POWER MINING · AIR-COOLED CONTAINER

20ft ASIC-162
567 kW

Air-cooled 20 ft Bitcoin mining container · 162 S19 / 144 S21 slots



MAKER
Power Mining

COOLING
Air · recirculation option

POWER
3-phase · 1,000–1,250 A

FORMAT
20 ft ISO · 4.99 t operating

Product Manual

Setup, operation, maintenance and OneMiners hosting guide

Version 1.0
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Contains manufacturer information © Power Mining, summarised for customer reference.

About this manual

This manual covers the **20ft ASIC-162 Bitcoin Mining Container** made by **Power Mining**: the 20 ft standard air-cooled build with **162** rack positions for S19-class miners (144 for S21-class).

Specifications come from Power Mining's product page. Items OneMiners lists that Power Mining doesn't document (Schneider/ABB components, Grafana monitoring) are marked. Installation guidance is OneMiners' general container practice.

Sections that reproduce or summarise manufacturer or reseller data carry a **Source** tag. Values that sources disagree on, or that no source confirms, are marked **Needs verification** and listed in section 1.4. Planning figures marked *calculated* are OneMiners arithmetic from the published values, not manufacturer ratings. Chapters 9 and 10 cover OneMiners services and support and are marked **OneMiners**.

Before you start

POWER	SITE	CLIMATE	NETWORK
3-phase · 1,000 A inlet	**Level base**	**Cold sites**	**7 × 24-port switches**
1,250 A for the S21 build.	4,990 kg operating.	Ask for hot-air recirculation.	Router with LAN / SIM.

How notices are used

DANGER
Risk of electric shock, arc flash, fire, crushing or falling loads. Do not continue until the condition is met.

CAUTION
Risk of damage to the container or miners, lost uptime, or a failed inspection. Read before acting.

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

ONEMINERS
Applies to containers bought, deployed or hosted through OneMiners.

Copyright and disclaimer

© OneMiners, 2026. This manual combines information published by the manufacturer, Power Mining (powermining.io), and other cited sources with planning guidance written by OneMiners. Manufacturer content remains the property of its owner and is summarised here for the convenience of OneMiners customers. All product names and trademarks belong to their respective owners.

A mining container is electrical infrastructure. Its installation must be designed, inspected and connected by licensed electrical engineers and contractors under local codes, utility rules and permits. Nothing in this manual replaces the manufacturer's installation documents or a site engineer's design. Specifications may change without notice. Profitability and hosting information is guidance only and is not financial advice.

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CHAPTER 01

Product Overview

Power Mining's 20 ft container is a filtered, air-cooled mining room with racks for 162 S19-class or 144 S21-class miners, a main distribution board, three-phase PDUs and pre-installed networking. Cold-climate options include hot-air recirculation and controllable dampers.



Figure 1-1 20ft ASIC-162 Mining Container. Image: OneMiners product photo.

1.1 Key figures

162 / 144 slots	567 / 533 kW	4,990 kg
S19 / S21 build	Power load	Operating weight

1.2 Specifications

ITEM	VALUE
CONTAINER	
Manufacturer / model	**Power Mining · 20 ft air-cooled, standard**
Size (L×W×H)	**6,060 × 2,440 × 2,890 mm (20 ft ISO)**
Weight	**2,400 kg net · 4,990 kg operating**
Racks	**162 (S19) in 6×9×3 · 144 (S21) in 6×8×3**
Setup time	**1 day**
ELECTRICAL	
Power load	**567 kW (S19) · 532.8 kW (S21)**
Inlet / MDB	**1 × 1,000 A (S19) · 1 × 1,250 A (S21), 3-phase**

ITEM	VALUE
AIR AND NETWORK	
Filtration	**G4 / M5, passive or active**
Network	**CAT5; 7 × 24-port switches; router with LAN / SIM**
OPTIONS (PRICED BY POWER MINING)	
Cooling	**Fans; hot-air recirculation (basic or controllable damper set with Belimo controller)**
Dampers	**6 controllable aluminium inlet/outlet dampers (UniPi)**
Other	**Power meter, temperature monitoring, PVC cold-zone doors, remote main switch, waterless fire extinguishing**
HIGH-CUBE VERSION	

ITEM	VALUE
MDB to PDU cable	**5 × 16 mm²**
PDU	**3 × 63 A, 3-phase main breaker; per socket optional (S19) / 20 A (S21)**

ITEM	VALUE
20 ft HC	**189 (S19) / 168 (S21) racks; 661.5 / 621.6 kW**

Power Mining writes power load as "kW/h"; it means kW.

SOURCE Power Mining, air-cooled mining container page (powermining.io); OneMiners product page (checked 8 Nov 2026).

1.3 What's in the package

ITEM	STATUS
Container, racks, MDB, PDUs, switches and router	Included (Power Mining standard build)
Fans, recirculation, dampers, temperature monitoring	Options, priced separately (Power Mining)
Schneider / ABB components, 6-point Grafana monitoring	OneMiners listing · **Needs verification** with Power Mining
Hydro manifolds and dry-cooler	Not applicable: air-cooled
Miners, transformer	Not included

Status reflects what the manufacturer or reseller documents. The OneMiners product page currently lists the same generic "What's included" items on every container (see 1.4).

1.4 Values that need verification

These values conflict between sources or aren't confirmed by the manufacturer. Resolve them in writing with OneMiners sales before you design power, cooling or foundations around them.

ITEM	WHAT THE SOURCES SAY	USED IN THIS MANUAL
Cooling	Power Mining and OneMiners spec table: air · OneMiners page also says hydro, dry-cooler, closed-loop	Air
Power capacity	Power Mining 567 kW (S19) · OneMiners spec blank; heat section shows 1,200 kW	567 kW
Height	Power Mining 2,890 mm · OneMiners 2,591 mm (standard 20 ft)	2,890 mm (manufacturer)
Recirculation and capacity	Power Mining's recirculation set "reduces 48 miner seats"	Confirm slots with recirculation
Components and monitoring	OneMiners: Schneider/ABB, 6-point Grafana · Power Mining: optional temperature monitoring and power meter	**Needs verification**
Certifications	OneMiners: CSC, UL 508A, CSA, IEC · Power Mining: none stated	**Needs verification**: ask for certificates

CHAPTER 02

Site Planning

The container needs a level base, a three-phase feed of 1,000–1,250 A and room for clean intake air. Cold-climate sites should add recirculation.

2.1 Choosing the site

- Built for cold climates when fitted with hot-air recirculation, which also reduces snow build-up on intakes (OneMiners listing).
- Orient the intake side to clean air, away from roads and dust; exhaust away from neighbouring intakes.
- Plan a short cable route from the transformer to the 1,000–1,250 A inlet.

2.2 Foundation, access and lifting

Footprint	**6,060 × 2,440 mm (20 ft ISO)**
Weight	**2,400 kg net · 4,990 kg operating**
Base	**Level concrete or engineered base sized for the operating weight**
Lifting	**Corner castings; crane or side-lifter**

DANGER · LIFTING
Lift only with equipment and rigging rated for the shipping weight, using the container's corner castings or the manufacturer's lifting points. Keep people clear of suspended loads. Never lift a container with miners installed unless the manufacturer allows it.

2.3 Climate and environment

Ambient	**Needs verification: not published. Plan for the miners' intake limits.**
Filtration	**G4/M5 filters; active filtration option for dusty sites**
Cold	**Hot-air recirculation (basic, damper set, or advanced) and controllable dampers keep intake air above the miners' minimum**

PLANNING CHECKLIST
Before ordering, confirm: land rights and permits, utility interconnection and transformer, road access for the delivery truck and crane, internet connection, water supply and drainage (if the cooling uses water), noise limits at the site boundary, and insurance requirements.

SOURCE Power Mining container page; OneMiners product page.

CHAPTER 03

Electrical Supply

A single three-phase inlet feeds the main distribution board (MDB), which feeds three-phase PDUs through 5 × 16 mm² cables.

3.1 Supply requirements

Supply	**3-phase; 1 × 1,000 A (S19 build) or 1 × 1,250 A (S21 build)**
Voltage	**Needs verification: not published. 567 kW on 1,000 A matches a 400 V three-phase supply (calculated: about 818 A)**
Load	**567 kW (S19) · 532.8 kW (S21)**
Remote main switch	**Option**

DANGER · ELECTRICAL

- The incoming supply, main protection, earthing and bonding must be designed and connected by a licensed electrical contractor and inspected before energising.
- Isolate, lock out and tag out the supply before opening any distribution panel. Verify absence of voltage with a rated tester.
- Never exceed the main breaker or PDU ratings. Size miner circuits for continuous load under your local code (often 80% of the breaker rating).

3.2 Distribution inside the container

MDB to PDU	**5 × 16 mm² cables**
PDU	**3 × 63 A three-phase main breaker**
Sockets	**Per-socket breakers optional (S19 build); 20 A per socket (S21 build)**
Power meter	**Option**

SOURCE Power Mining container page. Calculation: OneMiners.

CHAPTER 04

Cooling and Airflow

Air enters through G4/M5 filters, passes through the miners and leaves through the exhaust side. In cold weather, recirculation mixes warm exhaust back into the intake.

4.1 Airflow

1. **Intake**
   Outside air through G4/M5 filters.
2. **Miners**
   Miner fans push air through the racks.
3. **Exhaust**
   Hot air leaves through the exhaust side, with container fans if fitted.

4.2 Hot-air recirculation (option)

- Basic: fixed recirculation path.
- Set: controllable damper with a Belimo controller. Power Mining notes it "reduces 48 miner seats".
- Advanced: on request. Controllable aluminium inlet/outlet dampers (6 pcs, UniPi) give finer control.

> **COLD STARTS**
> Don't start miners with intake air below their minimum operating temperature. Use recirculation or dampers to warm the space first, and watch for condensation.

SOURCE Power Mining container page (options list).

CHAPTER 05

Installation and Commissioning

Installation turns a delivered container into a working mining site. Work through each step in order; the pre-power checklist must be complete and signed off before anything is energised.

5.1 Delivery and inspection

- Inspect the container on arrival before unloading: dents, damaged doors or seals, broken louvres or fans, water ingress, and loose fittings inside.
- Photograph any damage and note it on the delivery receipt before signing. Report it to OneMiners within 48 hours.
- Check the contents against the packing list: PDUs, shelving, fans, filters, keys, manuals and spare parts.

5.2 Placement

1. **Base**
   Confirm the base is level and ready.
2. **Set down**
   Lift by the corner castings and place the container.
3. **Earth**
   Bond the container to the site earth.

5.3 Connection

1. **Power**
   Licensed electrician lands the three-phase supply on the inlet and tests insulation, earthing and phase rotation.
2. **Network**
   Connect the router to internet (LAN or SIM).
3. **Options**
   Commission dampers, recirculation controller and monitoring, if fitted.

5.4 Pre-power checklist

CHECK	DONE
Supply, phase rotation and earthing tested and recorded	☐
MDB and all PDU breakers OFF	☐
Filters fitted; intake and exhaust clear	☐
Dampers and recirculation set for the season	☐
Electrical inspection signed off	☐

5.5 First power-up

1. Energise the MDB; check PDU voltages.
2. Start fans (if fitted) and set dampers.
3. Switch on miners one PDU at a time, checking phase currents.
4. After 30 minutes at full load, check temperatures and look for hot spots.

SOURCE Power Mining states a 1-day setup time; steps are OneMiners general commissioning practice.

CHAPTER 06

Loading Miners and Capacity

Plan the miner fleet against the container's real limits before you buy it. Then load, connect and test the miners shelf by shelf.

6.1 Capacity by miner model

A container fills up by whichever runs out first: **slots**, **power** or **cooling**. The table shows the power-limited count for common models. Use the lower of this count and the slot count, and confirm with OneMiners before you order miners.

MINER (TYPICAL RATED POWER)	POWER PER UNIT	UNITS BY POWER	SLOT LIMIT
Antminer S19k Pro 120 TH/s	2,760 W	205 (calculated)	162 (S19) / 144 (S21)
Antminer S19 95 TH/s	3,250 W	174 (calculated)	162 (S19) / 144 (S21)
Antminer S21 200 TH/s	3,500 W	162 (calculated)	162 (S19) / 144 (S21)
WhatsMiner T21 190 TH/s	3,610 W	157 (calculated)	162 (S19) / 144 (S21)

Units by power = container power limit ÷ miner rated power, rounded down (calculated). Rated powers from Bitmain and MicroBT specifications; check the label on your miners. Leave headroom for fans, lighting, network gear and power-supply losses. Power Mining designs the S19 build for 567 kW and the S21 build for 532.8 kW.

6.2 Loading miners

1. Load racks evenly across PDUs and phases, exhaust toward the hot side.
2. Record rack, PDU, phase and serial for each miner.
3. Switch on and confirm each miner boots before loading the next rack.

> **CAUTION**
> Balance miners across the three phases as you load. An unbalanced load overheats one phase and can trip the main breaker.

6.3 Network

- Pre-installed: CAT5 cabling, 7 × 24-port switches, router with LAN or SIM.
- One IP per miner; plan a /24 for 162 miners plus devices.

SOURCE Power Mining container page.

07 CHAPTER Operation and Monitoring

Most container problems show up first as rising temperatures or power changes. Watch the monitoring daily and act on trends, not just alarms.

7.1 Monitoring

- Optional temperature monitoring system and power meter (Power Mining).
- OneMiners lists 6-point temperature, humidity and power monitoring on Grafana; confirm what's fitted to your unit.
- OneMiners' platform monitors hosted containers.

7.2 Daily and weekly checks

WHEN	CHECK
Daily	Hashrate and online count per shelf; any miner offline or overheating; power draw against the planned load; intake and exhaust temperatures.
Weekly	Walk-round: fans running, filters clean, doors sealed, no water ingress, no burning smell, no hot spots on cables or PDUs (use a thermal camera if available).
Monthly	Check PDU and breaker loads per phase; compare with the previous month. Check cameras, door lock and internet backup.

7.3 Seasonal operation

- Winter: use recirculation and dampers to hold intake temperature; check intakes for snow.
- Summer: open dampers fully; clean filters more often.

SOURCE Power Mining container page; OneMiners product page.

08 CHAPTER Maintenance and Troubleshooting

Clean air paths, tight connections and a healthy cooling system keep a container running. Most faults trace back to one of these three.

8.1 Maintenance schedule

INTERVAL	TASK
Weekly	Inspect G4/M5 filters; clear snow or debris from intakes in season.
Monthly	Replace filters as needed; check dampers and controller; check PDU loads per phase.

INTERVAL	TASK
Quarterly	Isolate, then check connection tightness and scan for hot spots; blow dust from miners.
Yearly	Full electrical inspection; container seals, roof and paint.

Intervals are OneMiners recommendations unless a source is given. Shorten them at dusty, humid or coastal sites.

DANGER
Isolate and lock out the supply before working on PDUs, fans, busway or wiring. Only qualified electricians may open distribution panels.

8.2 Troubleshooting

SYMPTOM	CHECK
Whole container off	Utility supply, transformer and main breaker. Find the cause of any trip before resetting.
One shelf or PDU off	PDU breaker or outlet breakers; overload on that PDU; loose PDU feed.
Miners overheating	Intake temperature, dirty filters, failed fans, gaps letting hot air back into the cold aisle, blocked exhaust.
Miners offline but powered	Network switch, uplink and router; DHCP pool size; cabling to that shelf.
Breaker trips repeatedly	Overload or phase imbalance. Rebalance miners across phases and reduce load. Call an electrician.
Condensation or icing	Cold intake air on cold surfaces. Use recirculation or reduce intake until temperatures stabilise.

ONEMINERS
For a container bought or hosted through OneMiners, send the symptom, photos and monitoring screenshots to **service@oneminers.com** or WhatsApp **+1 305 867 6143**.

SOURCE OneMiners maintenance practice.

CHAPTER 09

OneMiners Services

OneMiners can deliver the container to your site or host it for you. This chapter summarises the options and terms as published on the product page.

9.1 Deployment options

OPTION	WHAT ONEMINERS DOES
Delivered to your site	Ships the container turnkey for your own installation. Your engineers handle site works, utility connection and commissioning.
Managed hosting	OneMiners hosts, powers, cools and monitors the container and its miners in one of its facilities, from day one.
Consultation	Use **Request Consultation** on the product page to size a site: power, transformer, cooling and miner mix.

9.2 Delivery, payment and warranty

- Orders are processed within 48 hours of verified payment; bulk orders may take longer. Estimated delivery is 5–7 business days after dispatch, plus customs time. Carriers: DHL Express, UPS, FedEx, TNT.
- Delivery is DDP by default. Where DDP isn't available, DAP applies and the buyer is the importer of record.
- Payment: BTC, LTC, SEPA bank transfer (1–3 business days), OneMiners Balance, or in person. Invoices on request.
- Miners are not included; the container is infrastructure only. Power Mining lists "super fast" express delivery; its 90-day warranty statement refers to miners.
- OneMiners' 7-year warranty applies to **miners** hosted by OneMiners. Container and miner warranties are separate; the OneMiners product page doesn't publish a container warranty. Get the container warranty terms in writing at purchase.

ONEMINERS
Hosted at a OneMiners site, the container is installed, commissioned and monitored by our team. Ask sales which locations accept your container type and what the current hosting rate is.

ONEMINERS OneMiners container product pages (shipping, payment and FAQ sections) and "Best Bitcoin Mining Containers to Buy in 2026" (21 Sep 2026). Checked 7–8 Nov 2026.

10 CHAPTER Resources and Support

Where to find manufacturer information, OneMiners services and help.

10.1 Resources

POWER MINING
Air-cooled container
powermining.io/products/air-cooled-mining-container

POWER MINING
Company site
powermining.io

ONEMINERS
Product page
oneminers.com/collections/mining-containers/products/20ft-asic-162-bitcoin-mining-container

ONEMINERS
Mining containers
oneminers.com/collections/mining-containers

ONEMINERS
Container buying guide
oneminers.com/blogs/news

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

10.2 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

10.3 Sources used for this version

1. Power Mining, air-cooled mining container page: size, weight, racks, power load, inlet and MDB, PDU, cables, filtration, network, setup time, options.
2. OneMiners product page, 20ft ASIC-162 Bitcoin Mining Container: manufacturer, components and monitoring as listed.
3. OneMiners: product page, "Best Bitcoin Mining Containers to Buy in 2026" (21 Sep 2026), site contact details, Media Kit. Checked 7–8 November 2026.

10.4 Revision history

VERSION	DATE	CHANGES
V1.0	Nov 2026	First edition. Power Mining specifications with conflicts listed in 1.4, site, electrical, airflow and recirculation, installation, capacity planning, operation, maintenance and OneMiners services.