CANAAN · AVALONMINER

Avalon A15 Pro 218 TH/s

Air-cooled Bitcoin miner · SHA-256



COIN · ALGORITHM
Bitcoin · SHA-256

COOLING
Air (fans)

POWER
170–300 V AC

RELEASED
May 2024 (A15 series launch)

Product Manual

Setup, operation, maintenance and OneMiners hosting guide

Version 1.0
First edition, November 2026
Information checked 7 Nov 2026

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

About this manual

This manual covers the **Canaan AvalonMiner A15 Pro** (Avalon A15 Pro), rated at **218 TH/s** and **3,662 W**.

Canaan lists the 215, 218 and 221 TH/s versions at the same 3,662 W. OneMiners sells the 215 and 221 TH/s units.

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	ROOM	NETWORK
Label says A15 Pro	**170–300 V AC**	**−5 to 35 °C**	**RJ45 + DHCP**
Check the model and hashrate bin on the label.	About about 16.6 A at 220 V (calculated).	Ventilated, away from people (≤ 75 dB).	A PC with an IP scanner or Canaan FMS.

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

© OneMiners, 2026. This manual combines documentation published by the manufacturer, Canaan Inc., and other cited sources with supplementary material written by OneMiners (platform, hosting, warranty and wallet chapters). Manufacturer content remains the property of its owner and is reproduced or summarised here for the convenience of OneMiners customers. OneMiners claims no ownership of it. All product names and trademarks belong to their respective owners.

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 A15 Pro is an air-cooled SHA-256 miner from Canaan with an included power supply.



Figure 1-1 Avalon A15 Pro 218 TH/s. Image: OneMiners product photo.

1.1 Key figures

218 TH/s	3,662 W	16.8 J/TH
Typical hashrate	Power on wall	Efficiency

1.2 Specifications

ITEM	VALUE
PRODUCT	
Model / version	**Canaan Avalon A15 Pro**
Algorithm / coins	**SHA-256 · BTC / BCH / BSV**
Hashrate	**218 TH/s**
Power on wall	**3,662 W**
Efficiency	**16.8 J/TH**
POWER	
Input voltage	**Needs verification** (OneMiners: 170–300 V AC)
Current	**about 16.6 A at 220 V (calculated)**
Power cord	**IEC C19 (OneMiners)**

ITEM	VALUE
HARDWARE	
Network	**RJ45 Ethernet 10/100M**
Size (L×W×H)	**301 × 192 × 292 mm**
Weight	**14.9 kg net · 15.9 kg gross**
Noise	**≤ 75 dB**
ENVIRONMENT	
Operating temperature	**−5 to 35 °C**

SOURCE D-Central miner reference pages (reviewed Aug 2026), which reproduce Canaan's official product listings (A15Pro-215T, -218T, -221T); OneMiners product pages.

Versions and OneMiners listings

VERSION	HASHRATE	POWER ON WALL	EFFICIENCY
A15Pro-215T	215 TH/s	3,662 W	17.0 J/TH
A15Pro-218T	218 TH/s	3,662 W	16.8 J/TH
A15Pro-221T	221 TH/s	3,662 W	16.6 J/TH

1.3 Hardware

Power supply	Canaan PSU mounted on the chassis; power cord not included.
Control board	Ethernet port, status light, **FUNC** and **RST** buttons.
Cooling	2 fans with front-to-back airflow.

SOURCE Canaan A13-series user manual; Canaan product listings.

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
Input voltage	Not published in Canaan's A15Pro listings · OneMiners 170–300 V	Check the PSU label
Operating temperature	Canaan −5 to 35 °C · OneMiners 5–35 °C	5–35 °C satisfies both

02 CHAPTER Safety and Installation Requirements

The A15 Pro draws about 3.7 kW and produces loud, hot exhaust air. Plan the circuit and the room before switching it on.

2.1 Safety warnings

DANGER · ELECTRICAL

- Connect to an **earthed** outlet near the equipment and easy to reach.
- Use only **Needs verification** (OneMiners: 170–300 V AC). Wrong input voltage may damage the miner.
- The A15 Pro draws about 16.6 A at 220 V (calculated). Use a power cord, PDU and circuit rated for at least that current.

CAUTION · EQUIPMENT

- Don't open the case or remove screws; unauthorised disassembly can void the warranty.
- Keep the miner away from water and condensing humidity.

2.2 Electrical requirements

Input	**Needs verification (OneMiners: 170–300 V AC)**
Typical load	**3,662 W**
Current	**about 16.6 A at 220 V (calculated)**
Power cord	**Rated for the current above**

Use earthed circuits sized by a licensed electrician to local code. Don't use household extension leads or multi-plugs.

2.3 Climate and site

CONDITION	REQUIREMENT
Operating temperature	−5 to 35 °C
Noise	≤ 75 dB

- Keep intake and exhaust clear and don't let hot exhaust air flow back into the intake.
- At ≤ 75 dB, the A15 Pro isn't suitable for living or office spaces.
- Avoid dust, salt air and corrosive gases; clean more often in dusty sites.

SOURCE D-Central miner reference pages (reviewed Aug 2026), which reproduce Canaan's official product listings (A15Pro-215T, -218T, -221T); OneMiners product pages.

03 CHAPTER Initial Setup

These steps take a new A15 Pro from the box to its management interface. If your miner is hosted by OneMiners, our team does this for you; skip to Chapter 8.

3.1 Unboxing and connecting

- Check the carton for damage and confirm the label shows **Avalon A15 Pro**. Keep the packing for transport and warranty returns.
- Canaan supplies the power supply with the miner; the power cord is not included. Use a cord rated for the current in 2.2.

1. **Network**
   Connect an Ethernet cable. The miner gets its IP address by DHCP by default.
2. **Power**

Connect a power cord rated for the current in 2.2 (IEC C19 (OneMiners)) to the PSU inlet and switch on the supply.

3. **Start-up**
The status light flashes during start-up. Allow a few minutes before looking for the miner on the network.

3.2 Finding the miner's IP address

- Look the miner up in your router's DHCP client list, or scan the network with a tool such as Advanced IP Scanner.
- For many miners, Canaan's batch management software (**FMS**) and **AvalonUpgradeTool** also scan an IP range and list Avalon miners.
- Some Avalon controllers have an **IP Report** function on the control-board button; hold it for about 5 seconds until it beeps (Luxor guide for the A1246). Confirm on your unit.

3.3 Logging in and network settings

1. Enter the IP address in a web browser on the same network.
2. Log in. Canaan's user manuals give the default username `root` and password `root`. Change the password after the first login.
3. The **Overview** page opens, showing hashrate, temperatures, fans and pool status.
4. Static IP (optional): in the configuration menu open **Network**, choose **IP (Static)**, enter address, mask, gateway and DNS, save and reboot the miner.

SOURCE Canaan, AvalonMiner user manuals (A1346/A1366 series, as published on ManualsLib) and Canaan support guidance on downloads (KA-01189) and upgrades (KA-01195); Kryptex and Luxor setup guides for the A15 / A1566 and A1246. Menu names can differ between firmware versions; confirm on your unit.

04 CHAPTER Mining Configuration

The Avalon A15 Pro mines SHA-256 coins, mainly Bitcoin (BTC).

4.1 Setting up pools

1. Open the **Configuration** page.
2. Enter up to three pools in priority order: pool address, worker and password.
3. Choose the **Work Mode** (or **Power Mode** level) if your firmware offers it. Normal mode gives the rated figures in 1.1.
4. Click **Save**, then **Reboot**. After a few minutes, check the **Overview** page: a hashrate curve confirms the pool connection.

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.a15pro01`.
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 Kryptex, "ASIC Canaan Avalon A15 / A1566" setup guide; Luxor, "How to set up an AvalonMiner 1246"; Canaan A1346/A1366 user manual (pool and work-mode settings).

05 CHAPTER Monitoring Performance

Judge performance by the average hashrate after the miner has run for some time.

5.1 What "normal" looks like

211–225 TH/s	**3,479–3,845** W	**< 1** %
Average hashrate (±3%)	Wall power (±5%)	Pool rejection rate

Calculated from the rated values with the manufacturer's usual tolerances (hashrate ±3%, power ±5%).

5.2 What to watch

VALUE	MEANING
Average hashrate	The most reliable measure of performance. The real-time figure moves with every share.

VALUE	MEANING
Board temperatures	Board temperatures should stay stable. Rising values point to dust, fans or room temperature.
Fan speed	Every fan should report a speed. A stopped fan raises temperatures and stops mining.
Pool status	Active pool, accepted and rejected shares. Rejection below 1% is normal.

06 CHAPTER Firmware and Maintenance

Keep the firmware current and the airflow clean. Most problems on air-cooled miners trace back to dust, fans or room temperature.

6.1 Upgrading firmware

> **USE THE RIGHT FILE**
> Avalon firmware comes as an `.aup` file. Install only firmware Canaan publishes for the **Avalon A15 Pro**, from Canaan's download page or the OneMiners Manuals & Firmware Library. Keep the miner powered throughout.

1. Single miner: open the **Firmware** (upgrade) page in the web interface, choose the `.aup` file and start the upgrade.
2. Many miners: in **AvalonUpgradeTool** or **FMS**, scan the IP range, select the miners, choose the file and click **Upgrade**. FMS reports failed IPs.
3. Check the new version on the overview page (or the Ver column in FMS).

6.2 Password and factory reset

- Change the web password after first login and store it securely.
- Factory reset (Canaan manual): with the miner powered on, hold the **FUNC** button for 5–10 seconds. Network, pool, password and other settings are cleared.
- The **RST** button restarts the system without clearing settings.

SOURCE Canaan AvalonMiner user manual (A1346/A1366 series): firmware upgrade and reset; Kryptex A15 guide: AvalonUpgradeTool.

6.3 Preventive maintenance

WHEN	TASK
Daily / remotely	Check average hashrate, board temperatures, fan speeds and pool status.
Monthly	Check room temperature and humidity against 2.3. Look for dust on fan guards.
Every 1–3 months	Switch off and unplug, then clean fans and heat sinks with dry compressed air.

WHEN	TASK
Regularly	Check power cords and plugs for heat marks. Check for new firmware.

Intervals are OneMiners recommendations. Clean more often in dusty sites.

07 CHAPTER Troubleshooting

Start with the symptom table. Hosted customers: don't attempt repairs yourself; contact OneMiners service.

SYMPTOM	CHECK
Miner doesn't power on	Check the supply is **Needs verification** (OneMiners: 170–300 V AC) and the power cord is fully seated and rated for the current.
No network / IP not found	Check the cable and DHCP. Look for the miner in the router client list or scan with an IP scanner or Canaan FMS.
Pool won't connect	Re-check the pool address and port, the worker name, gateway and DNS. Make sure the pool port isn't blocked by a firewall.
Low or unstable hashrate	Compare the average hashrate with 5.1. Check board temperatures, fans and dust. Update the firmware.
Overheating	Check the room is within −5 to 35 °C, fans are running and intake and exhaust are clear. Clean, then restart.
Smell, unusual sound or smoke	Switch off immediately and contact service.

SOURCE Based on Canaan documentation cited in Chapters 2–6.

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 A15 Pro.

8.1 Miner details

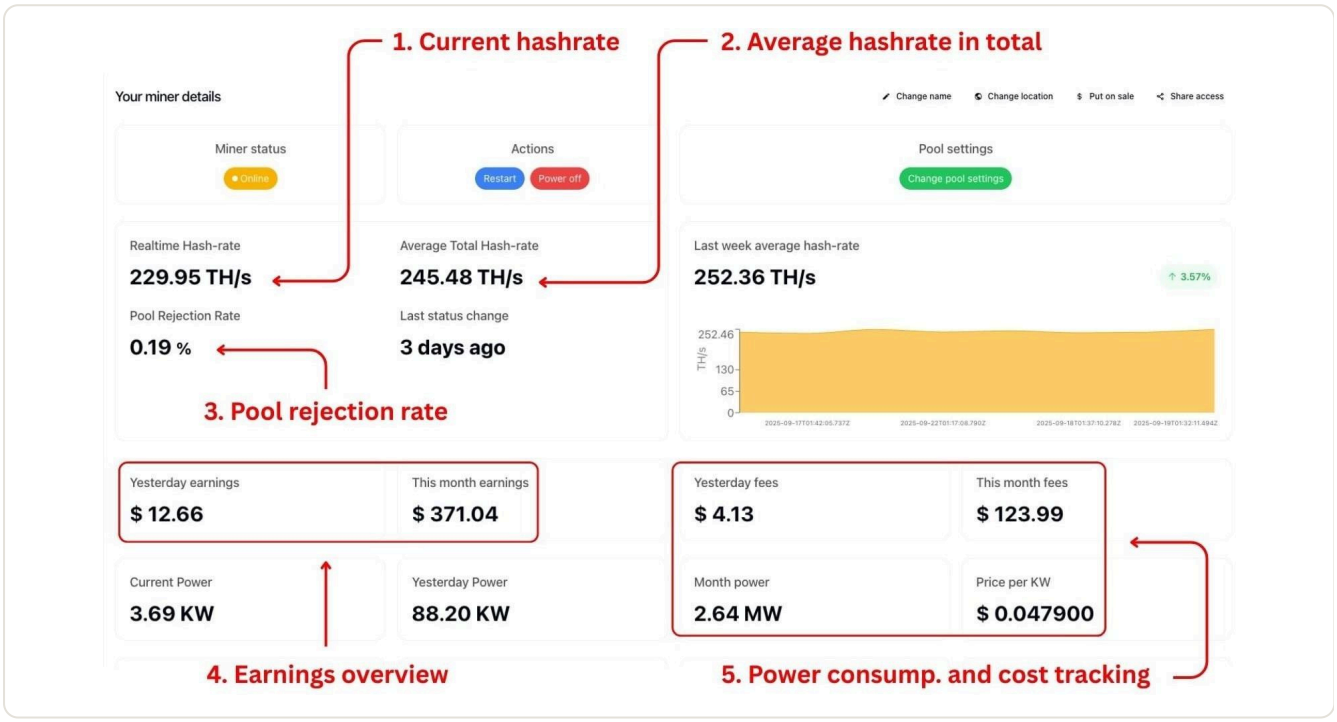


Figure 8-1 Miner details on OneMiners platform v1.2 (example values).

1 · Current hashrate	Real-time hashrate (for the A15 Pro, 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 A15 Pro, expect about 211–225 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

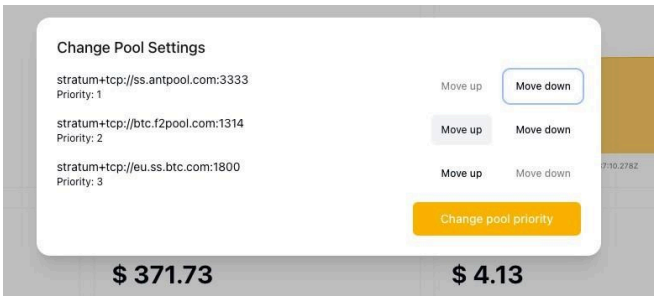


Figure 8-2 Change Pool Settings.

- 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

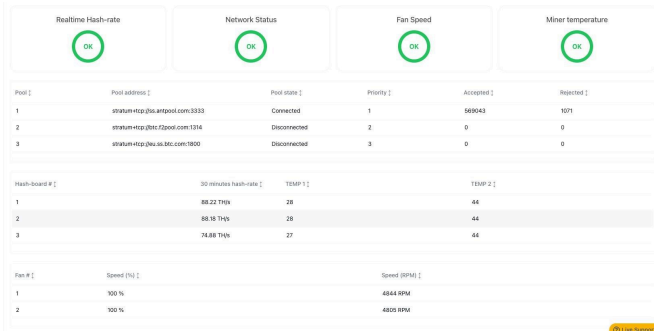


Figure 8-4 Hardware status (example from an air-cooled miner).

- **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 (2 fans on the A15 Pro). 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.
- Air-cooled miners like the A15 Pro are accepted at most sites. Ask sales which locations currently host the A15 Pro.

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 A15 Pro, this includes damage from running outside −5 to 35 °C or **Needs verification** (OneMiners: 170–300 V AC), 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.

CHAPTER 10

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.

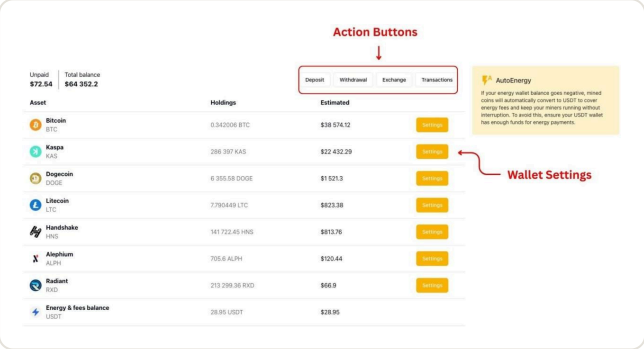


Figure 10-1 Wallet section.

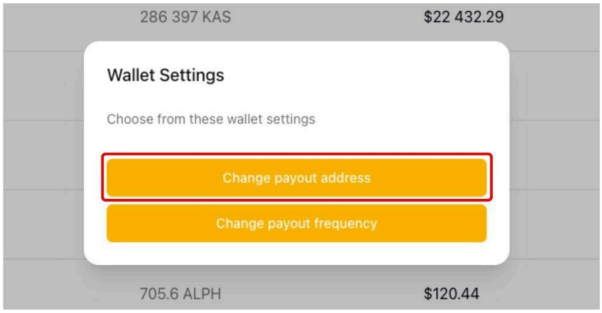


Figure 10-2 Changing the payout address.

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.

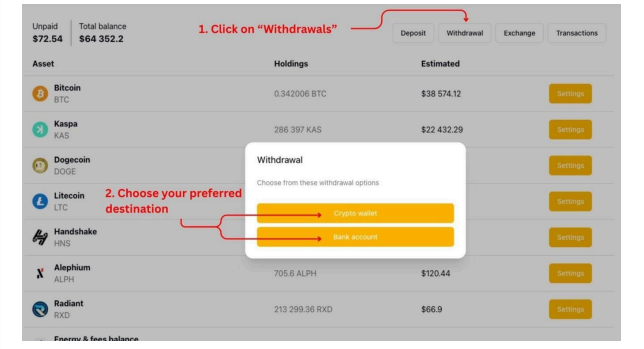


Figure 10-3 Choosing a withdrawal destination.

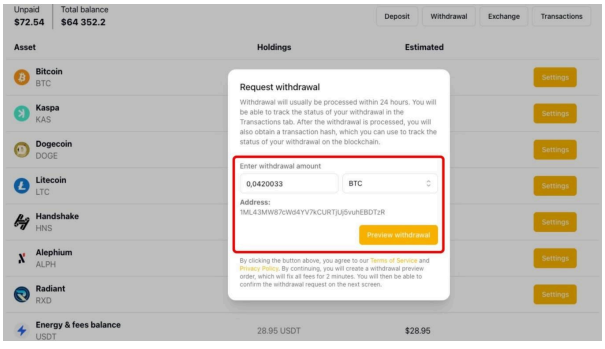


Figure 10-4 Choosing currency and amount.

10.3 Exchange

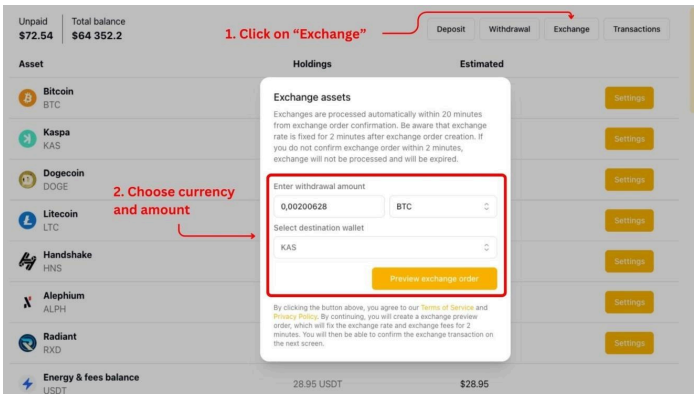


Figure 10-5 Exchanging currencies.

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

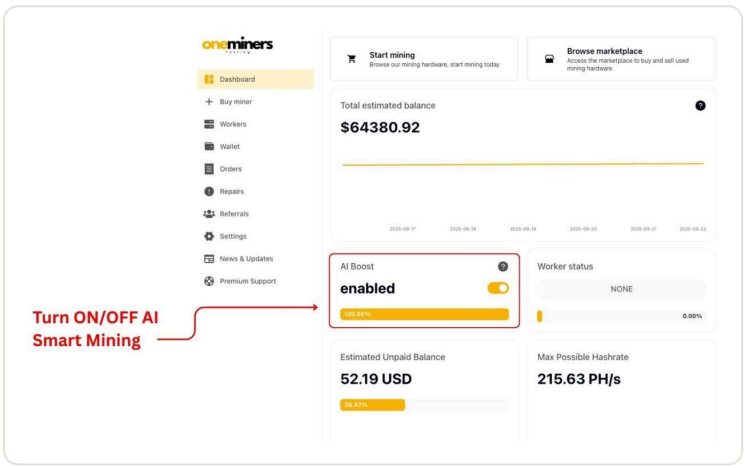


Figure 11-1 AI Boost toggle on the dashboard (platform v1.2).

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.

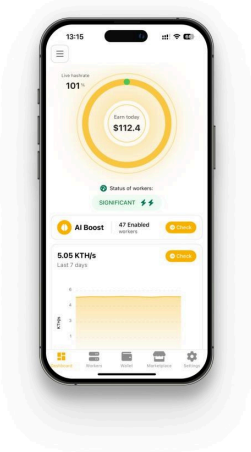
Results depend on hardware and market conditions and aren't guaranteed. More information: oneminers.com/pages/ai-smart-mining.

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 A15 Pro 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 A15 Pro, use 218 TH/s and 3,662 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-a15pro-215-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

+1 305 867 6143

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 miner reference pages (reviewed Aug 2026), which reproduce Canaan's official product listings: A15Pro bins, power, efficiency (±3%), size, weight, noise, temperature, fans.
2. PR Newswire, "Canaan debuts Avalon A15 new product series" (May 2024).
3. OneMiners product pages, Avalon A15 Pro 215 and 221 TH/s.
4. Canaan AvalonMiner user manual (A1346/A1366 series, ManualsLib); Kryptex "ASIC Canaan Avalon A15 / A1566" guide; Luxor "How to set up an AvalonMiner 1246": IP, login, pools, work mode, firmware (.aup, AvalonUpgradeTool, FMS) and reset.
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.