



VNISH GLOBAL

OFFICIAL PRESENTATION · 2026 EDITION

Every fourth miner already runs on VNISH

THE CONTROL LAYER FOR PROFITABLE BITCOIN MINING

1 000 000+ machines

45 models · 73 official builds

Remote install in minutes

Free download and testing

Documented route back

Independent Cambridge study: 26.4% of surveyed mining hashrate, June 2024



A million machines have already run this firmware

Every generation of the Antminer line, from the S9 era to the S21, taught us the efficiency curve, the thermal limit and the board quirks of that exact model

1 000 000+

MACHINES ON VNISH

Since 2017

SHIPPING WITHOUT A GAP

Every generation

OF THE ANTMINER S LINE

45 models

73 OFFICIAL NAND BUILDS



2017

ANTMINER S7

UP TO 5 TH/s · 250 J/TH



2018

ANTMINER S9

UP TO 14 TH/s · 96 J/TH



2020

ANTMINER S17

UP TO 56 TH/s · 45 J/TH



2021

ANTMINER S19

UP TO 95 TH/s · 34.5 J/TH

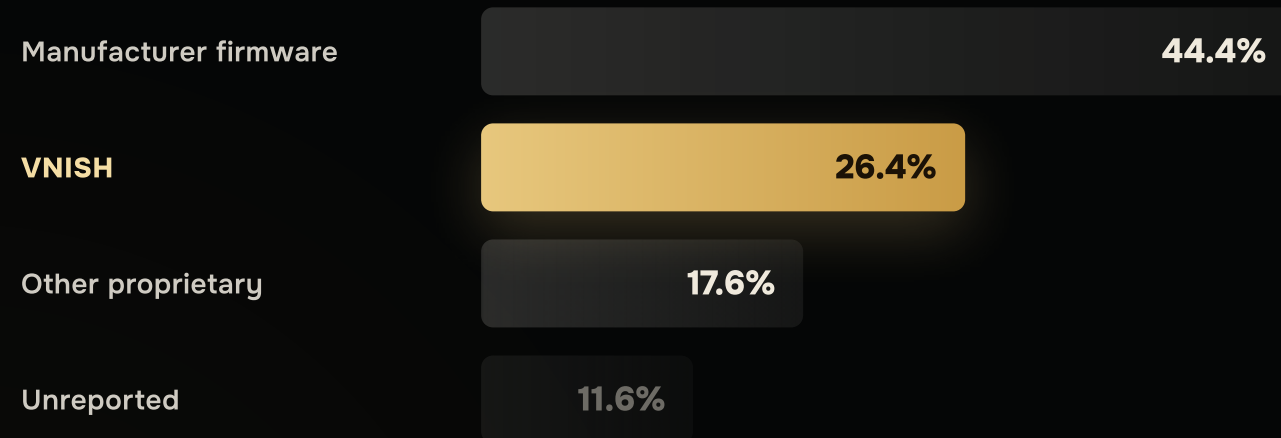


2024

ANTMINER S21

UP TO 200 TH/s · 17.5 J/TH

The largest independent firmware in the Cambridge sample



Share of reported hashrate by firmware type, Cambridge Centre for Alternative Finance survey, June 2024. Every fourth surveyed machine on an independent firmware is running ours



REPORTED HASHRATE, NOT A MARKETING CLAIM

The hardware is fixed. What it does with a kilowatt is not



A miner leaves the factory on one universal setting, chosen for every climate and every site at once. Firmware is where that setting stops being universal and starts belonging to your site

PROFIT PER KILOWATT

01

Hold output, cut watts

Or hold the power envelope and push hashrate. The site decides which answer it needs

HARDWARE LIFETIME

02

Older machines earn longer

Chip-level tuning and thermal policy keep a paid-off fleet inside a profitable window when the market turns

REVERSIBILITY

03

A written route back

Supported configurations keep a documented path to stock, published before the install

Same machine. Two more profitable answers

PERFORMANCE

+25%

HASHRATE



EFFICIENCY

-30%

ELECTRICITY

FACTORY STATE · T21

190 TH/s

3610 W · 19.0 J/TH

SAME MACHINE

VNISH STATE · T21

233.12 TH/s

4318 W · 18.5 J/TH

+22.7% hashrate for 19.6% more power, and efficiency still improves. Three boards at 77.6, 77.9 and 77.6 TH/s add up to the number above

+25%

HASHRATE

more output from hardware you already own

-30%

ELECTRICITY

the industry's main expense, cut

+50%

NET PROFIT*

combined effect, up to

* Combined effect from using all available options and improvements of the solution. Results vary with hardware, power quality, cooling and settings



One machine proves it. A thousand machines pay for it

If a pilot reproduces the operating point above, the same delta repeats across the floor. Two ways to take it, one decision per site

EFFICIENCY ROUTE · SAME HASHRATE

400 kW

lower site load across 1,000 machines

PERFORMANCE ROUTE · SAME POWER ENVELOPE

+9 PH/s

more output across 1,000 machines

Arithmetic from the measured single-machine delta, not a forecast. Your own pilot replaces these figures with yours

No guessed files. No blind flash

Model plus control board plus install method resolve to one published build, with the checksum printed beside it. Two identical looking miners can need two different files

45

SUPPORTED ASIC MODELS

73

OFFICIAL NAND ROUTES

SHA-256

PUBLISHED ON EVERY BUILD

~15 min

PER MACHINE OVER YOUR LAN

SELECT YOUR
FIRMWARE

No tech skills? No problem. We guide every step

SELF INSTALLATION

Version

1.3.4-stable

Model

Antminer S21 Pro

Type

AML

Method

NAND

ROI ASIC Firmware for Bitmain antminers

Antminer S21 Pro
AML - NAND, 1.3.4-stable

DOWNLOAD INSTALL

DOWNLOAD UPDATE

Four control boards cover the whole range · AML, XIL, CV and BB each take a different file

Each step **pays for the next**

01

1-5 machines

BASELINE · INSTALL · OBSERVE

One day under your own load and site conditions. Hashrate, temperature and error rate decide whether step two happens

02

10-20% cohort

COMPARE ECONOMICS AND STABILITY

A named cohort mixed by board and batch carries the change first, with go, hold and stop gates written before the first flash

03

Fleet waves

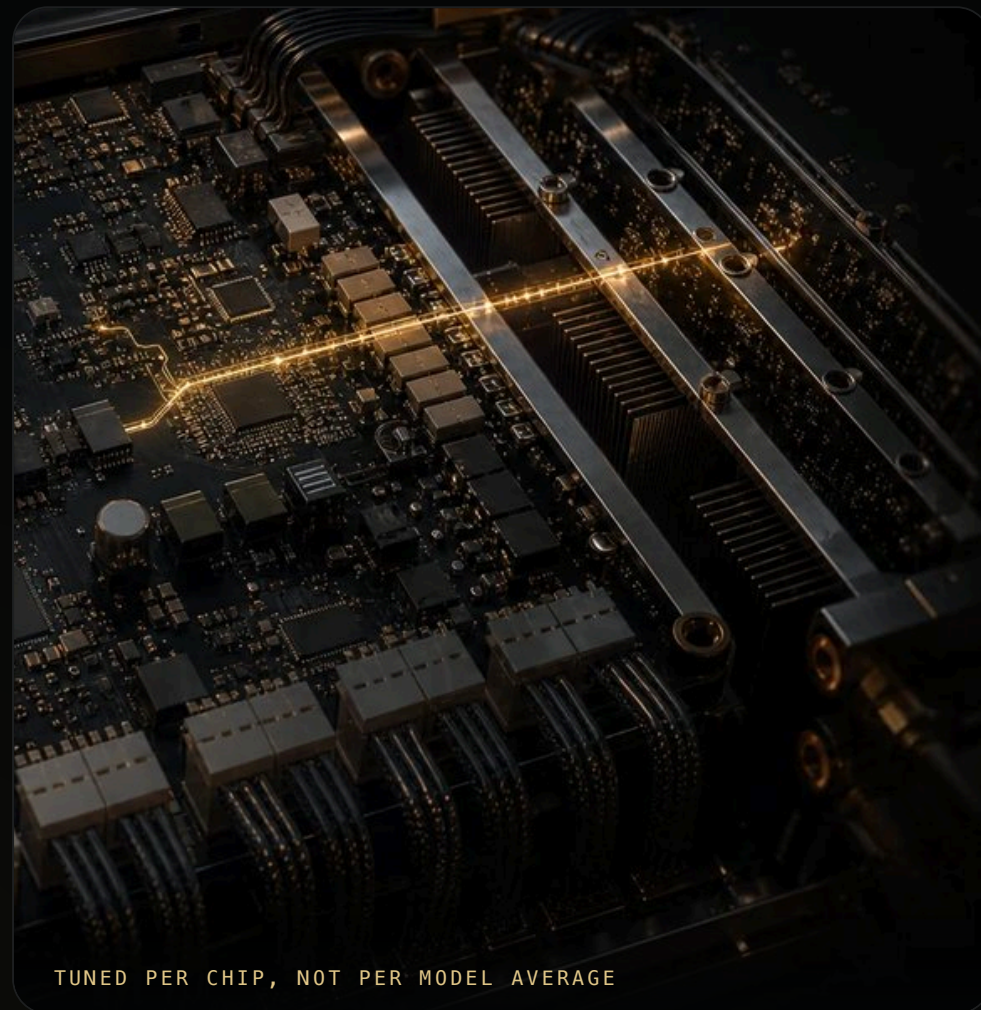
PROPAGATE WHILE GATES STAY GREEN

Never more than a quarter of the floor at once, with a named rollback owner and the stock route reachable for every board type



A NAMED COHORT CARRIES THE CHANGE FIRST

The machine keeps tuning after the install



PER-CHIP AUTOTUNE

01

Silicon level

Clock and voltage tuned per chip, not per model average

POLICY CONTROL

02

Profiles and schedules

Thresholds, presets and remote updates across the fleet

THERMAL POLICY

03

Fans follow the limit

Board temperature and fan duty stay inside the boundary you set

RECOVERY PATH

04

Written before change

The route back stays visible, per model and per control board

The install is local, started by you, on your own network. Nothing is flashed remotely and no credentials leave your site

Telemetry is not decoration. It is the evidence for the next decision



One panel per machine and per fleet: hashrate and its history, board temperatures, power draw, pool state, firmware version and the update route

Zero capex. Prove it before you commit

UPFRONT LICENSE

01

\$0

Download the exact build for your machine and test it on your own hardware before anything is agreed

HOW WE EARN

02

1.8-2.8% dev fee

A share of active hashrate, by model and commercial agreement. We are paid while the machine earns, not before

SUPPORT AND UPDATES

03

Included by use

New releases follow new Bitmain hardware, and the engineers behind them stay reachable



FREE TO TEST, PAID FROM WHAT IT EARNS

FREE TESTING · REMOTE INSTALL · DOCUMENTED ROUTE BACK

One control layer. Four ways to win

Operator OWNED HARDWARE

Improve profit per kilowatt on machines already paid for, and extend the window in which they stay profitable 01

Hosting CLIENT MACHINES

Add measurable client ROI and a service competitors cannot copy from a price list 02

Service and repair WORKSHOPS

Diagnose faster, standardise routes per board, and turn one job into repeat work 03

Partner DISTRIBUTION

Branded builds and referral economics for mining hotels and colocation sites 04



Mining Technology of the Year, and shipping since 2017

Blockchain Life 2025 named VNISH Mining Technology of the Year. Behind the award is a firmware line that has followed every Antminer generation since the S9, and a team that answers when a machine goes silent

2017

SHIPPING SINCE

2025

MINING TECHNOLOGY
OF THE YEAR

10

LANGUAGE EDITIONS

The pilot earns the next step

Three questions decide whether a cohort becomes a fleet, and all three are answered by your own machines rather than by this deck

ECONOMICS

Profit per kilowatt

TH/s, watts, J/TH and cost per TH measured against your own stock baseline

01

STABILITY

Behaviour under load

Rejects, thermals, restarts and uptime across a full day of your site conditions

02

OPERATIONS

Effort per machine

Install time, monitoring load and how quickly a machine can be returned to stock

03



IF ANY OF THE THREE FAILS, THE ROLLOUT STOPS. THAT IS THE POINT OF A GATE



www.vnish.global
www.vnish.world · www.vnish.ninja · www.roiasic.com

Start with one to five miners

Take the exact build for your machine, verify the checksum, run it for a day and let the numbers decide the rest

vnish.global

[Talk to an engineer](#)

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