BITMAIN · ANTMINER

Z15 Pro
860 KSol/s

Air-cooled Zcash miner · Equihash · Model 240-Z



COIN · ALGORITHM
Zcash · Equihash

COOLING
Air (fans)

POWER SUPPLY
APW12 · 2 inputs

HARDWARE
3 boards · 18 chips

Product Manual

Setup, operation, maintenance and OneMiners hosting guide

Version 1.2
Updated November 2026
Specifications verified 7 Nov 2026

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About this manual

This manual covers the **Bitmain Antminer Z15 Pro (model 240-Z)** in the **860 KSol/s** bin sold by OneMiners. All Z15 Pro bins (800, 820, 840 and 860 KSol/s) use the same hardware and firmware. It does **not** cover the original Antminer Z15 (420 KSol/s), which uses a different power supply and firmware.

Chapters 1 to 7 are based on Bitmain's Z15 Pro specification and server manual. Each section that reproduces manufacturer content is marked with a **Source** tag. Chapters 8 to 11 cover the OneMiners platform, hosting, warranty and wallet, and are marked **OneMiners**.

Before you start

CHECK
Z15 Pro · 240-Z
Confirm the model and bin on the label.

POWER
200–240 V · 2 cords
Both inputs must be connected. Cords not included.

ROOM
0–40 °C · 10–90% RH
Clean, ventilated, away from people (75 dBA).

PAYOUT
Zcash wallet
Plus a Windows PC for IP Reporter.

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 published by the manufacturer 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 Antminer Z15 Pro is Bitmain's air-cooled Equihash server for Zcash (ZEC), released in 2023. It roughly doubles the original Z15's hashrate in a 19-series-style case with a built-in APW12 power supply. Every unit is tested and configured before shipping.



Figure 1-1 Antminer Z15 Pro 860 KSol/s. Image: OneMiners product photo.

1.1 Z15 Pro bins

BIN	HASHRATE	POWER ON WALL	SOURCE
800 KSol/s	**800 KSol/s**	**2,648 W**	OneMiners listing; power calculated at 3.31 J/KSol
820 KSol/s	**820 KSol/s**	**2,714 W**	OneMiners listing; power calculated at 3.31 J/KSol
840 KSol/s	**840 KSol/s**	**2,780 W**	Bitmain specification
860 KSol/s (this manual)	**860 KSol/s**	**2,849 W**	OneMiners listing

The 860 KSol/s figure is from the OneMiners listing; 800 and 820 KSol/s power is calculated at Bitmain's rated 3.31 J/KSol. Bitmain's 2023 server manual lists 2,650 W (±10%) and 3.15 J/KSol for the 840 bin; this manual uses the newer web specification (2,780 W, 3.31 J/KSol).

1.2 Specifications

ITEM	VALUE
PRODUCT	
Model / version	**Z15 Pro · 240-Z**
Algorithm / coins	**Equihash · ZEC / ZEN** [1]
Hashrate	**860 KSol/s (±3%)**
Power on wall @25 °C	**2,849 W (±5%)**
Efficiency @25 °C	**3.31 J/KSol (±5%)**
POWER SUPPLY (APW12)	
AC input voltage	**200–240 V** [2]
AC input frequency	**50–60 Hz**

ITEM	VALUE
HARDWARE	
Network	**RJ45 Ethernet 10/100M**
Size, unpacked (L×W×H)	**428 × 195 × 290 mm**
Size, packed (L×W×H)	**597 × 317 × 427 mm**
Net / gross weight	**16.9 kg / 18.8 kg**
Noise @25 °C	**75 dBA** [3]
ENVIRONMENT	
Operating temperature	**0–40 °C**

ITEM	VALUE
AC input current	**20 A, two inputs, 10 A each**
Hash boards / chips	**3 / 18**

ITEM	VALUE
Storage temperature	**−20 to 70 °C**
Operating humidity	**10–90% RH, non-condensing**
Operating altitude	**≤ 2,000 m** [4]

[1] Check that a coin is still mineable on its network before pointing the miner at it. [2] Wrong input voltage may damage the server. The Z15 Pro doesn't support 110–120 V. [3] Measured with fans at maximum speed. [4] Above 900 m, the maximum operating temperature drops by 1 °C for every 300 m.

SOURCE Bitmain, Z15 Pro specifications (support.bitmain.com) and Z15 Pro Server Manual.

1.3 Hardware and power supply

Power supply	APW12, built into the server, with **two power inputs**. The server runs only when both are connected. Two power cords are needed and must be bought separately.
Controller panel	ETH port · **IP Report** button · **Reset** button · status lights
Cooling	Fans at both ends. Fan speed is automatic by default and adjustable as a percentage.

SOURCE Bitmain, Z15 Pro Server Manual: Overview and Components.

02 CHAPTER Safety and Installation Requirements

The Z15 Pro draws close to 3 kW through two power inputs and produces loud, hot exhaust air. Plan the circuits and the room before switching it on.

2.1 Safety warnings

DANGER · ELECTRICAL

- Connect the equipment to an **earthed** mains socket-outlet that is installed near the equipment and easy to reach.
- The equipment has **two power inputs** and runs only when both are connected. When powering off, **switch off all inputs**.
- Use only 200–240 V AC. Wrong input voltage may damage the server.

CAUTION · EQUIPMENT

- Don't remove any screws or cables attached to the product.
- **Don't press the metal button on the cover.**
- The actual server may differ slightly from the illustrations.

SOURCE Bitmain, Z15 Pro Server Manual: Cautions.

2.2 Electrical requirements

Input	**200–240 V AC, 50–60 Hz, two inputs**
Current	**20 A total, 10 A per input**
Typical load	**2,849 W (±5%)**
Power cords	**Two, each rated for at least 10 A (not included)**

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	0–40 °C
Operating humidity	10–90% RH, non-condensing
Storage	−20 to 70 °C · 5–95% RH
Altitude	< 2,000 m

- Keep the site away from heavy pollution (smelters, coal mines: > 5 km), chemical or electroplating plants and the sea or salt lakes (> 3.7 km).
- No transformers > 10 kA within 20 m, no high-voltage lines within 50 m, no radio transmitters > 1,500 W within 100 m.
- Suspended dust ≤ 0.2 mg/m³, sand ≤ 30 mg/m³. No conductive or corrosive dust.

Airflow and placement

- Keep the fan intake and exhaust clear and don't let hot exhaust air flow back into the intake.
- At 75 dBA, the Z15 Pro isn't suitable for living or office spaces.

SOURCE Bitmain, Z15 Pro Server Manual: Environmental Requirements.

03 CHAPTER Initial Setup

These steps take a new Z15 Pro from the box to its web dashboard. 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 crush damage. Confirm the label shows **Z15 Pro**, model 240-Z. Check the fans spin freely and keep the packing for transport.

1. **Network**
   Connect an Ethernet cable to the **ETH** port. The default DHCP protocol assigns an IP address automatically.
2. **Power**
   Connect **both** power cords to the APW12 and switch on the supply. The fans spin up during start-up.

3.2 Finding the miner's IP address

1. Download `IPReporter.zip` from shop.bitmain.com/support/download or the OneMiners Manuals & Firmware Library. It runs on Windows only.
2. Extract it and run `IPReporter.exe` as administrator.
3. Choose **Shelf, Step, Position** (farm) or **Default** (single server), then click **Start**.
4. On the controller, hold **IP Report** until it beeps (about 5 seconds). The IP address appears on your computer.

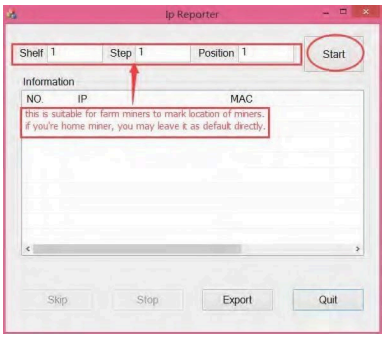


Figure 3-1 IP Reporter. © Bitmain.

3.3 Logging in and network settings

1. Enter the IP address in a web browser on the same network. Log in with `root` as both username and password, then change the password (6.2).
2. Optional static IP: set **Protocol** to **Static**, enter the IP address, subnet mask, gateway and DNS server, then click **Save**.

Dashboard menu map

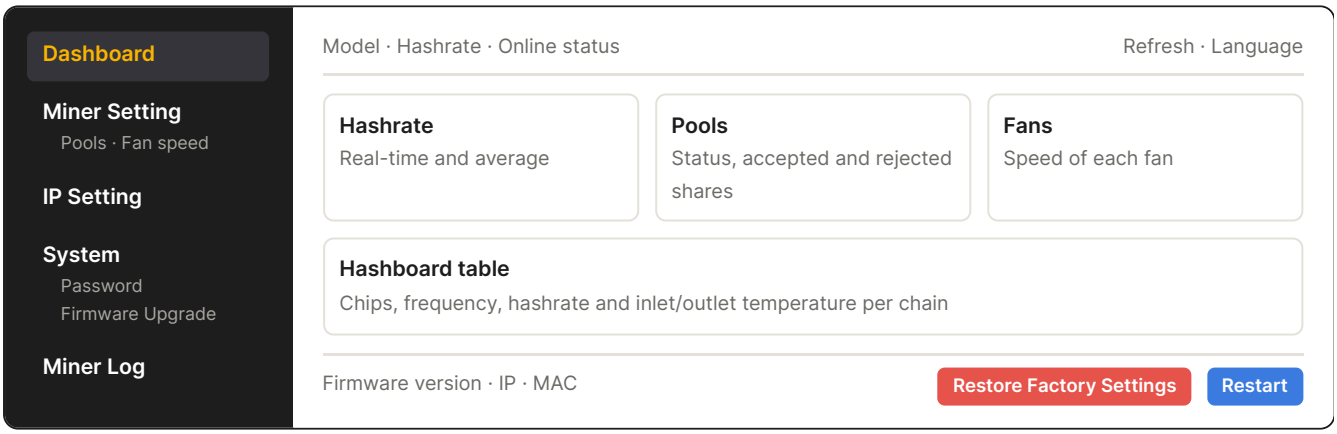


Illustration of the Antminer web interface layout, not a screenshot. Labels can differ slightly between firmware releases.

SOURCE Bitmain, Z15 Pro Server Manual: Setting up the Server.

04 CHAPTER Mining Configuration

The Z15 Pro mines Equihash coins, mainly Zcash (ZEC). You need a Zcash pool and a Zcash wallet address. The miner holds three pools in priority order.

4.1 Setting up pools

1. Open `Miner Setting`.
2. Enter up to three pools. Pool 1 has the highest priority; lower pools are used only when all higher pools are offline.
3. Click **Save**. The miner restarts and connects to Pool 1.

Worked example: Kryptex Pool

FIELD	VALUE
Mining address	`stratum+tcp://zec.kryptex.network:7042` (regional: `zec-eu`, `zec-us`, `zec-sg`, `zec-ru`.kryptex.network, same port)
Name	`ZEC_WALLET_ADDRESS.WORKER`, for example `t1Abc…xyz.z15pro01`. Use Latin letters or numbers for the worker.
Password	`x`, or leave blank

SOURCE Kryptex Pool, Antminer Z15 / Z15 Pro setup article, checked 7 November 2026. Pool addresses change; confirm on the pool's website.

WALLET ADDRESS
Kryptex's example uses a transparent Zcash address (starting with `t1`). Check which address types your pool accepts before entering a shielded address.

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

4.2 Fan speed

Fan speed can be set as a percentage, but Bitmain recommends keeping the default. If no percentage is selected, the server adjusts fan speed automatically.

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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 Bitmain, Z15 Pro Server Manual: Configuring the Server.

CHAPTER 05

Monitoring Performance

Judge performance by the average hashrate after the miner has run for some time, not by the real-time figure.

5.1 Dashboard values

VALUE	MEANING
Number of chips	Chips detected in each chain (six per board). A lower count points to a hashboard fault.
Frequency	ASIC frequency setting.
Real hashrate	Real-time hashrate of each hashboard.
Inlet temp / Outlet temp	Temperature at the inlet and outlet (°C).
Chip state	Green icon = normal · red icon = abnormal.

5.2 What "normal" looks like

834–886 KSol/s	2,707–2,991 W	< 1 %
Average hashrate (±3%)	Wall power (±5%)	Pool rejection rate

Calculated from the bin's rated values and Bitmain's tolerances at 25 °C.

TEMPERATURE
If temperatures climb, the firmware protects the hardware and mining stops. Check the Miner Log, then fix airflow, fans or room temperature before restarting (Chapter 7).

SOURCE Bitmain, Z15 Pro Server Manual: Monitoring Your Server.

06 CHAPTER Firmware and Maintenance

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

6.1 Upgrading firmware safely

DANGER · KEEP POWER ON
Keep the server powered throughout the upgrade. If power fails before the upgrade completes, the server must go back to Bitmain for repair.

USE THE Z15 PRO FILE
Only install firmware Bitmain publishes for the **Antminer Z15 Pro**, from shop.bitmain.com/support/download (choose ZEC/ZEN, Equihash, then Z15 Pro) or the OneMiners Manuals & Firmware Library. **Never install Z15 firmware** on a Z15 Pro; they are different generations.

1. Check the current version (a date, for example `20230218`) at the bottom of the dashboard.
2. Open **System** › **Firmware Upgrade**. Leave **Keep settings** selected to keep your configuration.
3. Select the upgrade file and click **Update**. Restart the server when it finishes.

6.2 Changing the password

Open **System** › **Password**, enter the new password and click **Save**.

6.3 Restoring factory settings

1. Turn on the server and let it run for 5 minutes.
2. On the controller front panel, press and hold **Reset** for 10 seconds.
3. The server reboots with default settings. The red LED flashes once every 15 seconds when the reset has succeeded.

SOURCE Bitmain, Z15 Pro Server Manual: Administering Your Server.

6.4 Preventive maintenance

WHEN	TASK
Daily / remotely	Check that all three chains report, the average hashrate is in range and temperatures are stable.
Monthly	Check room temperature and humidity against 2.3. Look for dust on the fan guards.
Every 1–3 months	Switch off **both** inputs and unplug, then clean fans and heat sinks with dry compressed air. Check for new Z15 Pro firmware.

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

Intervals are OneMiners recommendations; Bitmain doesn't publish a schedule. Clean more often in dusty sites.

07 CHAPTER Troubleshooting

Start with the symptom table, then check **Miner Log** for the last error lines. Hosted customers: don't attempt repairs yourself; contact OneMiners service.

SYMPTOM	CHECK
Miner doesn't power on	Make sure **both** power cords are connected and both circuits are live. Check the supply is 200–240 V.
No network / IP not found	Check the cable, switch port and DHCP. Run IP Reporter as administrator and hold **IP Report** until it beeps.
Pool won't connect	Re-check the pool address and port, the Zcash wallet and worker format, gateway and DNS. Make sure the port isn't blocked by a firewall.
Low or unstable hashrate	Compare the average hashrate with the range in 5.2. Check each chain's chip count and chip state. Check inlet temperature and dust. Update the firmware.
Mining stops on temperature	Check the room is within 0–40 °C, the fans are running and intake and exhaust are clear. Clean, then restart.
Smell, unusual sound or smoke	Switch off both inputs immediately and contact service.

SOURCE Based on Bitmain's Z15 Pro Server Manual and support topics. Bitmain doesn't publish an error-code table for the Z15 Pro.

ONEMINERS
For a hosted miner, send the symptom, the last lines of the Miner Log, 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 Z15 Pro.

8.1 Miner details

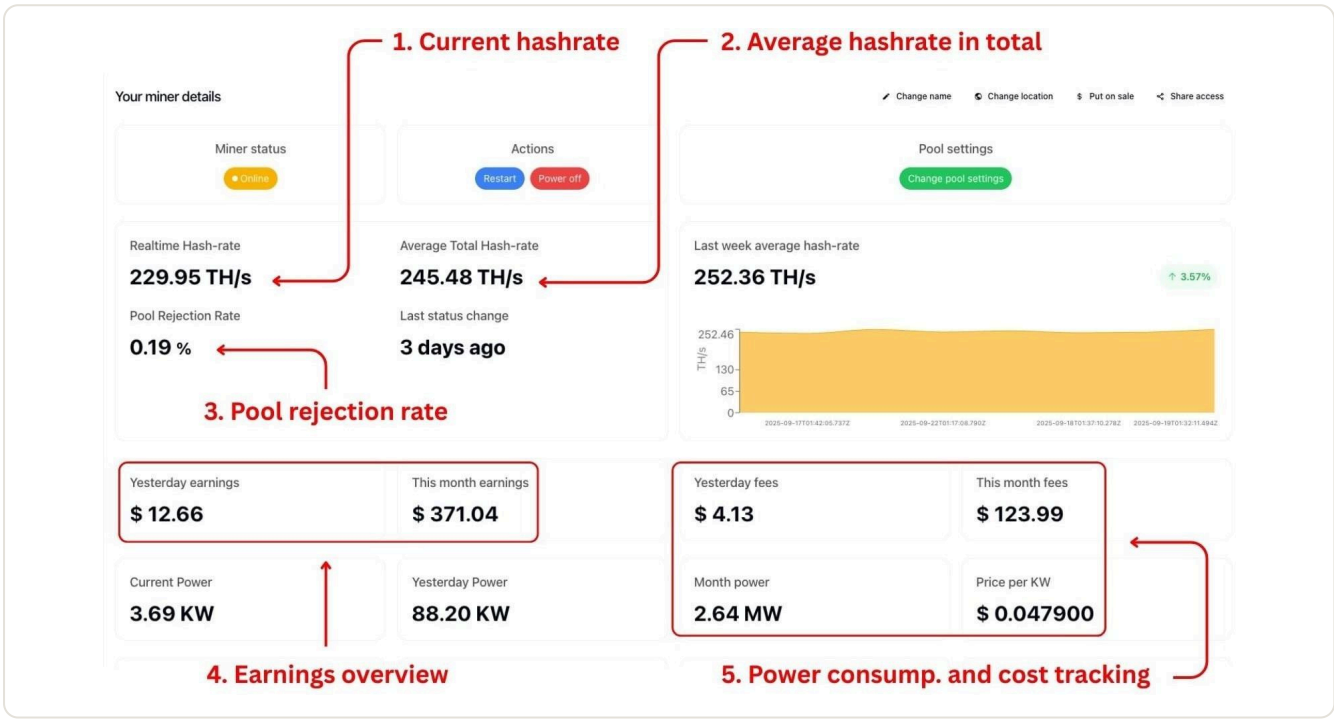


Figure 8-1 Miner details on OneMiners platform v1.2 (example values).

1 · Current hashrate	Real-time hashrate (for the Z15 Pro, in KSol/s; OneMiners listings write KH/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 860 KSol/s bin, expect 834–886 KSol/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

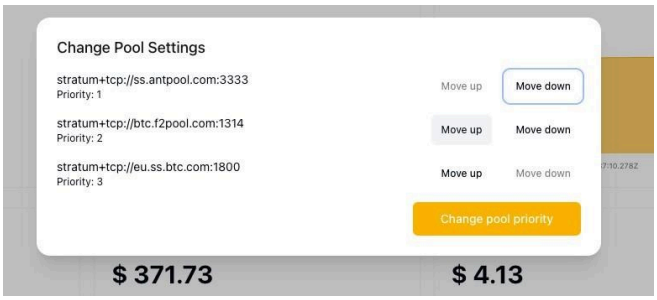


Figure 8-2 Change Pool Settings.

- 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

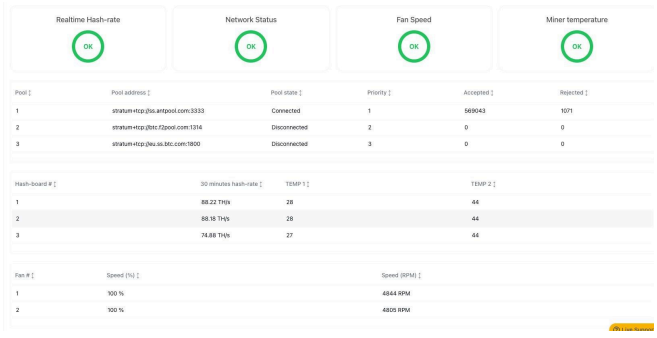


Figure 8-4 Hardware status (example from an air-cooled miner).

- **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.
- Air-cooled Zcash miners like the Z15 Pro are accepted at most sites. Ask sales which locations currently host the Z15 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 Z15 Pro, this includes damage from running outside 0–40 °C or 200–240 V AC, blocked airflow, installing Z15 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.

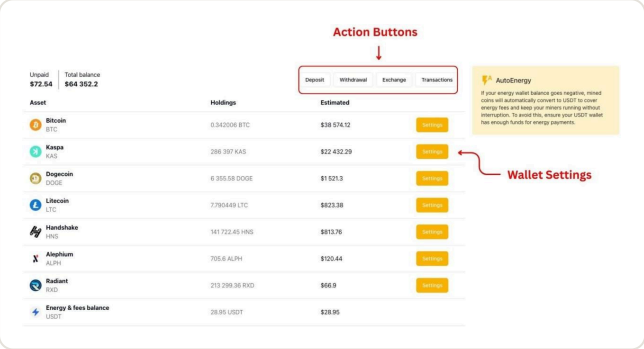


Figure 10-1 Wallet section.

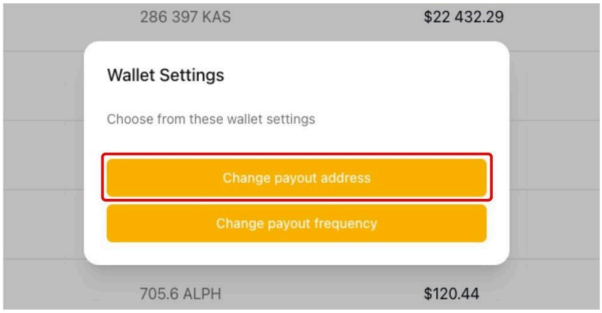


Figure 10-2 Changing the payout address.

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.

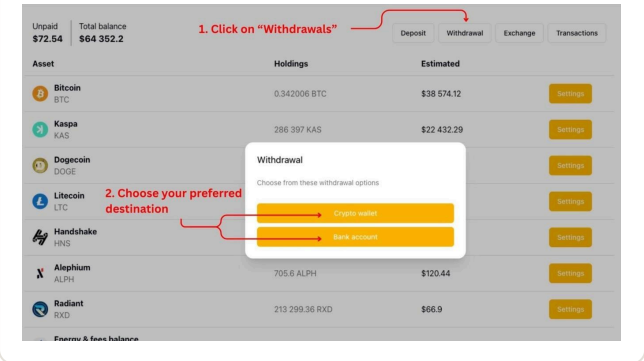


Figure 10-3 Choosing a withdrawal destination.

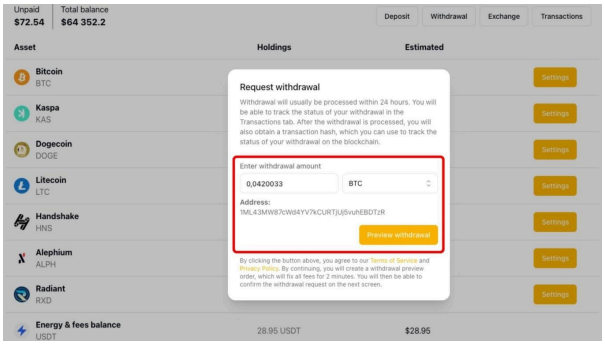
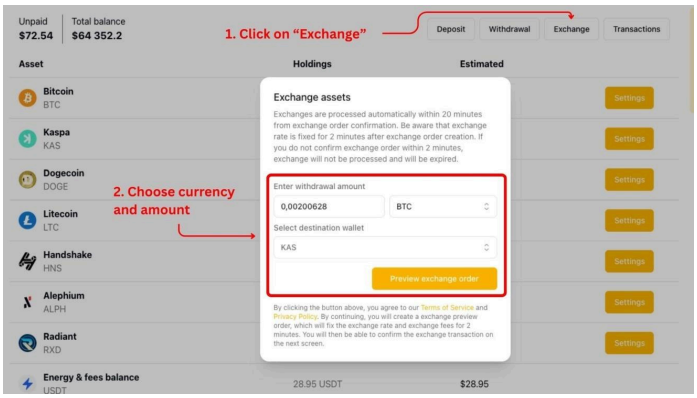


Figure 10-4 Choosing currency and amount.

10.3 Exchange



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.

Figure 10-5 Exchanging currencies.

> **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

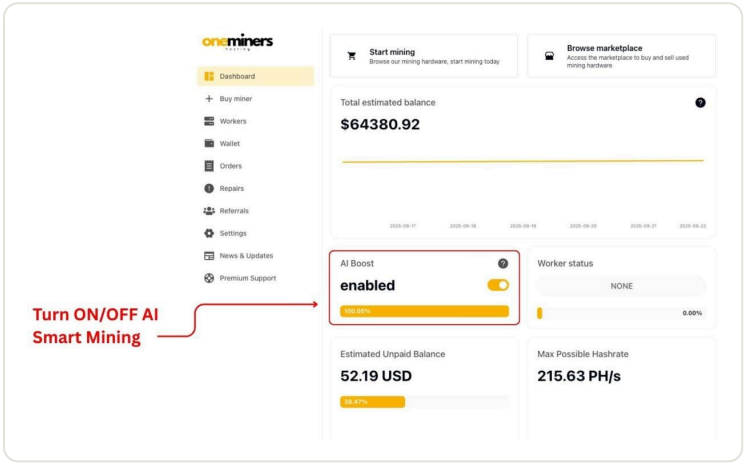


Figure 11-1 AI Boost toggle on the dashboard (platform v1.2).

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.

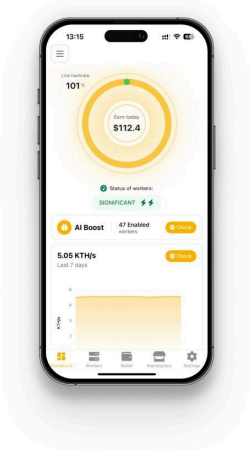
Results depend on hardware and market conditions and aren't guaranteed. More information: oneminers.com/pages/ai-smart-mining.

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

Zcash mining income depends on the ZEC price, network difficulty 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
- Zcash miners collection: oneminers.com/collections/zcash-miners

For this bin, use 860 KSol/s and 2,849 W with your own price per kWh. Estimates aren't financial advice.

12 CHAPTER Official Resources and Support

12.1 Resources

BITMAIN
Firmware and IP Reporter
shop.bitmain.com/support/download

BITMAIN
Support centre
support.bitmain.com

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

ONEMINERS
Product page
oneminers.com/products/antminer-z15-pro-860-kh-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. Bitmain, Z15 Pro specifications (support.bitmain.com, model 240-Z): hashrate, power, electrical, size, weight, noise, environment.
2. Bitmain, Z15 Pro Server Manual (2023): cautions, power inputs, setup, pools, monitoring, administration, environment, regulations.
3. OneMiners product listings for the Z15 Pro bins.
4. D-Central, Antminer Z15 family owner hub: generation and firmware notes.
5. Kryptex Pool, Antminer Z15 / Z15 Pro setup article: Zcash pool addresses and worker format.
6. OneMiners: product pages, 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
V1.2	Nov 2026	Rewritten for the OneMiners media-kit template from Bitmain's Z15 Pro specification and server manual. Focused on the 860 KSol/s bin, with a table of all four bins. Kryptex Zcash pool example. Warning against Z15 firmware. Current warranty, hosting and contact details. Source tags on manufacturer content.
V1.1	—	Version published on the OneMiners library. Not reviewed for this revision.