
Air-cooled container operating instructions

ANTBOX N5 V2

Rev V03

table of contents

1, CONTAINER ACCEPTANCE INSPECTION	4
2, PRECAUTIONS FOR USE	5
3, ANTBOX N5 V2 PRODUCT INTRODUCTION	6
4, ANTBOX N5 V2 SYSTEM INTRODUCTION	7
4.1 ANTBOX N5 V2 MAIN PARAMETERS	7
4.2 ANTBOX N5 V2 INTERNAL VIEW	8
4.3 POWER DISTRIBUTION CABINET	10
4.4 RACKS	13
4.5 PDUs	14
5, INSTALLATION AND OPERATION INSTRUCTION	15
5.1 INSTALLATION GROUND, ELECTRICAL, AND SPACE REQUIREMENTS	15
5.2 TRANSPORT REQUIREMENTS	15
5.3 ELECTRICAL REQUIREMENTS	15
5.4 WIRING INSTRUCTIONS	16
5.5 WATER CURTAIN INSTALLATION	19
5.6 SWITCHING ON AND OFF	19
5.7 ACCESS CONTROL INSTALLATION AND USE	27
5.8 REMOTE MONITORING OF MINING MACHINES	27
5.9 FIRE PROTECTION REQUIREMENTS.	27
6, ROUTINE MAINTENANCE	28
6.1 SAFETY PRECAUTIONS	29
6.2 MAINTENANCE WORK AND CYCLES	29
6.3 CLEANING DUST SCREENS	30

7, TROUBLESHOOTING	30
7.1 OVERVIEW	30
7.2 TROUBLESHOOTING	30
7.3 ACCESS CONTROL TROUBLESHOOTING	31
8, ENVIRONMENTAL REQUIREMENTS OF THE MINE SITE	31
8.1 BASIC ENVIRONMENTAL REQUIREMENTS.....	31
8.2 MINE SITE SELECTION REQUIREMENTS.....	31
8.3 MINE LAYOUT RECOMMENDATIONS.	32

1, Container acceptance inspection

1, when the container is signed for, please check whether the appearance of damage, if there is damage, please take a photo first, contact WeChat customer service to deal with.

2, please check whether the container box has deformation, if there is deformation, please take a photo first, contact WeChat customer service to deal with.

3. Confirm that the container components are complete against the packing list.

4, check whether the container is rattling, if there are rattling, please contact WeChat customer service to deal with it.

5, check whether the PDU, switch screws are loose, if so, please retighten them.

6, check whether the switch power cord plug is loose, and reinsert it if it is loose.

7, to confirm the internal distribution cabinet, whether the shelves have shifted, if there is a shift, contact WeChat customer service to deal with.

2, Precautions for use

- 1, (a) For outdoor use, erect a sun and rain shelter.
- 2, (a) The container (including the internal PE ground terminal of the system) shall be reliably earthed.
- 3, (a) The water curtain must be opened when the ambient temperature is $> 35^{\circ}\text{C}$.
- 4, (a) The external wiring of the distribution cabinet must ensure correct connection and installation, and the customer must not alter the power supply system in any way during use.
- 5, (a) Overloading of mining machines is prohibited during container operation.
- 6, Always pay attention to the hazard warning signs on the body, which include.

LOGO	DEFINITION OF THE LOGO
 RISK	This mark indicates that the body contains high voltage inside and touching it may cause a risk of electric shock.
 EARTH (ELECTRIC CONNECTION)	This symbol indicates that this is the protective earth (PE) terminal, which needs to be firmly grounded to ensure operator safety



In order to facilitate users to better read and use, the manual is configured with a large number of pictures, the pictures are for illustration purposes only, about the specific details of the product, please refer to the actual product received.

3, ANTBOX N5 V2 Product Introduction

ANTBOX N5 V2 is a new generation of mobile mining farm developed by Bitmain, which can greatly shorten the construction cycle of supercomputing centers. The ANTBOX N5 V2 is designed to support personalized free stacking and customization with high-powered mining machines such as the 19 series, providing up to 207 machine spaces.

With environmental protection and energy-saving features and advanced cooling technology, ANTBOX N5 V2 meets all safety standards (UL and CSA), and comes with its own container power distribution cabinet, so it is the best choice for mining at sea.



Figure 1

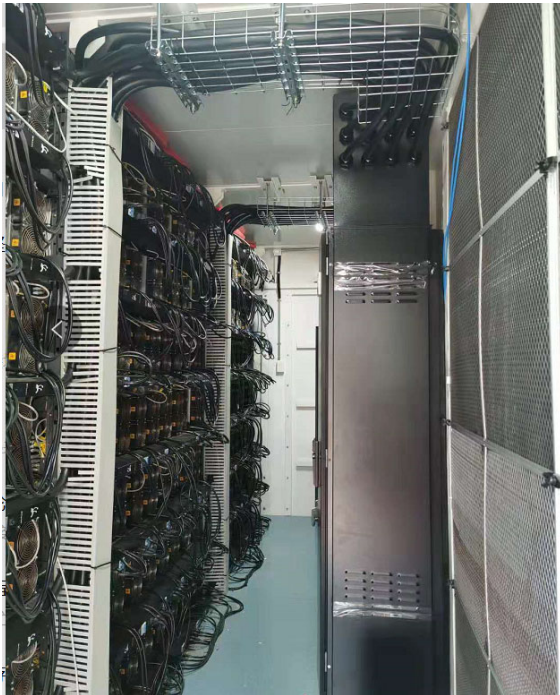
4, ANTBOX N5 V2 System Introduction

4.1 ANTBOX N5 V2 main parameters

Product Overview	Input voltage,V	Min	Max
		3P/N/PE-AC380~415V	
	Frequency, Hz	50/60	
	Total power consumption, kW	672	745
	Safety certification	NFPA 79:2021 UL 508A:2018 R8.21 CSA C22.2 No. 14-18	
mining machine	Miner power consumption (predicted), W	3200	3600
	Mining Machine Adaptation	S19 Series	
container (for shipping)	Container size (L*W*H,mm)	6058*2438*2896	
	Container transport weight, kg	5000	
	Container operating weight, kg	7200	
	Number of mining machines, units	207 units	
	Main switch capacity, A	1600A/2000A	
	Transformer Adaptation	1 x 2500 KVA with 3 containers	
Environmental requirements	Ambient temperature °C	-25~40	
	Ambient humidity	10%-90% RH	

4.2 ANTBOX N5 V2 internal view

ANTBOX N5 V2 has a rack on the left side and a power distribution cabinet on the right side, illuminating brightness located above the interior, insulated flooring on the ground, windows on the left and right sides, and a closed design scheme for the upper and lower front and rear to form air ducts. The right side face is added with water curtain to make the temperature of the air inlet lower, the structure is compact but the cooling effect will be better than the traditional mine with an exhaust fan.



To continuously improve our product, we reserve the rights to change some features and specifications without further notice.



There have two models, one is the power on the top and the other is on the floor,
Please refer to the product received

Figure 2

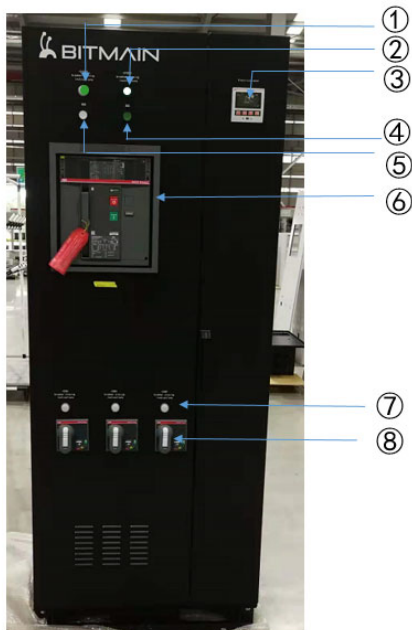
number	name (of a thing)	instructions
A	power cabinet	1pc, custom
B	Cable bridges	1 set
C	frame	Fixed 3 side-by-side
D	PDU	24 PDUs
E	switch (telecommunications)	24 ports, 12 switches
F	network cable	207 FTP single shielded network cable
G	illumination	Container top
H	surveillance camera	1

4.3 Power distribution cabinet

4.3.1 Overview of distribution cabinets.

The power distribution cabinet is mainly used to provide distribution, protection and metering of electrical energy for shelf PDUs, lighting, monitoring equipment and other devices in containers.

4.3.2 Description of the appearance and main components of the distribution cabinet.



On the basis of the standard configuration, the main switch can be selected from 1600A or 2000A, depending on the actual product received.

Figure 3

number	name (of a thing)	instructions
①	Inlet indicator	Green. Light on means power to the incoming line.
②	Gate closing indicator	White, light on indicates switch is in the closed position
③	power meter	
④	Close button	
⑤	Break button	
⑥	main switch	
⑦	Tributary switch closing indicator	White, light on indicates that the indicated switch is closed
⑧	Tributary switch	600A, corresponding to the shelf

4.3.2 Description of the parameters of the power distribution cabinet.

Mechanical data	
Cable access	Top/Bottom/Back
Wiring Form	Front / Side
Type of segmentation	1
Size (body)	900(W)*2000(H)* 500(D) mm
Weight (estimated)	400kg
shell	Epoxy resin spraying >50μ
Shell color	RAL9004 black
Electrical data	
Electric cabinet form	Type I
Rated operating voltage (Ue)	3P/N/PE-AC380~415V
Rated Frequency (F)	50/60 Hz
Rated pulse voltage (Uimp)	12kV
Rated Auxiliary Circuit Voltage	230 V AC max.
Overpressure rating	IV
contamination	3
Busbar current	1600A /2000A
Rated short-time withstand current (Icw/1s)	50 kA
Rated peak withstand current (Ipk)	105 kA
grounding system	TNS
Max. in/out switch	1600A/ 2000A
Protection level	IP51

警告 Warning

Non-professional authorized persons are prohibited from operating and maintaining power distribution cabinets!

警告 Warning

During the operation of the container system, it is forbidden to open the door of the distribution cabinet!

note

Because the main circuit breaker inside the distribution cabinet is installed with a loss of voltage striker, the circuit breaker cannot be closed when there is no voltage at the top of each circuit breaker or the phase voltage is less than 154V, and it is also necessary to minimize the closing operation when there is no voltage at the top of the circuit breaker or the phase voltage is less than 154V, otherwise it may cause damage to the breaking mechanism inside the circuit breaker and thus affect the service life of the circuit breaker.

4.4 Racks

The racks are fixed 3 side-by-side, 8 tiers each. Each of the first to seven tiers has 9 miner bays (vertical) and the eighth tier (top tier) has 6 miner bays (flat), as well as supporting power and network cables, network switches, and a total of 207 S19 series miners can be placed in one ANTBOX N5 V2.

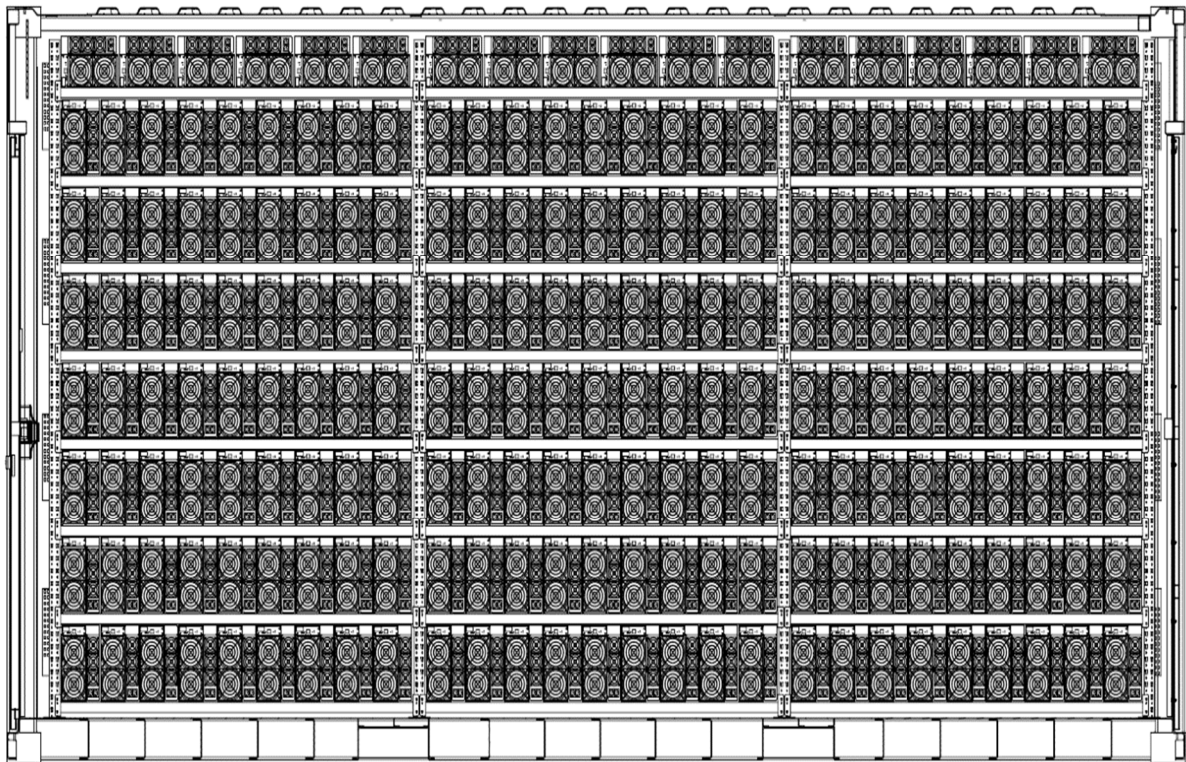


Figure 4

number	name (of a thing)	instructions
A	PDU	24 PDUs
B	switch (telecommunications)	12 replacement units
C	network cable	207 FTP shielded network cable (1 cable/single machine)

 **Note:** The 8th level miner needs to be connected to the power cord according to the manual, otherwise it will cause current imbalance.

4.5 PDUs

4.5.1 PDU Overview.

TNS system, 3-phase, 5-wire input, input wired to 5-position terminal block; 19-position C13 output; one vac controls 2 C13s; 9 vacs are miniature circuit breakers; 1 vac is a miniature circuit breaker C2 controlling a single C13 (switch only).

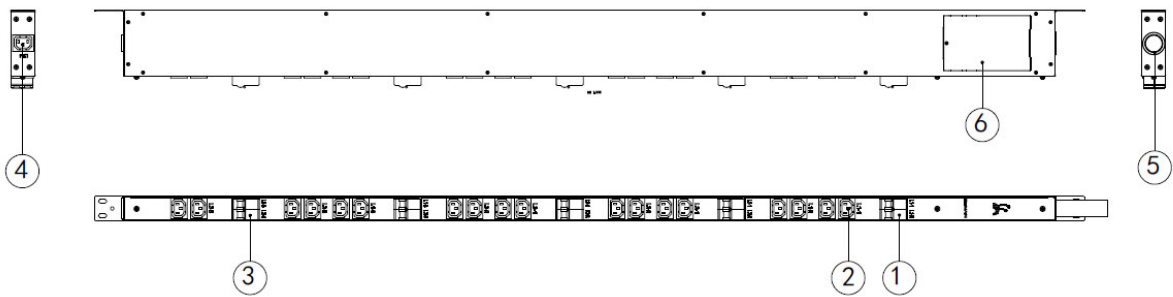


Figure 5

number	name (of a thing)	instructions
①	Miniature Circuit Breaker	9 vacs, each vac controls 2 C13 sockets
②	C13 socket	Connecting the container configuration C13-14 power cable
③	Miniature circuit breaker C2	Controls a C13 socket
④	C13 socket	Switch only
⑤	inlet	PDU Cable Inlet
⑥	terminal cover	

 警告 Warning

Non-professionals are prohibited to disassemble the PDUs, all the consequences caused by the user's private disassembly at their own risk!

 警告 Warning

It is strictly forbidden to insert the grounding latch into any charged hole, and it is strictly forbidden to insert a single pole!

 警告 Warning

In the process of inserting the power plug into the socket, it is strictly prohibited to touch the plug!

 警告 Warning

All screws securing the PDUs must be locked tight!

5, Installation and operation instruction

5.1 Installation ground, electrical, and space requirements

The ANTBOX N5 V2 has three aspects to be met before installation, namely ground load, power and space on both sides.

1, The installation site needs to support a total weight of about 7 tons per single container.

2, For power, each ANTBOX N5 V2 is equipped with 207 miners, which actually runs about 745kw and is rated at 828kw;

3, Space is reserved on both sides for air circulation, 16m for air inlet and 10m for air outlet (refer to the figure below).

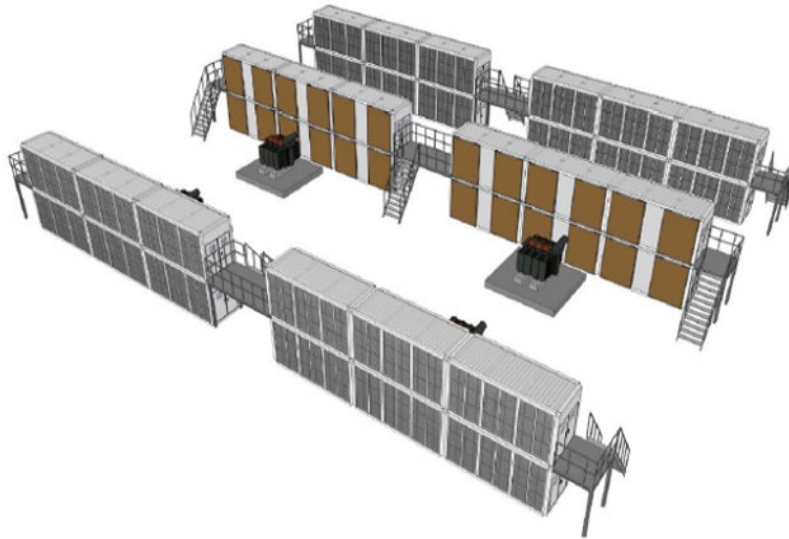


Figure 6

5.2 Transport requirements.

The customer needs to prepare a 5-10 ton crane or forklift to load and unload the ANTBOX N5 V2 container (without miner).

5.3 Electrical requirements.

The North American distribution grid is complex and requires matching power transformers as shown below, and no other voltage and wiring specifications are available to meet the container requirements.

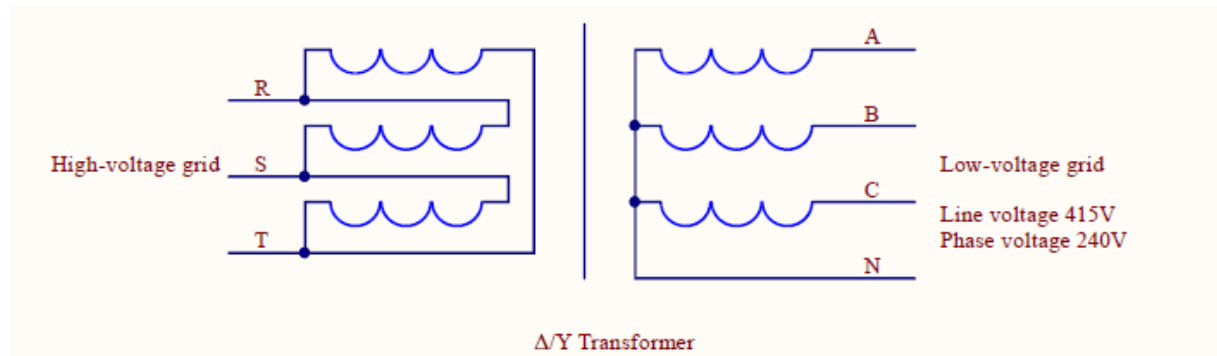


Figure 7

Recommended voltage input range: 3P/N/PE-AC380~415V

⚠ Note: The transformer is a TNS system and must have a neutral line

2500KVA transformer: can support 3 ANTBOX N5 V2 operations (to run 207 S19 miners for example).

⚠ CAUTION: Do not install electrical equipment or distribution units during thunderstorms.

5.4 Wiring instructions.

5.4.1 Incoming cable requirements

The incoming cables have a voltage resistance of 600 V or more, with the following requirements per phase.

L1 single core cable 600kcMil (300mm²) 4 pcs,

L2 single core cable 600kcMil (300mm²) 4 pcs,

L3 single core cable 600kcMil (300mm²) 4 pcs,

N Single-core cable 600kcMil (300mm²) 3 pcs.

PE single-core cable 600kcMil (300mm²) 3 pcs.

5.4.2 The wiring sequence is as follows.

5.4.2.1 Remove the container inlet backing plate (do not discard the screws, spare them) funnel the distribution cabinet inlet cover and remove the inlet cover with the waterproof glands from the container.

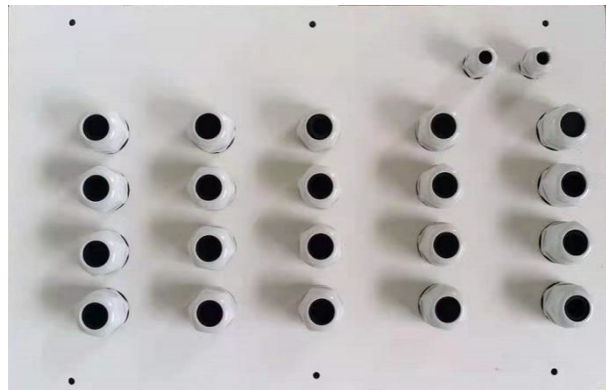


Figure 8

5.4.2.2 Remove the distribution cabinet inlet cover (spare).

5.4.2.3 Remove the M16 bolt combination from the copper row of the distribution cabinet (spare).

 Caution.

During the removal process, pay attention to the nuts and gaskets not to fall into the distribution cabinet machine, if they fall inadvertently, you need to remove the left side door panel of the distribution cabinet, remove the nuts and gaskets that fall into the distribution cabinet, and then fix the side door panel of the distribution cabinet as it is.

5.4.2.4 Strip the cable of 40 mm of insulation.

5.4.2.5 Installation of cable fixings with a torque of 120 N.m on the copper row.



Figure 9

5.4.2.6 Passing the cable through the container backplane waterproofing glands and the distribution cabinet waterproofing glands in sequence.

 **Note:** The line goes through the container backboard waterproofing gland head first.

5.4.2.7 Fix the line corresponding to the phase sequence on the cable clamps with a torque of 120 N.m as indicated by the phase sequence label of the copper row in the distribution cabinet.

5.4.2.8 (a) After all wires have been secured, secure the watertight gland head cover of the distribution cabinet back to the rear cover of the distribution cabinet.

5.4.2.9 Fixing of waterproof glands on the back cover of all distribution cabinets.

5.4.2.10 Secure the container outlet hole plate back to the container with a torque of 8 N.m..

5.4.2.11 Fixing the watertight glands of the container outlet hole plate;

5.4.2.12 Secure the container outlet aperture plate rain shield. Torque 8 N.m;

5.4.2.13 Fill the gaps between the rainscreen and the container mating with sealant;



Figure X

5.4.2.14 Fill the gaps around the container outlet hole plate with sealant.

警告 Warning

When the container system is newly installed, moved or removed power lines, the above sealant needs to be refilled in the gaps to avoid rainwater flowing into the distribution cabinet and causing equipment failure or electric shock!

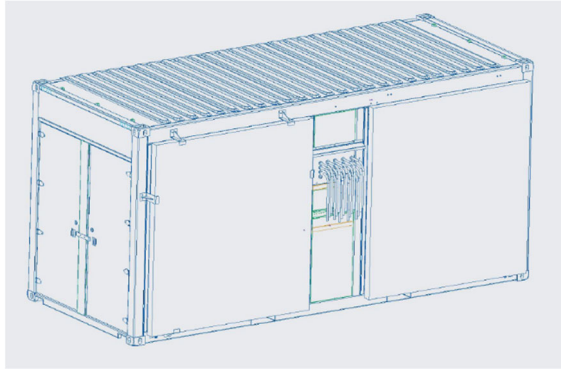


Figure XI

5.5 Water curtain installation.

Water pump lift and specification requirements, Please refer to the product received.

The Water pump lift is more than 5 meters.



Figure XII (Picture only for reference.

5.6 Switching on and off

5.6.1 Place the miner on the shelf with the front of the miner (fan, with the mesh socket as the front) and the rear of the shelf directly to the duct baffle.



Figure XIII

- 5.6.2 Nine S19s are placed vertically on each shelf from the first to the seventh level.
- 5.6.3 Six S19s are placed horizontally on the eighth floor (PDUs L1, L2 and L3 need to be connected to two mining machines respectively).

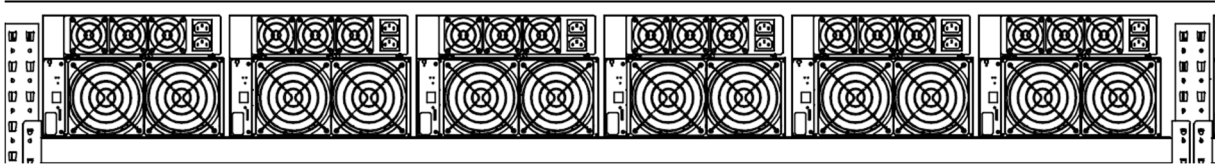


Figure XIV

⚠ Note: The space in the middle wire slot location requires the miner to be moved over from the side.

⚠ 警告 Warning

The PDUs L1, L2 and L3 corresponding to the layer 8 miners need to be connected to 2 miners respectively, otherwise they will cause current imbalance!

- 5.6.4 Connect the network cable to the miner.
- 5.6.5 Connect the power cables from the PDU to the miner, two power cables C13-C14 per miner. the L1-1 and L1-2 power cables need to be fixed to the fixed cable tie holders of the PDU.

For the layer 1 to 7, W02 length 0.5m corresponds to miner 1,2,3,4; W03 length 0.7m corresponds to miner 5,6,7,8; W01 length 1m corresponds to miner 9, the power cable corresponding to miner 8 and miner 9 needs to be fixed with a cable tie in the PDU cable tie holder.

For the top layer miners , connect the PDU L1-1 sockets to the miner 6 with 1m length power cable W01, PDU L1-2 sockets to the miner 5 with 0.7 length power cable W03, PDU L2-1 to miner 4 , PDU L2-2 to miner 3, PDU L3-2 to miner 2, PDU L3-3 to miner 1 with 0.5m length power cable.

Table1

Layer	PDU socket	Miner	Power cable label	length
From 1 to 7	L1-1	1	W03	0.5m
From 1 to 7	L1-2	2	W03	0.5m
From 1 to 7	L2-1	3	W03	0.5m
From 1 to 7	L2-2	4	W03	0.5m
From 1 to 7	L3-1	5	W02	0.7m
From 1 to 7	L3-1	6	W02	0.7m
From 1 to 7	L1-3	7	W02	0.7m
From 1 to 7	L2-3	8	W02	0.7m
From 1 to 7	L3-3	9	W01	1m
Top layer	L3-3	1	W03	0.5m
Top layer	L3-2	2	W03	0.5m
Top layer	L2-2	3	W03	0.5m
Top layer	L2-1	4	W03	0.5m
Top layer	L1-2	5	W02	0.7m
Top layer	L1-1	6	W01	1m

⚠️ 警告 Warning

The top layer load should be balance for each phase.

⚠️ 警告 Warning

Non-authorized professionals are prohibited from opening the PDUs top cover!

5.6.6 Confirm indoor and outdoor ambient temperatures to confirm that conditions for system use are met.

5.6.7 Open the air inlet and outlet louvers at an angle of 85° maximum.

⚠️ 警告 Warning

The opening angle of the shutters should not be more than 85° to avoid rainwater entering the container!

5.6.8 Closing the main switch

5.6.8.1 Open the cabinet door, remove the main switch key inside the folder, insert the main switch post lock, turn the key right and the red button Push OFF on the main switch pops up.

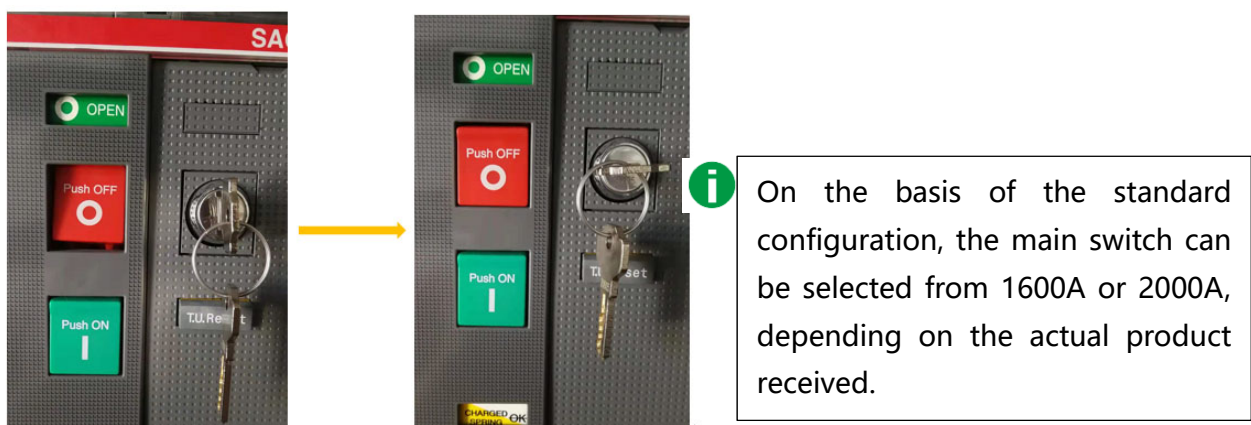


Figure XV

⚠️ **Note:** The key cannot be removed during operation

5.6.8.2 Close the micro-break Q2 on the control panel on the right side of the switchboard



Figure XVI

5.6.8.3 The green light on the main panel of the distribution cabinet starts to illuminate, indicating that there is power to the system incoming line;



Figure XVII

5.6.8.4 Press the SBC button to close; after closing, the white indicator light is on and the green indicator light is off



Figure XVIII



Note: The switch closes with momentary loud noise

5.6.8.5 Observe that the right meter (serial number) shows voltage, indicating that the system is normal;



Figure XIX

5.6.8.6 Close the right control panel with all micro-breaks, system lighting on, temperature and humidity sensors 1 and 2 with temperature

Display.



Figure XX

5.6.8.7 Close the switchboard door.

⚠ Note: The door can only be opened and closed when the three shelf switch handles on the distribution cabinet door are in the OFF position.

⚠ Note: There are two locations for the temperature and humidity sensors, on the left hand side of the entry door and in the rear space of the miner.

⚠ 警告 Warning

The switch has an undervoltage decoupling device, and the manual accumulator handle cannot be used after locking!

⚠ 警告 Warning

Non-professional authorized personnel are forbidden to open the safety shield of the power distribution cabinet!

警告 Warning

Non-professional authorized persons are forbidden to open the door of the distribution cabinet!

5.6.9 Closing shelf sub-switch

5.6.9.1 There is an energized indicator above the shelf switch, white when closed, corresponding to shelves 1,2,3 respectively

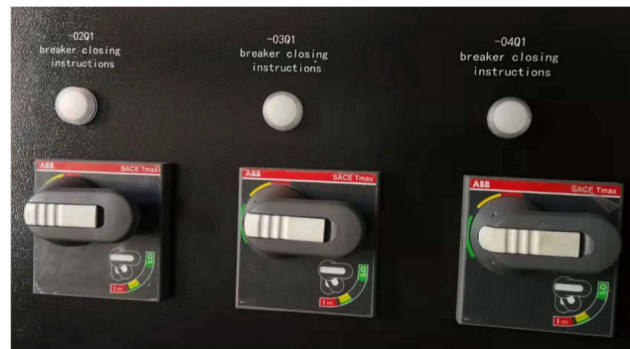


Figure XXI

5.6.9.2 Turn on the shelf switches 02Q1, 03Q1 and 04Q1 step by step and turn the switch handle to the ON position.

警告 Warning

During the operation of the power distribution cabinet, it is necessary to ensure that the cabinet door is in a locked state to prevent personal injury such as electric shock, while avoiding salt, moisture, dust or other conductive substances in the air from entering the interior of the cabinet.

Distribution cabinet during the power-on period, it is prohibited to contact the cabinet internal single board, cables, terminals, modules, inductors and other devices to prevent safety accidents.

When the power distribution cabinet malfunctions, abnormal smell and sound, please stop running and cut off the power immediately, the power distribution cabinet running under fault state will lead to electric shock or fire accident.

 **Note:** Stop immediately if there are strange noises, or other unusual sounds during the process.

 **Note:** There is an emergency stop to the left of the entry door, when an emergency occurs, please press the emergency stop, at this time the shelf switch will be disconnected immediately, after the emergency is properly handled, please turn the emergency stop button right and then turn the shelf switch counterclockwise to the OFF position before closing the switch again.

5.6.10 Turn on the switch gradually as needed, first turn on the switch power, L3-4 switch on the PDU, (turn the corresponding micro-break on the PDU to the ON position),

5.6.11 gradually turn on the power to the miner again, with L1 (L1-1,, L2, L3 micro-breaks on the PDU pulled to the ON position.

Suggestion: for each PDU turn on all switches, wait for the miner to run normally (expect 5-10 minutes) and confirm that the current on the power meter will increase.

警告 Warning

If there is any abnormality, please immediately close the corresponding micro-break of the miner.

5.6.12 The emergency stop switch to the left of the container entry door can be pressed in case of emergency

(Three shelf sub-switches tripped and all mining machines lost power)



Figure XXII

5.7 Access Control Installation and Use

5.7.1 The right side door of the container has a fixing plate where the face recognition system is installed. Take out the internally packed KK3D-MK1 and the outer protective box and install them on the right side door of the container (the position indicated by the blue box in the figure below), see the installation instructions inside the KK3D-MK1 box for detailed operation.



The KK3D-MK1 product is located in the box. Please check the packing list.

Figure XXIII

5.8 Remote monitoring of mining machines

ANTBOX N5 V2 supports remote mining cluster management, which is convenient for remote monitoring and management of mining machines, refer to "AntSentry Operation Manual" for detailed operation.



The AntSentry Operation Manual can be obtained by contacting Bitmain Customer Service in Beijing.

5.9 Fire Protection Requirements.

5.9.1 fire extinguisher bracket located inside the container, the left door entryway (below the emergency stop switch) can support 4kg ABC dry powder fire extinguishers, the customer can purchase their own fire extinguishers to place.



Figure XXIV

警告 Warning

The container system must be equipped with a fire extinguisher before starting operation.

5.9.2 The top of the container has reserved smoke sensor interface, customers can refer to local requirements to purchase their own; smoke sensor has reserved power supply line and dry contact status communication line, customers can connect their own communication line according to their needs.

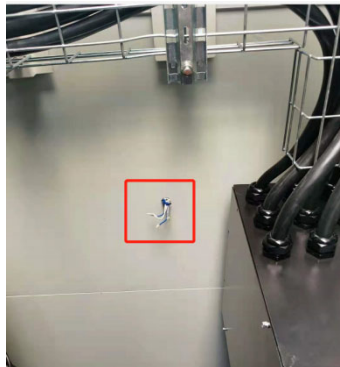


Figure XXV

6, Routine maintenance

Due to the effects of ambient temperature, humidity, dust and vibration, the internal components of the container can deteriorate and wear out, leading to potential failures of the container system. Therefore, it is necessary to perform routine and regular maintenance on the container system to ensure its proper operation and service life.

All measures and methods that help to keep the container system in good working order are part of the maintenance work.

6.1 Safety Precautions

6.1.1 General safety rules

警告 Warning

Only qualified and authorized personnel are allowed to perform maintenance and other operations on the container electrical system!
No items should be left inside the electrical equipment during maintenance work, otherwise the equipment may be damaged!

6.1.2 Symbols used in the instruction manual

LOGO	DEFINITION OF THE LOGO
 RISK	"Dangerous" indicates a high potential hazard which, if not avoided, could result in serious injury to persons.
 WARNING	"Warning" indicates a moderate potential hazard that could result in serious injury to persons if not avoided.
 NOTE	"Caution" indicates a potential risk which, if not avoided, could result in the equipment not functioning properly or in property damage

6.2 Maintenance work and cycles

The recommended routine maintenance intervals and work are expressed in the following table.

INSPECTION CONTENT	INSPECTION METHOD	MAINTENANCE CYCLE
TEMPERATURE AND HUMIDITY SENSOR	See if the temperature and humidity display is normal during normal operation	each day
DUST SCREEN	Look for dust buildup	One week ⁽¹⁾
TERRESTRIAL	See if it's clean.	when the need arises
WATER CURTAIN	Unscrew the top drain to see the internal stain	Based on water quality
POER METER	Metrology Calibration	per year

6.3 Cleaning dust screens

Remove the dust screen fixing structure and reverse blow the dust screen with a high pressure air gun until it is clean

(1) Note: The container air inlet dust screen needs to be cleaned regularly, and the cleaning frequency is adjusted according to the local environment, so as not to affect the operation of the system.



Note: If the dust screen is broken and needs to be replaced, please contact our customer service.

7, Troubleshooting

7.1 Overview

7.2 Troubleshooting

When the container system does not output as expected or is abnormal, before consulting our maintenance personnel, please take care to check the following.

6.2.1 When the ring temperature is greater than 35 °C, whether there is wind at the left door outlet of the distribution cabinet, if not, the distribution cabinet fan is faulty.

6.2.2 The red LED of LI position on the main switch panel of the power distribution cabinet flashes 1 second once, please confirm whether the power frequency is in accordance with the local power frequency setting, 50/60Hz. Other settings have been set at the factory and cannot be transferred.

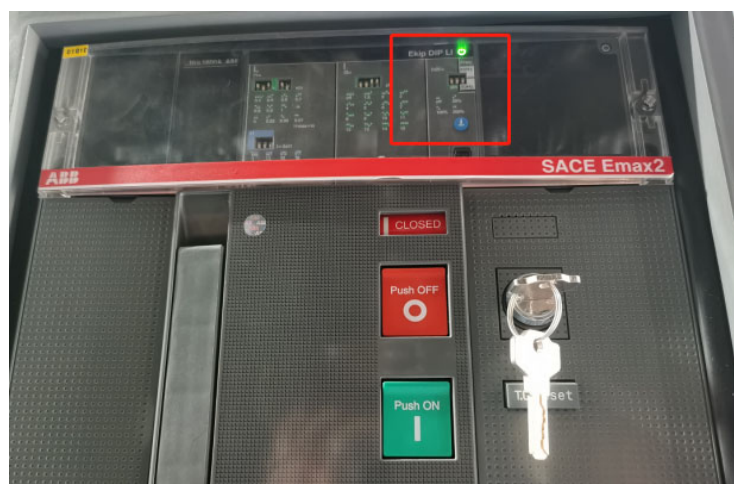


Figure XXVI

7.3 Access Control Troubleshooting

Refer to the KK3D-MK1 instruction manual (included in the KK3D-MK1 box).



This manual cannot cover all possible situations during operation, maintenance, servicing, etc. If you encounter a situation that is not explained in the manual, please contact Beijing Bitmain Technology Co.

8, Environmental requirements of the mine site

8.1 Basic environmental requirements.

Climatic conditions.

instructions	request
Operating temperature	-25-40°C
Working humidity	10-90%RH, non-condensing
Storage temperature	-35-70°C
Storage humidity	5 - 95% RH, non-condensing
height above sea level	<2000m

8.2 Mine site selection requirements.

Away from industrial sources of pollution.

For heavy pollution sources such as smelters and coal mines, the distance should be more than 5km.

For medium pollution sources such as chemical, rubber, electroplating, etc., the distance should be more than 3.7km.

For light pollution sources such as food and leather processing plants, the distance should be more than 2km.

If this cannot be avoided, it should be located upwind of the source of pollution all

year round.

Avoid building container mines within 3.7km of the sea or salt lake edge.

8.3 Mine layout recommendations.

1, Height assembling: recommended not more than 3 layers, 8688mm

2, length of assemblies: no more than 6 units recommended; to be determined on a site-specific basis.

3, Layout: Opposite air inlet. Recommended spacing: 9 m, transformer on inlet side

4, Opposite air outlets. Recommended spacing: 16 m, transformer on inlet side

5, Per container row, spacing between groups: 2 m

6, For outdoor use, please add sun and rain shade.