BITDEER · SEALMINER

A4 Pro Hyd
680 TH/s

Hydro-cooled Bitcoin server · 19-inch 2U



COIN · ALGORITHM
Bitcoin · SHA-256

COOLING
Hydro (liquid loop)

POWER
3-phase 380–480 V

RELEASED
May 2026

Product Manual

Setup, operation, maintenance and OneMiners hosting guide

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

Contains manufacturer documentation © Bitdeer Technologies Group, summarised for customer reference.

About this manual

This manual covers the **Bitdeer SealMiner A4 Pro Hyd**, rated at **680 TH/s** and **7,412 W**.

Coolant limits come from Bitdeer's published figures and its Hydro Series Cooling User Guide; installation and network steps from Bitdeer's SealMiner guides.

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	COOLING	NETWORK
Label says A4 Pro Hyd	**3-phase 380–480 V**	**Inlet 20–53 °C**	**RJ45 + DHCP**
Check the version.	See 2.2.	≤ 350 kPa; stainless loop.	A PC with the Sealminer Tool.

How notices are used

DANGER
Risk of electric shock, fire, burst pipes 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, Bitdeer Technologies Group, 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 SealMiner A4 Pro Hyd is a hydro-cooled server from Bitdeer, built on Bitdeer's own SEAL chips.



Figure 1-1 SealMiner A4 Pro Hyd 680 TH/s. Image: OneMiners product photo.

1.1 Key figures

680 TH/s	7,412 W	10.9 J/TH
Typical hashrate	Power on wall	Efficiency

1.2 Specifications

ITEM	VALUE
PRODUCT	
Model / version	**SealMiner A4 Pro Hyd**
Algorithm / coins	**SHA-256 · BTC / BCH / BSV**
Hashrate	**680 TH/s (680 TH/s)**
Power on wall	**7,412 W (7,412 W)**
Efficiency	**10.9 J/TH**
POWER	
Supply	**3-phase AC, 380–480 V (ASIC Miner Value); OneMiners 380–415 V**
Current	**Needs verification: not published (A2/A3 hydro: max 17–20 A)**
Power cable	**Not supplied by default with hydro units**

ITEM	VALUE
HARDWARE	
Network	**RJ45 Ethernet 10/100M**
Size (L×W×H)	**482 × 665 × 86 mm**
Weight	**20.5 kg**
Noise	**Fanless server (pump and cooler noise not included)**
COOLING AND ENVIRONMENT	
Inlet temperature	**20–53 °C normal · 20–43 °C high-hash (A4 hydro, Hydro Series guide)**
Flow	**≥ 11.3 L/min per server at 40% glycol (A4 hydro, Hydro Series guide)**
Inlet pressure	**≤ 350 kPa (3.5 bar); 3.5 bar relief valve on the system**
Humidity	**10–90% RH, non-condensing**

SOURCE ASIC Miner Value, SealMiner A4 Pro Hydro; Bitdeer Hydro Series Cooling User Guide (via Alliance Chemical); OneMiners product page.

1.3 Hardware

Front panel	Ethernet port, status LEDs, **IP Report** and reset buttons, power interface.
Cooling	Liquid through cold plates; blue inlet and red outlet quick connectors.

SOURCE Bitdeer SealMiner hydro installation guide.

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	ASIC Miner Value 380–480 V · OneMiners 380–415 V	380–415 V satisfies both
Coolant limits	Taken from Bitdeer's Hydro Series guide for A4 hydro servers, not an A4 Pro sheet	Confirm with OneMiners
Operating temperature	ASIC Miner Value 5–45 °C · OneMiners 10–50 °C (ambient)	Use the coolant limits
Current	Not published	Size circuits for 7.4 kW

02 CHAPTER Safety and Installation Requirements

The SealMiner A4 Pro Hyd needs three-phase power and an engineered liquid-cooling loop with heat rejection for about 7.4 kW. Installation must be done by qualified personnel.

2.1 Safety warnings

DANGER · ELECTRICAL

- The SealMiner A4 Pro Hyd runs on **three-phase 3-phase 380–415 V**. Connection must be made by a licensed electrician, with earthing, surge protection and a disconnect that breaks all phases.
- Observe the polarity markings on all power connections, and complete Bitdeer's pre-power checks before switching on.

CAUTION · COOLING LOOP

- Maximum inlet pressure **350 kPa**. Fit a **3.5 bar pressure relief valve** and a constant-pressure expansion tank.
- **No copper**: use stainless steel piping. Main filter 100 mesh or finer, plus a recommended 10 µm side filter.
- Use only the factory-supplied quick connectors.

SOURCE Bitdeer, SealMiner hydro installation and operation guidance (A2 Hydro article) and Hydro Series Cooling User Guide, as cited by Alliance Chemical.

2.2 Electrical requirements

Supply	**3-phase AC; 380–415 V satisfies both published ranges**
Typical load	**7,412 W (7,412 W)**
Current	**Needs verification: not published (A2/A3 hydro: max 17–20 A)**
Protection	**Earthing, surge protection, disconnect breaking all phases**

2.3 Coolant requirements

Inlet temperature	**20–53 °C normal · 20–43 °C high-hash (A4 hydro, Hydro Series guide)**
Flow	**≥ 11.3 L/min per server at 40% glycol (A4 hydro, Hydro Series guide)**
Inlet pressure	**≤ 350 kPa (3.5 bar); 3.5 bar relief valve on the system**
Coolant	**Pure or distilled water + inhibitor + EG/PG antifreeze**
Piping and filters	**Stainless steel, no copper · 100 mesh + 10 µm side filter**

- Recommended fluid: pure or distilled water, plus corrosion inhibitor, plus ethylene or propylene glycol antifreeze in the ratio your lowest site temperature needs.
- Water quality: pH 7.0–8.7, chloride < 20 mg/L, sulfate < 10 mg/L.
- Clean the loop thoroughly before the first fill. Incomplete cleaning voids Bitdeer's warranty.

SOURCE Bitdeer Hydro Series Cooling User Guide (2026-07-13), Sections 2 and 3, as summarised by Alliance Chemical; values apply to SealMiner A2, A3 and A4 hydro servers. Confirm against Bitdeer's current guide before filling.

2.4 Rack installation and start-up

1. **Mount**
   Two people slide the SealMiner A4 Pro Hyd into the rack and secure the front panel with its screws.
2. **Water**
   Connect the **blue inlet** and **red outlet** with the factory quick connectors.
3. **Circulate**
   Run coolant before powering on. Don't power on until all air has been expelled from the system.
4. **Power on**
   Turn on pumps, valves and dry-cooler fans first. Fill and start one miner at a time, check for condensation, and let the loop stabilise before full load.

Shutdown and removal

1. Shut down and disconnect power, then remove the Ethernet and power cables.
2. Disconnect the **inlet first**, then the outlet.
3. Unscrew the front panel and remove the unit with two people.

4. Drain fully with air pressure if the unit will be stored for more than 2 hours, or if the room may approach the coolant's freezing point.

SOURCE Bitdeer, "SealMiner A2 Series Hydro Cooling: How to Install and Operate Safely". Procedures are shown for the SealMiner hydro range.

03 CHAPTER Initial Setup

These steps take a racked SealMiner A4 Pro Hyd to its web interface. If your miner is hosted by OneMiners, our team does this for you; skip to Chapter 8.

3.1 Unboxing and inspection

- Confirm the label shows **SealMiner A4 Pro Hyd**.
- Inspect the quick connectors, power interface and front panel (Ethernet port, status LEDs, IP Report and reset buttons).
- Keep the packing for transport and warranty returns.

3.2 Finding the IP address

1. The miner uses **DHCP** by default. Connect it to a network with a DHCP router.
2. Run the **Sealminer Tool** on a PC on the same network and start a scan.
3. Hold the **IP Report** button for 5 seconds. The miner's IP appears in the tool.

3.3 Logging in

1. Enter the IP address in a web browser.
2. Log in with username `seal` and password `seal`.
3. Change the password after the first login.
4. Optional static IP: **Network** › **Settings**. Changes take effect without a reboot.

SOURCE Bitdeer, SealMiner setup guides (A2 air and hydro): Sealminer Tool, default login and network settings. Confirm on your A4 Pro Hyd firmware.

04 CHAPTER Mining Configuration

The SealMiner A4 Pro Hyd mines SHA-256 coins, mainly Bitcoin (BTC).

4.1 Setting up pools

1. Open the pool settings in the web interface.
2. Enter the pool URL and worker name (and password if your pool needs one) for each pool.
3. Save. Bitdeer's guide states pool changes apply without a reboot.

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.sm-a4prohyd01`.
Password	Optional. Most pools accept any value, such as `x`.

COIN AND POOL
The SealMiner mines SHA-256; this manual assumes Bitcoin (BTC). For many units, use the Sealminer Management Tool for batch configuration.

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 Bitdeer, SealMiner setup guide: Pool configuration.

05 CHAPTER Monitoring Performance

Judge performance by the average hashrate, and watch the coolant values alongside it.

5.1 What to watch

The dashboard shows total and per-board hashrate, temperatures, cooling status and pool connectivity.

≈ 680 TH/s	20–53 °C	< 1 %
Rated	Inlet coolant	Pool rejection rate

Bitdeer tolerances: hashrate and efficiency ±5%, power ±10% (DL1) or as published.

COOLING FIRST
If hashrate drops, check the inlet temperature, flow and pressure before anything else. Air in the loop and blocked filters are the most common causes.

SOURCE Bitdeer, SealMiner hydro guide: Monitoring.

06 CHAPTER Firmware and Maintenance

Keep the firmware current and the loop within Bitdeer's coolant limits.

6.1 Firmware

USE THE RIGHT FILE
Install only firmware Bitdeer publishes for the **SealMiner A4 Pro Hyd**, from Bitdeer or the OneMiners Manuals & Firmware Library. The Sealminer Management Tool handles batch firmware updates. Keep power on during an upgrade.

6.2 Component replacement

Control board, hashboard and power-supply replacement follow the procedures in section 11 of Bitdeer's user manual. Follow them exactly; hosted customers should leave this to the OneMiners repair team.

6.3 What voids Bitdeer's warranty

- Non-compliant coolant or piping (including copper), or a missing expansion tank or relief valve.
- Incomplete loop cleaning, or improperly inserted connectors.
- Failing to drain after shutdown, condensation damage, or damage from unfiltered debris.

SOURCE Bitdeer, "SealMiner A2 Series Hydro Cooling: How to Install and Operate Safely".

07 CHAPTER Troubleshooting

Start with the symptom table. Hosted customers: contact OneMiners service rather than attempting repairs.

SYMPTOM	CHECK
No power	Check the supply is 3-phase 380–415 V and the breaker is on. Check the power connection and polarity.
IP not found	Check DHCP and the cable. Hold IP Report for 5 s while the Sealminer Tool is scanning.
Pool won't connect	Re-check the pool URL, port and worker name, DNS and gateway.
Low hashrate or protection	Check inlet temperature (20–53 °C normal · 20–43 °C high-hash (A4 hydro, Hydro Series guide)), flow and pressure. Purge air, open valves and clean filters.
Condensation or leak	Power off first. Don't restart until the miner is dry and the leak is fixed.

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.

CHAPTER 08

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 SealMiner A4 Pro Hyd.

8.1 Miner details

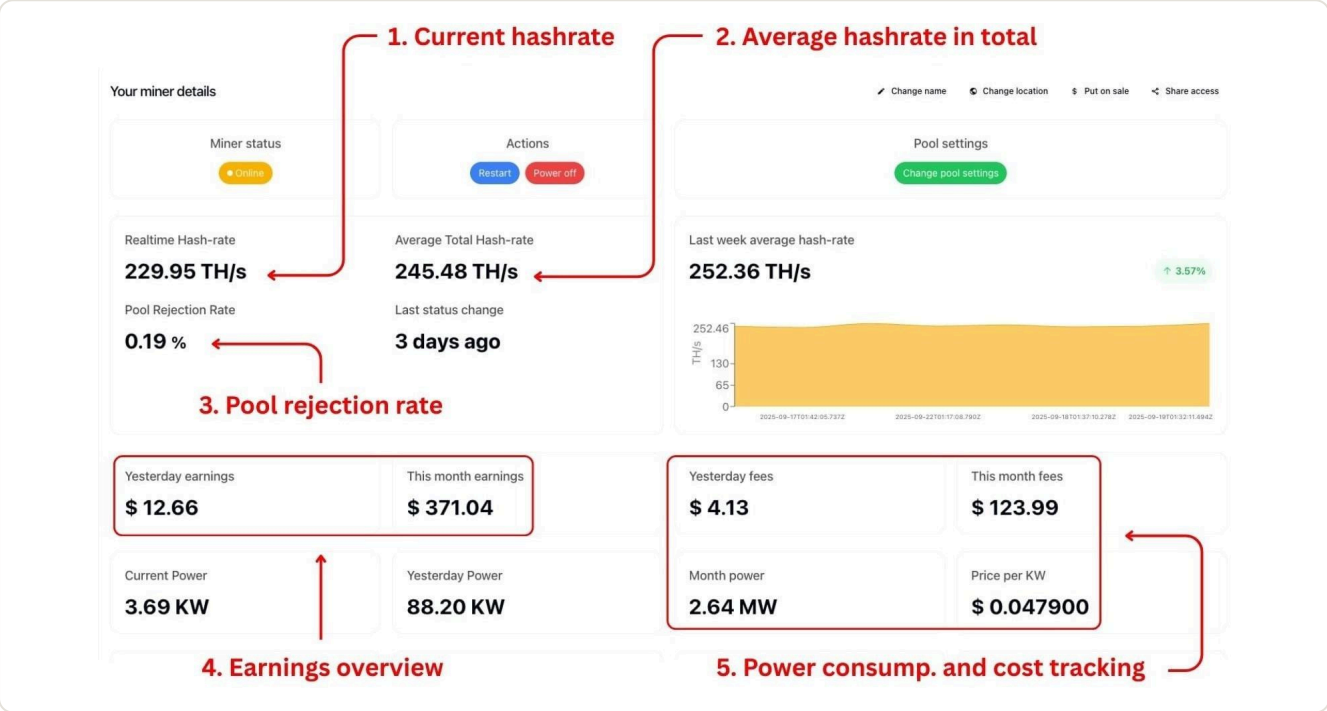


Figure 8-1 Miner details on OneMiners platform v1.2 (example values).

1 · Current hashrate	Real-time hashrate (for the SealMiner A4 Pro Hyd, 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 SealMiner A4 Pro Hyd, expect about 660–700 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

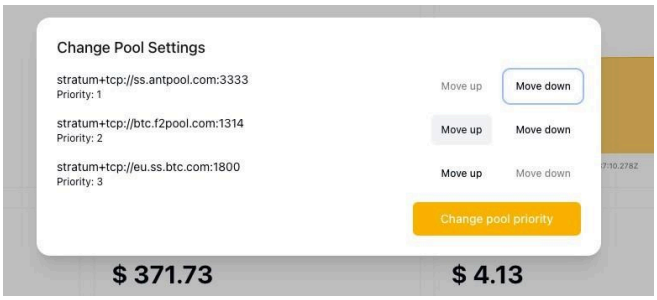


Figure 8-2 Change Pool Settings.

- 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

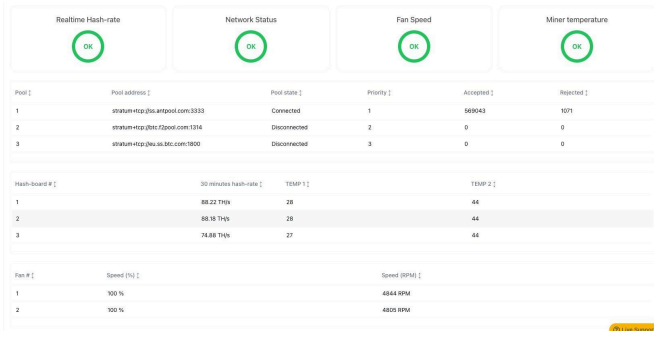


Figure 8-4 Hardware status (example from an air-cooled miner).

- **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.

> **HYDRO UNITS**
> The SealMiner A4 Pro Hyd is liquid-cooled. Fan readings, if any are shown, don't describe its cooling. Watch board and coolant temperatures and the cooling alerts instead.

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.
- Hydro-cooled units need sites with a liquid-cooling loop. Ask sales which locations currently accept the SealMiner A4 Pro Hyd.

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 SealMiner A4 Pro Hyd, this includes damage from incorrect voltage, frozen or non-compliant coolant, poor coolant quality, loose connectors, unofficial firmware, 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.

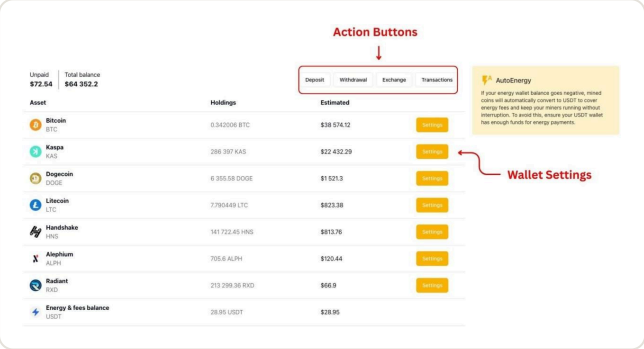


Figure 10-1 Wallet section.

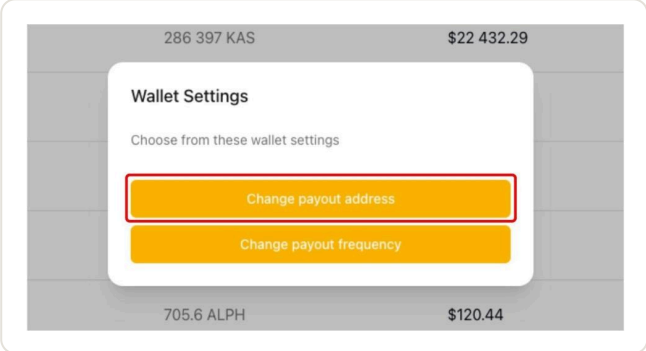


Figure 10-2 Changing the payout address.

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.

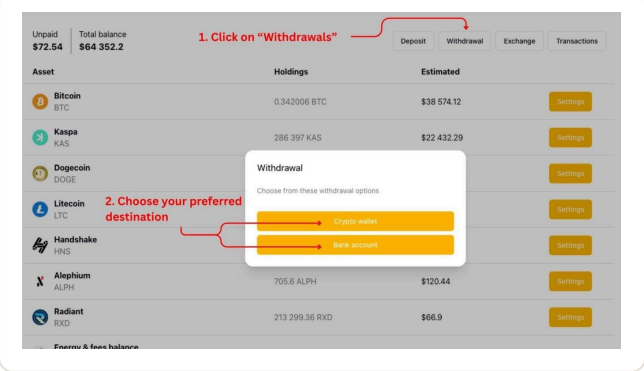


Figure 10-3 Choosing a withdrawal destination.

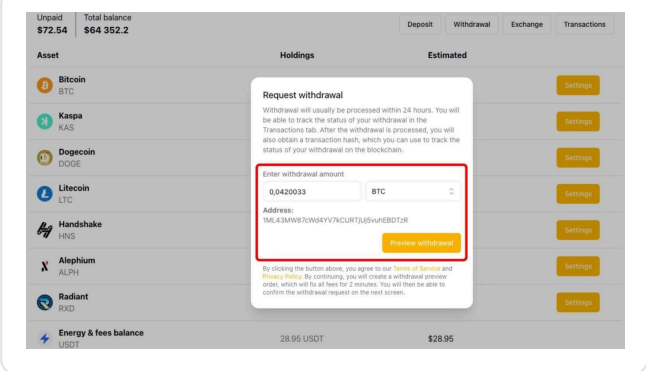


Figure 10-4 Choosing currency and amount.

10.3 Exchange

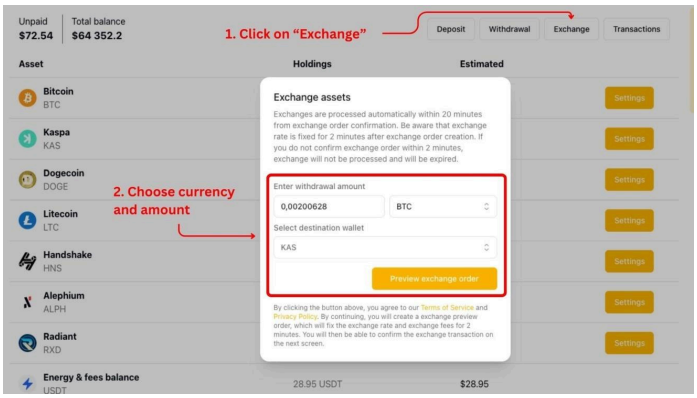


Figure 10-5 Exchanging currencies.

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

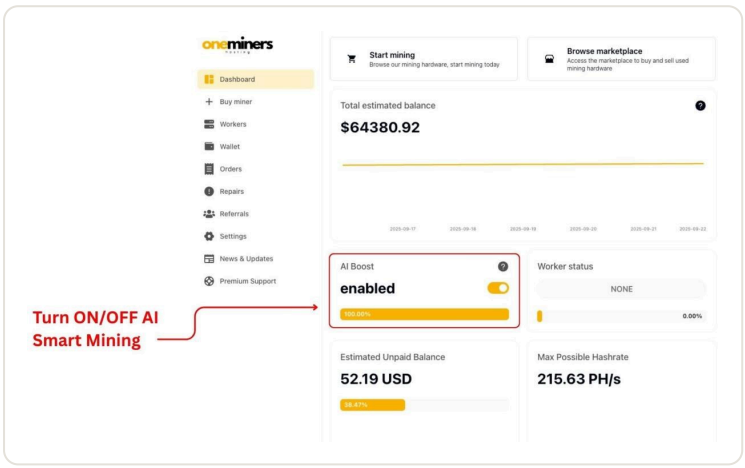


Figure 11-1 AI Boost toggle on the dashboard (platform v1.2).

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.

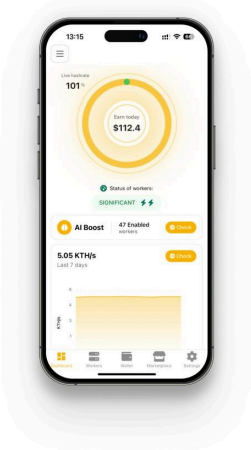
Results depend on hardware and market conditions and aren't guaranteed. More information: oneminers.com/pages/ai-smart-mining.

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 SealMiner A4 Pro Hyd 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 SealMiner A4 Pro Hyd, use 680 TH/s and 7,412 W with your own price per kWh. Estimates aren't financial advice.

12 CHAPTER Official Resources and Support

12.1 Resources

BITDEER
SEALMINER firmware and manuals
www.bitdeer.com/shop/support/firmware

BITDEER
Support centre
bitdeersupport.zendesk.com

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

ONEMINERS
Product page
oneminers.com/products/sealminer-a4-pro-hyd-680-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. ASIC Miner Value, SealMiner A4 Pro Hydro: release, hashrate, power, efficiency, voltage, size, weight, environment.
2. ForkLog, "Bitdeer launches SealMiner A4 bitcoin miner with 9.45 J/TH energy efficiency".
3. OneMiners product page, Sealminer A4 Pro Hyd 680 TH/s.
4. Bitdeer Hydro Series Cooling User Guide (2026-07-13), as cited by Alliance Chemical: pressure, piping, filtration and water quality for A2, A3 and A4 hydro servers.
5. Bitdeer, "SealMiner A2 Series Hydro Cooling: How to Install and Operate Safely" and A2 air setup guide: installation, Sealminer Tool, default login (seal / seal), pools, warranty conditions.
6. 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.