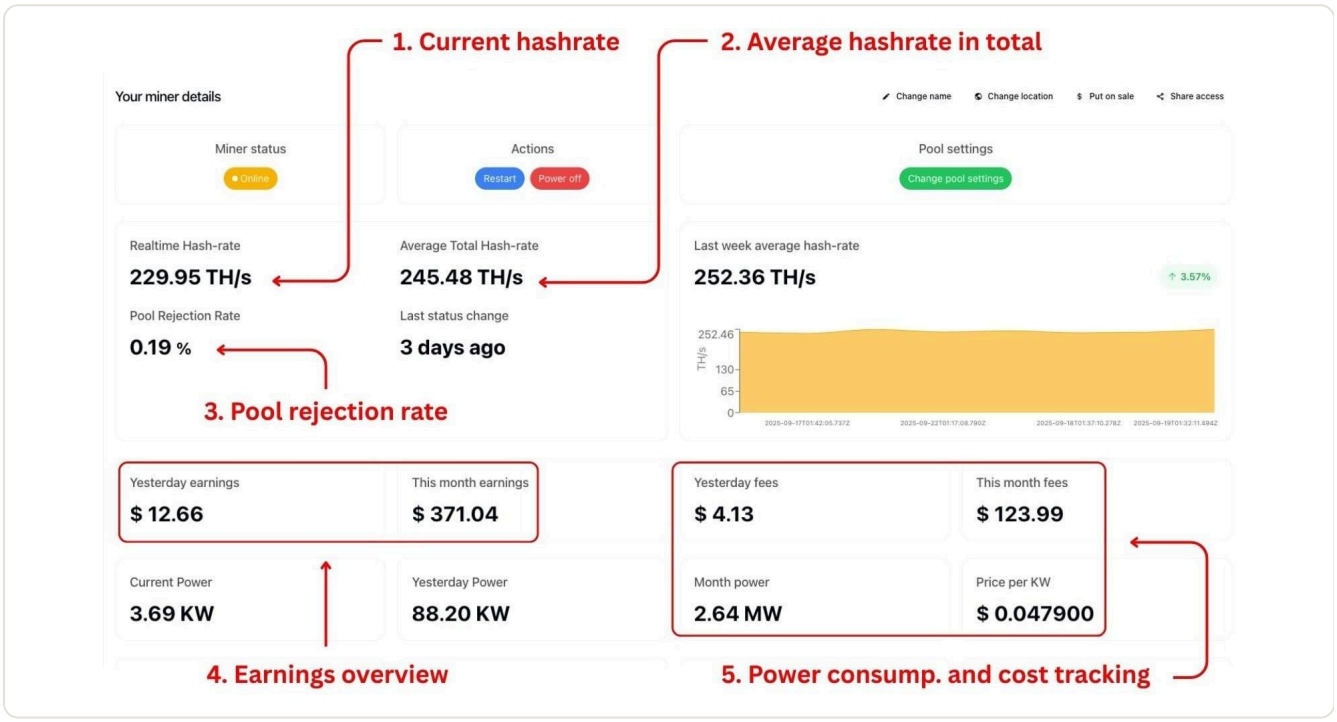


Figure 8-1 Miner details on OneMiners platform v1.2 (example values).

1 · Current hashrate	Real-time hashrate (for the Nano 3S, in TH/s). It moves with network stability, hardware and pool communication.
2 · Average hashrate	Average over a longer period (typically 24 h). The most reliable measure of performance; for the Nano 3S, expect about 5.82–6.18 TH/s.
3 · Pool rejection rate	Share of submitted shares the pool rejected. Below 1% is healthy.
4 · Earnings overview	Estimated earnings for the selected period, based on accepted shares.
5 · Power and cost	Real-time and historical energy use (kW) and its cost at your configured price per kWh.

8.2 Pool settings

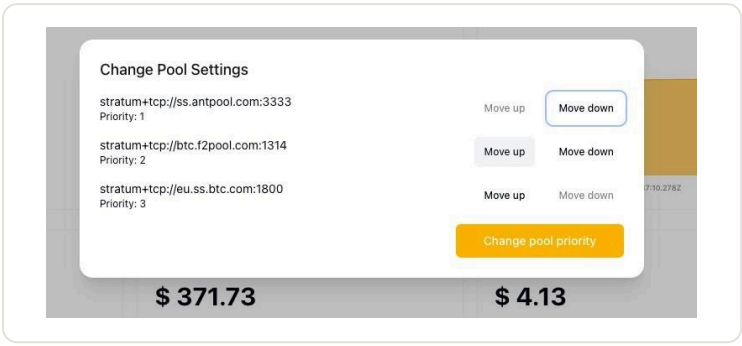


Figure 8-2 Change Pool Settings.

- Up to three pools can be connected.
- Pools are listed in priority order. If the first is unavailable, the miner switches to the second, then the third.
- Use **Move up** / **Move down** to set the order, then **Change pool priority** to apply it.

8.3 Earnings and fees

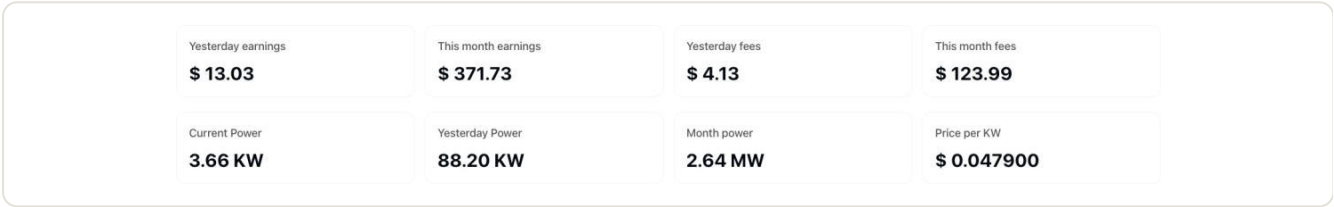


Figure 8-3 Earnings, fees, power and price per kWh (example values).

- **Earnings:** daily, monthly and cumulative mining rewards in USD or your selected currency.
- **Fees:** pool and platform fees deducted from earnings, shown daily and monthly.
- **Net result:** earnings minus fees, which is your net mining income.

8.4 Hardware status

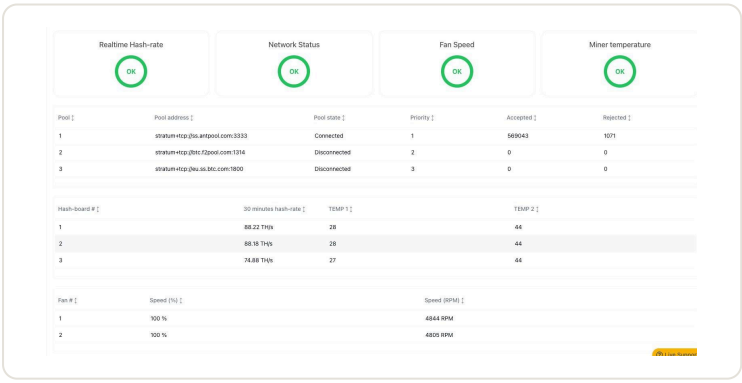


Figure 8-4 Hardware status (example from an air-cooled miner).

- **Network status:** whether the miner is connected to its pools. Address disconnections immediately.
- **Miner temperature** and **hashboard table:** per-board hashrate and temperatures. Useful for spotting an underperforming board early.

> **AIR-COOLED UNITS**
> Fan speed is shown per fan. A slow or stopped fan raises temperatures and stops mining, so act on fan alerts quickly.

ONEMINERS OneMiners platform v1.2. Confirm layout against the current version of your account.

CHAPTER 09

OneMiners Hosting and Warranty

OneMiners hosts customer-owned miners in its data centers, providing power, cooling, racking and monitoring. Terms below reflect OneMiners' published pages as checked on 7 November 2026.

9.1 Hosting

- Hosting is offered across 17 data centers worldwide, **from 3.6¢ per kWh** at the time of writing.
- Locations include Nigeria, Ethiopia, Dubai, the USA (Texas, Houston, Georgia, South Carolina, Kansas and a no-service-fee option), Finland, Norway, Canada, Brazil, Czechia, China and Paraguay.
- Hosted orders are deployed turnkey; OneMiners racks, connects and monitors the miner.
- Home miners like the Nano 3S are usually run at home. If you want one hosted, ask sales which locations accept it.

Current prices and locations: oneminers.com/pages/hosting-centers.

9.2 Warranty

HOSTED WITH ONEMINERS

7-year full warranty for miners hosted in the USA, Dubai, Norway, Finland, Ethiopia, Nigeria and China.

- Free on-site repairs
- No-cost replacement of power supplies and cables
- No labour or diagnostic fees

SHIPPED TO YOU

Standard 12-month warranty, unless the manufacturer specifies otherwise.

- Free repair of manufacturing defects
- Replacement of defective units when necessary
- Valid only when the miner is operated according to official instructions

All customers during warranty

Remote diagnostics, real-time monitoring, 24/7 technical support, and firmware upgrades and maintenance.

Exclusions

The warranty may be voided by damage from misuse, unauthorised modifications or non-compliant operation. For the Nano 3S, this includes damage from running outside −5 to 30 °C or 28 V DC (power adapter), undersized power cords, blocked airflow, firmware for other models, or opening the unit.

Out of warranty

Repairs typically cost **US$80–220**, depending on the fault and parts required.

Making a claim

Contact OneMiners support with your miner's hosting details and service ID through oneminers.com/pages/contact or **service@oneminers.com**.

ONEMINERS OneMiners Warranty Policy, oneminers.com/pages/warranty-policy . The policy page prevails if it differs from this summary.

10 CHAPTER Wallet and Mining Rewards

Rewards from a hosted miner are credited to your OneMiners wallet, where you can withdraw them or exchange between currencies.

10.1 Automatic mining balance

- The miner starts generating rewards as soon as it is installed and activated.
- If no energy payment has been preloaded, mining continues and energy costs and fees are deducted automatically from the rewards.
- If funds are preloaded in advance, earnings are credited without automatic deductions.
- You can change your payout wallet address in the wallet settings.

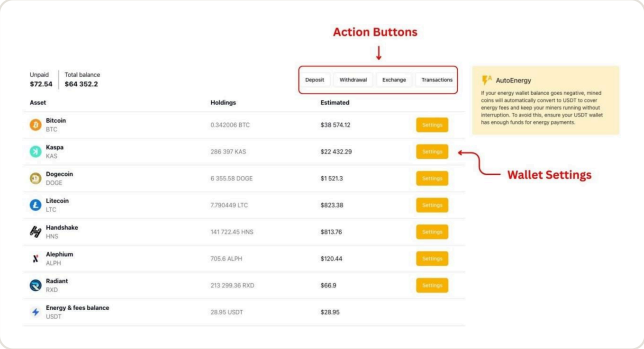


Figure 10-1 Wallet section.

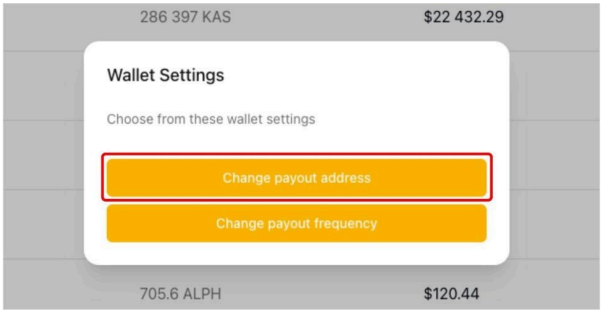


Figure 10-2 Changing the payout address.

10.2 Withdrawals

1. Go to **Wallet** › **Withdrawal**.
2. Add a crypto wallet address or a bank account.
3. Select the currency, enter the amount and confirm.

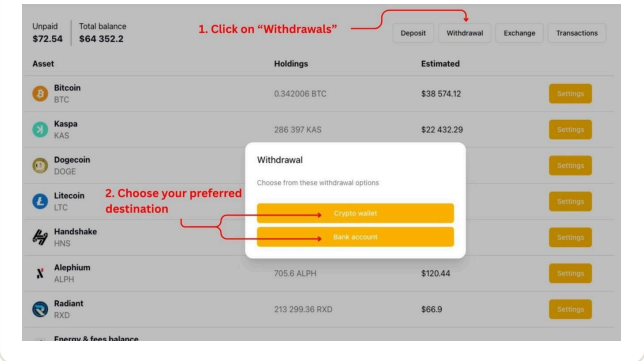


Figure 10-3 Choosing a withdrawal destination.

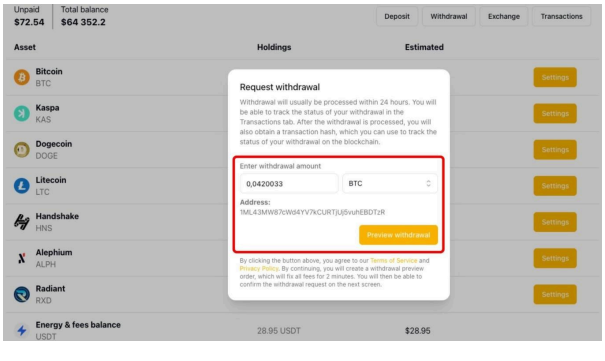


Figure 10-4 Choosing currency and amount.

10.3 Exchange

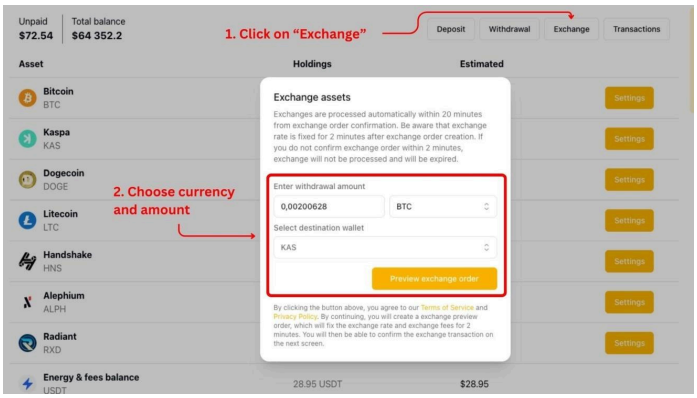


Figure 10-5 Exchanging currencies.

1. Go to **Wallet** › **Exchange**.
2. Select the currencies to exchange. You can also convert directly into **Energy & Fees** funds to keep the miner running.
3. Enter the amount and confirm.

> **BEFORE YOU WITHDRAW**
> Double-check addresses and networks. Crypto transfers to a wrong address usually can't be reversed. Keep enough Energy & Fees balance to avoid deductions from your rewards.

ONEMINERS OneMiners platform v1.2.

CHAPTER 11

Additional OneMiners Features

Optional tools in your OneMiners account. Availability and settings can change; check your dashboard for what is active on your account.

11.1 AI Smart Mining

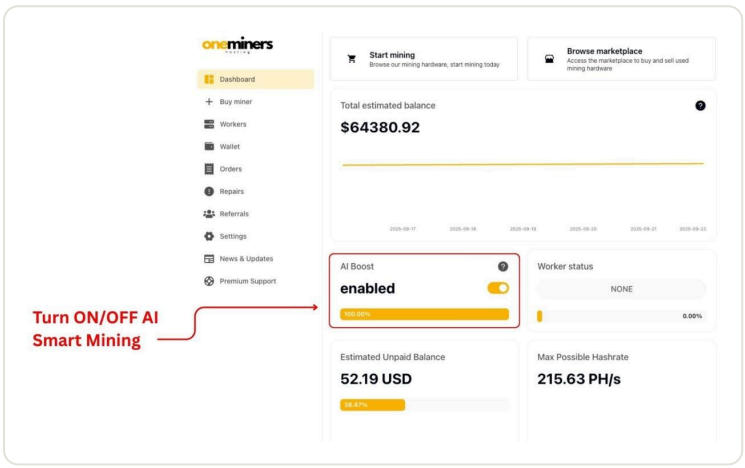


Figure 11-1 AI Boost toggle on the dashboard (platform v1.2).

AI Smart Mining analyses market conditions and pool performance and can switch your miner to the pools it calculates are most profitable.

- Turn it on or off with the **AI Boost** toggle on your dashboard.
- Your hardware keeps mining to your own account and wallet.

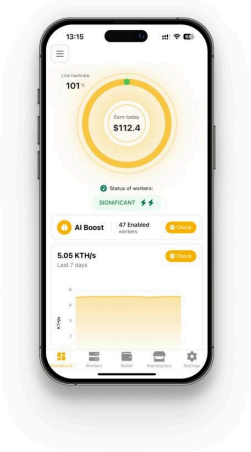
Results depend on hardware and market conditions and aren't guaranteed. More information: oneminers.com/pages/ai-smart-mining.

11.2 OneMiners mobile app

Monitor and manage your miners from your phone: start and stop miners, view hashrate, power use and hardware status, and manage balances and withdrawals. The app is built on the CircleHash white-label hosting platform and is free.

App Store

Google Play



11.3 Profitability tools

Mining income from the Nano 3S depends on the BTC price, network difficulty, transaction fees and your electricity cost, all of which change daily. For current estimates, use the live tools rather than figures printed in a manual:

- Miner profitability table: oneminers.com/pages/miner-profitability
- Bitcoin miners collection: oneminers.com/collections/bitcoin-miners

For the Nano 3S, use 6 TH/s and 140 W with your own price per kWh. Estimates aren't financial advice.

12 CHAPTER Official Resources and Support

12.1 Resources

CANAAN
Support and downloads
www.canaan.io/support

CANAAN
Avalon Family app
apps.apple.com/app/avalon-family/id6479229114

ONEMINERS
Manuals & Firmware Library
oneminers.com/pages/manuals-and-firmware

ONEMINERS
Product page
oneminers.com/products/avalon-nano3s-6-th-s

ONEMINERS
Warranty policy
oneminers.com/pages/warranty-policy

ONEMINERS
Hosting locations
oneminers.com/pages/hosting-centers

12.2 Contact OneMiners

SUPPORT, 24/7

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WhatsApp

+1 607 9009 004 · Sales, USA

service@oneminers.com · Service and repairs
sales@oneminers.com · Sales
payinquire@oneminers.com · Payments

Telegram: t.me/oneminers_hosting

ADDRESS

CIRCLEHASH LLC
701 Tillery Street
Austin, Texas 78702, USA

Contact page

Manuals library

12.3 Sources used for this version

1. D-Central, Avalon Nano 3S reference page (Canaan listing): hashrate, power, DC input, size, weight, noise, temperature.
2. Kryptex, "ASIC Canaan Avalon Nano 3 / Nano 3S": specs, app pairing, pools, firmware.
3. Jingle Mining, "Canaan Avalon Nano 3S use & setup tutorial": Wi-Fi module, pairing, default password, pool config.
4. OneMiners product page, Avalon Nano 3S 6 TH/s.
5. OneMiners: product page, Warranty Policy, hosting pages, AI Smart Mining page, Media Kit, site contact details. All checked 7 November 2026.

12.4 Revision history

VERSION	DATE	CHANGES
V1.0	Nov 2026	First edition on the OneMiners media-kit template: manufacturer specifications with conflicts listed in 1.4, safety, installation, setup, pools, monitoring, firmware, maintenance and troubleshooting. Current warranty, hosting and contact details.