

# **U3S19XP+H**

User Guide

Feb. 2025





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### 1 Overview

The U3S19XP+H server is one of BITMAIN's latest products. The APW11 power supply is a crucial component of the U3S19XP+H server. All U3S19XP+H servers are thoroughly tested and configured before shipping to ensure easy setup.



Figure 1-1 U3S19XP+H

#### **Caution:**

- (1) Please refer to the layout above to place your equipment in their designated locations to prevent any damage.
- (2) The equipment must be connected to an earthed mains socket. The socket shall be installed near the equipment and shall be easily accessible.
- (3) **DO NOT** remove any screws or cables attached to the product.
- (4) Please note that the actual server shall prevail.
- (5) There must be an external specific surge protection device complying with IEC/EN 61643-11 either in front of the power supply or outside the end system (in a separate distribution box or as part of the building installation).
- (6) **DO NOT** plug or remove the device when it is powered on.
- (7) The external power supply must have a disconnecting device, which can disconnect L1, L2, and L3 simultaneously.
- (8) The server needs to be manually restarted when the hashrate is abnormal.
- (9) The U3S19XP+H server shall be used simultaneously with the ANTSPACE series. Please click <u>BITMAIN Shop</u> for more details on ANTSPACE series.
- (10) The U3S19XP+H server requires two network cables to be connected simultaneously.



### 1.1 U3S19XP+H Server components

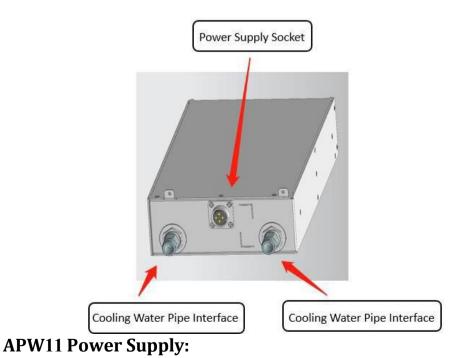
The main components and control panel of the U3S19XP+H server are shown in the figure below.



Figure 1-2 Main components and control panel of U3S19XP+H server

Figure 1-2 illustrates a type of the U3S19XP+H server control panel.

The following sections provide a detailed description of the function and specific role of each component.



2



#### Figure 1-3 APW11 power supply

The APW11 power supply serves as the energy source for U3S19XP+H server.

#### NOTE:

- The power connector is designed to be waterproof.
- For detailed parameters, please refer to the specifications below.

#### **Water Inlet and Outlet:**

Water inlet, and water outlet refer to components in a cooling system that control the flow of coolant into and out of the system

#### NOTE:

When inserting or removing the bend pipes, ensure they are securely tightened.

#### **Control Panel:**

#### **Ethernet mode:**

The device is equipped with an RJ45 Ethernet interface that supports data transfer speeds of 10/100 Mbps.

#### LED Indicators:

The green LED indicates normal operation of the Ethernet interface.

The red LED signifies a fault condition within the Ethernet interface, requiring attention.

#### **Function Activation:**

The IP report function can be activated by pressing the raised button.

The reset function can be activated by pressing the recessed button, allowing for quick troubleshooting and maintenance.

### 1.2 Specifications of Partial Components

Customers can purchase the following parts for the U3S19XP+H on our official website at <a href="https://www.bitmain.com">https://www.bitmain.com</a>. The specifications for the above parts can be found on the parts sales page of our official website.



Table 1-1 Specifications of Partial Components

Item Number	Accessories	Picture
1	Control Board for U3S19XP+H	
2	APW11H1721-2a,17V- 21.6V,V1.0,EMC	
3	Manifold Series(for 3 hashboards)	THE REPORT OF THE PROPERTY OF

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# 1.3 Product Specifications

Table 1-2 Product Glance

Product Glance	Value		
Model		U3S19XP+H	
Sub	504T 532T 558T 586T		
Version	10		
Crypto algorithm  coins	SHA256 BTC/BCH/BSV		
Typical hashrate, <b>TH/s</b> <sup>(1-1)</sup>	504T 532T 558T 586T		
Power on wall @35°C <sup>(1-2)</sup> , <b>Watt</b> <sup>(1-1)</sup>	9576 10108 10602 10900		
Power efficiency on wall@35°C <sup>(1-2)</sup> , $\mathbf{J/T}^{(1-1)}$	19		

Table 1-3 Detailed Characteristics of Product

Detailed Characteristics	Value
Power Supply	
Phase	3
Input voltage, <b>Volt</b> <sup>(2-1)</sup>	380~415
Input frequency range, <b>Hz</b>	50~60
Input max current, Amp	24
Power port	LP34
Hardware Configuration	
Network connection mode	RJ45 Ethernet 10/100M
Server size(length*width*height, w/o package), mm	790*440*130
Server size(length*width*height, with package), mm	997*637*252
Net weight, <b>kg</b>	37
Gross weight, <b>kg</b>	41
<b>Environment Requirements</b>	
Inlet coolant temperature, °C	20~50
Coolant flow, <b>L/min</b>	16.0~20.0
Coolant pressure, <b>bar</b>	≤3.5
Working coolant	Antifreeze/ Pure water/Deionized water
Coolant pH value	Antifreeze: 7.0~9.0 Pure water: 6.5~7.5 Deionized water: 8.5~9.5
Diameter of coolant pipe connector, <b>mm</b>	OD14
Storage temperature, °C	-20~70
Operation humidity(non-condensing), RH	10~90%



Operation temperature, °C	-20-45
Operation altitude <sup>(2-3)</sup> , <b>m</b>	≤2000

#### NOTE:

- (1-1) The hashrate value, power on wall, and power efficiency on wall are all typical values. The actual hashrate value fluctuates by  $\pm 3\%$ , and the actual power on wall and power efficiency on wall fluctuate by  $\pm 5\%$ .
- (1-2) Inlet coolant temperature.
- (2-1) **Caution**: Wrong input voltage may cause server damaged.
- (2-2) For detailed working coolant use and maintenance instructions, please refer to **Chapter 2.1** "**Requirements of Coolant**".
- (2-3) When the server is used at an altitude from 900m to 2000m, the highest operating temperature decreases by  $1^{\circ}$ C for every increase of 300m.



### 2 Cooling System Requirements

### 2.1 Requirements of Coolant

When purchasing coolant, it is essential to focus on the relevant parameters in Table 2-1. If the requirements are not met, it is necessary to consider refilling and replacing the coolant as appropriate.

- (1) The primary focus during regular inspection of coolant should be the pH value. It is not recommended to use the coolant when the pH value is below 7 (a pH indicator can be added to the coolant. When the pH is below 6.8, the coolant will change color for easy observation); the inspection method is shown in the table below.
- (2) Secondary focuses during regular inspection of coolant include freezing point, ethylene glycol ratio, total hardness, etc. In the later stage, attention should be paid to whether the content of elements such as Al, Fe, and Cu increases or not, as an increase indicates that contact corrosion has already occurred; the inspection method is shown in the table below.

It is recommended to regularly add corrosion inhibitors according to the supplier's requirements to maintain the coolant.

Table 2-1 Recommended Standard Parameters for Coolant

Items	Index	Recommended reference standards for inspection
Color	Significant color	Visual inspection
Exterior	No odor, sediment, or suspended solids	Visual inspection
Freezing point	< Local minimum freezing temperature	
Boiling point	108°C (low temperature type)	
pH value	7-9	
Reserve alkalinity	≥4ml (organic formula) ≥9ml (including inorganic formula)	
Total hardness	<120 mg/l	



	В	<20mg/kg
	Si	<20mg/kg
	P	<20mg/kg
Main element	Мо	<20mg/kg
content	Ca	<20mg/kg
	Al <sup>3+</sup>	<50mg/L
	Fe <sup>2+</sup>	<50mg/L
	Cu <sup>2+</sup>	<50mg/L

Table 2-1 provides the medium requirements for working environments with temperatures below  $0^{\circ}\text{C}$  like glycol. Table 2-2 illustrates the relationship between the concentration of glycol and its freezing point.

Table 2-2 Glycol Refrigerant Concentration vs. Freezing Points

Glycol con	F	
Mass concentration, %	Volume concentration, %	Freezing point, °C
0	0	0
5	4.4	-1.4
10	8.9	-3.2
15	13.6	-5.4
20	18.1	-7.8
25	22.9	-10.7
30	27.7	-14.1
35	32.6	-17.9
40	37.5	-22.3
45	42.5	-27.5
50	47.6	-33.8
55	52.7	-41.1
60	57.8	-48.3

If the working environment temperature is consistently above 0°C, deionized water or purified water can be used as the secondary side internal circulation medium with corresponding requirements listed in Table 2-3.

Table 2-3 Recommended standards for deionized water

Index	Deionized	Reference	Remarks
mucx	water	standards	Kemarks
pH value	8.5-9.5	Intel 632983	
Sulfide	<1 ppm	TC9.9/Intel	



		632983	
Coalfada	410	TC9.9/Intel	
Sulfate	<10 ppm	632983	
Chlassida	45	TC9.9/Intel	
Chloride	<5 ppm	632983	
Bacterial	4100 CEU a /m. l	TC9.9/Intel	
community	<100 CFUs/ml	632983	
Total hardness (as	-20	TC9.9/Intel	
CaCO <sub>3</sub> )	<20 ppm	632983	
Conductivity	<20us/cm (reference value, not mandatory)	TC9.9	High conductivity is not necessarily unacceptable, such as 1000us/cm, as corrosion inhibitors and fungicides will both lead to an increase in water conductivity. It is necessary to understand the reasons behind the sharp increase in conductivity trend during circuit operation.
Residues after	50 ppm	TC9.9/Intel	
evaporation	эч ррш	632983	
Turbidity	<20 NTU	TC9.9/Intel	
	201110	632983	
Iron content	0.1 ppm	Industry	
-	r r	standards	
Copper content	10 ppm	Industry standards	
Carbon steel	3mpy (0.075mm/a)	GB/T 50050-	
corrosion rate	Smpy (v.v/Smm/a)	2017	
Corrosion rate of	0.2mpy	GB/T 50050-	
copper or stainless steel	(0.005mm/a)	2017	
NOTE.			

#### **NOTE:**

➤ The coolant must be configured strictly in accordance with the lowest possible temperature in the environment. If the coolant is not configured according to the instructions and the ambient temperature is lower than the freezing point of the coolant, causing the heat exchanger to freeze and crack, our company will not bear



any responsibility.

### 2.2 Maintenance Requirements of Cooling System

As the core unit of the container water cooling system, it is recommended to regularly track and record the coolant, at least once a year (pH value should be tested every six months).

To ensure long-term reliable operation, when using deionized water or purified water as the internal circulation medium, check every 1-2 weeks and replace the internal coolant every 1-2 months.

When using deionized water as the internal circulation medium, please strictly comply with the usage environment above  $0^{\circ}$ C. Otherwise, if the temperature is below freezing point, unexpected power outage will cause the internal pipes of the system to freeze and cause the pipes to burst.

When using deionized water/pure water, the pH value, conductivity, and related index parameters of the coolant must be regularly tested and recorded. When the requirements in Table 2-3 are exceeded, or there are abnormal changes, new deionized water/pure water that meets the requirements must be replaced in time.



### 3 Installation

### 3.1 Loading Hydro-cooling miner

First connect the water, then the power supply, and proceed from the top to the bottom in sequence.

- 1. Water flows: First, close all the inlet and outlet water valves, then insert the water pipes into the machine's quick connectors, with the upper connector for inlet and the lower one for outlet. Make sure the water pipes are fully inserted to ensure a tight seal. Then, open all the water pipe valves and check for any leaks.
- 2. Power: The miner's power plug is an aviation plug, and the button can be fully reset to complete insertion.
- 3. Network: Insert the corresponding network cable below the miner into the miner, and each network cable has a location code.

### 3.2 Unloading Hydro-cooling miner

First cut off the power, then cut off the water, from the lower level to the higher level in sequence.

- 1. Power: Turn off the corresponding air switch of the miner.
- 2. Water flows:

Step 1: close all the inlet and outlet valves of the miner to ensure they are fully closed. Then, slowly pull out the inlet and outlet water pipes, and lower the water pipe mouth to allow the liquid inside the miner to flow into the bucket until no water droplets flow out.

Step 2: check the power plug and network cable head, confirm that there is no liquid on the head, and then unplug and remove the miner.

Step 3: unplug the water pipe and block the quick connect plug of the miner with a water stop plug. The residual miner coolant should be left in the miner (if repair is required, all the miner coolant should be drained and the residual coolant inside the miner should be blown dry with an air pump). After removal from the rack, the water inlet and outlet of the original miner position should be kept connected.

- 3. Network: Pull out the network cable from the miner and bend it down to avoid scratching the network cable when removing the miner.
- 4. After all the above operations are completed, the miner can be taken out and removed from the rack.

#### 3.3 Precautions

1. **Before water filling**: Check the water pipes to ensure they are securely connected to prevent leaks during water filling.



- 2. **Power connections**: Ensure that the power connections are securely plugged in to avoid sparks when powering on. Before plugging in or unplugging the AC power input line, please ensure that the server is powered off.
- 3. **Powering on**: First, fill the system with water, wait for 20 seconds, and then confirm that the flow rate and water temperature meet the standards before powering on.
- 4. **Powering off**: First, disconnect the power, wait for 20 seconds, and then confirm that the server is powered off before disconnecting the water.
- 5. **In case of water spillage**: If there is water splashing or spraying from the water-cooled server, do not power on the device directly. Please contact the after-sales service center.
- 6. **Operating below 0°C**: If the water-cooled server operates in an environment below 0°C, antifreeze must be used inside; otherwise, there is a risk of freezing and cracking the server.
- 7. **In case of thunderstorms**: Unplug the device during thunderstorms or when not in use for an extended period. This will protect the server from damage caused by power fluctuations. Do not overload the power outlet and power cord. Overloading may result in fire or electric shock.
- 8. **In case of strange odors, sounds, or smoke:** If the server emits strange odors, sounds, or smoke, immediately disconnect the power and contact the service center. Under no circumstances should you hit or drop the server. Ensure that all connection cables are securely connected and properly aligned.
- 9. The miner can only be energized after all of the above operations have been completed.
- 10. When performing batch shelving operations: it is necessary to load the miner from the upper layer to the lower layer in order to avoid the impact of residual water in the water pipe on the miners in the lower layer.
- 11. For transfer in batches, all the cooling liquid of the miner should be discharged, dried with an air pump, and packaged in original carton boxes for transportation and transfer.



### 4 Setting up the Server

#### NOTE:

➤ The file IPReporter.zip is supported by Microsoft Windows only.

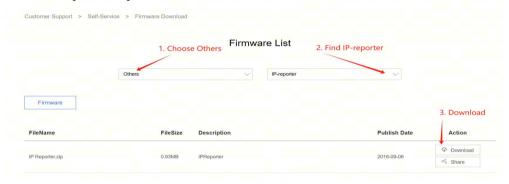
### 4.1 Setting up the Server

To set up the server:

1. Go to the following site:

https://file12.bitmain.com/shop-product/firmware/IP%20Reporter.zip.

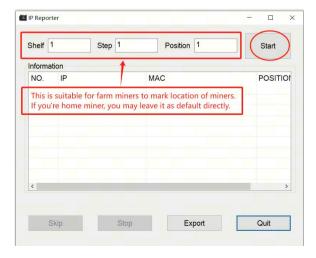
If the link is invalid, please visit the official firmware download page (<a href="https://service.bitmain.com/support/download">https://service.bitmain.com/support/download</a>) and select as shown in the image to download IPReporter.zip.



- 2. Download the following file: IPReporter.zip.
- 3. Extract the file.

#### NOTE:

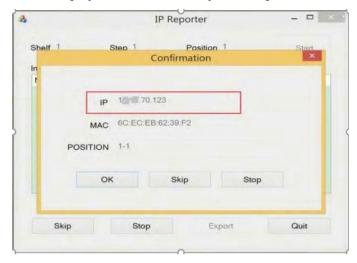
- > The default DHCP network protocol distributes IP addresses automatically
- 4. Right-click **IPReporter.exe** and run it as Administrator.
- 5. Select one of the following options:
  - **Shelf, Step, Position** suitable for farm servers to mark the location of the servers.
  - **Default** suitable for home servers.
- 6. Click Start.





7. On the control panel, click the IP Report button (its location is shown in Figure 1-2). Hold the button down until it beeps (about 5 seconds).

The IP address will be displayed in a window on your computer screen.



- 8. In your web browser, enter the IP address provided.
- 9. Proceed to login using **root** for both the username and password.
- 10. In the Protocol section, you can assign a Static IP address (optional).
- 11. Enter the IP address, Subnet mask, gateway and DNS Server.
- 12. Click "Save".
- 13. Click <a href="https://support.BITMAIN.com/hc/en-us/articles/360018950053">https://support.BITMAIN.com/hc/en-us/articles/360018950053</a> to learn more about gateway and DNS Server.



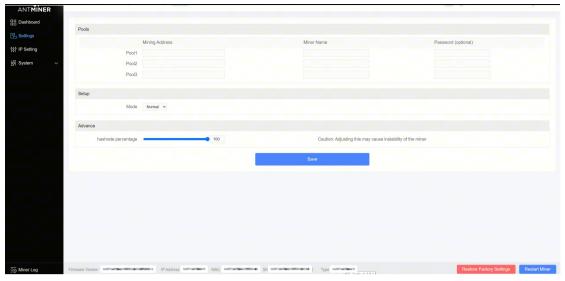
### 4.2 Configuring the Server

#### **Setting up the Pool**

To configure the server:

1. Click **Settings** as below.





2. Set the options according to the following table:

Option	Description	
Mining address	Enter the address of your desired pool.	
	The U3S19XP+H servers can be set up with three	
	mining pools, with decreasing priority from the first pool	
	(pool 1) to the third pool (pool 3). The pools with low priority	
	will only be used if all higher priority pools are offline.	
Name	Your worker ID on the selected pool.	
Password (optional)	The password for your selected worker.	

- 3. Click **Save** after the configuration.
- 4. You can drag the progress bar or enter a number in "Advance," then click "Save" to adjust the hash rate percentage. However, adjusting the hash rate will affect energy efficiency and stability.

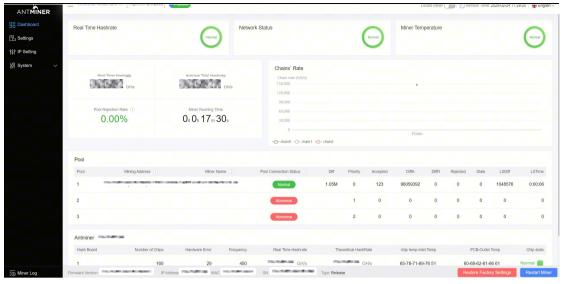
### 4.3 Monitor your Server

To check the operating status of your server:

1. Click **dashboard** marked below to check the server status.

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2. Monitor your server according to the descriptions in the following table:

Option	Description			
Number of chips	Number of chips detected in the chain.			
Frequency	ASIC frequency setting.			
Real Hashrate	Real-time hashrate of each hash board (GH/s).			
Inlet Temp	Temperature of the inlet (°C).			
Outlet Temp	Temperature of the outlet (°C).			
Chip state	One of the following statuses will appear:			
	The Green Icon - indicates normal			
	The Red Icon- indicates abnormal			

3. Monitor your server according to the LED indicator light:

Status	Fault Indicator(RED)	Normal Indicator(GREEN)
Normal	OFF	ON
Over temperature	ON	OFF
Network disconnection	ON	OFF

#### NOTE:

➤ The frequency of the U3S19XP+H server is fixed at 450 MHz. The firmware will stop running when the Temp (PCB) reaches 80°C or the water temperature is either



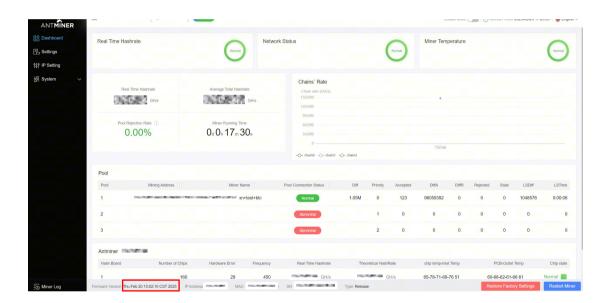
greater than 50°C or lower than 20°C. An error message, "Fatal Error: Temperature is too high!" will be shown at the bottom of the Kernel log page.

### 4.4 Administering your Server

### 4.4.1 Checking your Firmware Version

To check your firmware version:

- 1. Enter the backend of your server, find the firmware version at the bottom.
- 2. File System Version displays the date of the firmware your server uses. In the example below, the server is using firmware version **202502201502**.



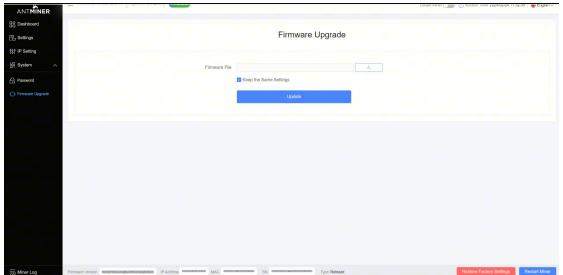
### 4.4.2 Upgrading your System

**Caution**: Make sure that the U3S19XP+H server remains powered during the upgrade process. If power fails before the upgrade is completed, you will need to return it to BITMAIN for repair.

To upgrade the server's firmware:

1. In System, click Firmware Upgrade.





- 2. For Keep Settings:
  - (1) Select "**keep settings**" to keep your current settings (default).
  - (2) Unselect "**keep settings**" to reset the server to default settings.
- 3. Click the button and navigate to the upgrade file. Select the upgrade file, then click Update.
- 4. When the upgrade is completed, restart the server. It will return to the settings page.
- 5. Click one of the following options:
  - **Reboot** to restart the server with the new firmware.
  - **Go Back** to continue mining with the current firmware. The server will load the new firmware next time it is restarted.

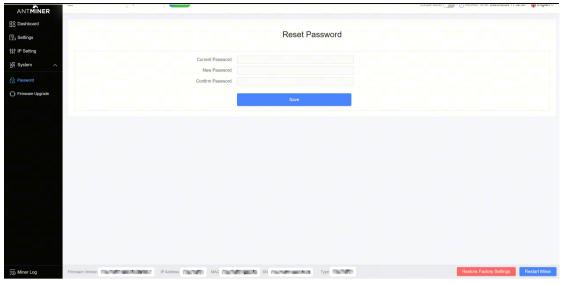
### 4.4.3 Modifying your Password

To change your login password:

- 1. In System, click the Password tab.
- 2. Set your new password, then click **Save**.

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### **4.4.4 Restoring Initial Settings**

To restore your initial settings

- 1. Turn on the server and let it run for 5 minutes.
- 2. On the controller front panel, press and hold the **Reset** button for 10 seconds.

**Caution:** Resetting your server will reboot it and restore its default settings. The red LED will automatically flash once every 15 seconds if the reset is operated successfully.

#### 4.4.5 Error Code

Here is the server error code and the corresponding reasons and suggestions:

Error Code	Reason	Suggestion
R:1	Average total hashrate is low	Update the firmware to the latest version, replace the power supply, or return to factory
	nashrate is low	for repair
R:2	Average total hashrate is low	Check if chain1 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J1:1	Chain1 has bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
J2:1	Chain2 has bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory



	1611	
		for repair
J3:1	Chain2 and chain1 have bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
J4:1	Chain3 has bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
J5:1	Chain3 and chain1 have bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
J6:1	Chain3 and chain2 have bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
J7:1	Chain3 , chain2 and chain1 have bad ASIC	Update the firmware to the latest version, replace the power supply, or return to factory for repair
N:1	Average total hashrate exceeds the sale hashrate too much	Update the firmware to the latest version
N:3	Chain is unbalance	Update the firmware to the latest version
V:1	Power initialization error or power output voltage error	Check power output wiring, update the firmware to the latest version, replace the power supply, or return to factory for repair
V:2	Power supply is not calibrated	Update the firmware to the latest version, replace the power supply, or return to factory for repair
M:1	Memory contains incorrect information	Update the firmware to the latest version, replace the power supply, or return to factory for repair



		1
P:1	High temperature protection	Check if the environment temperature is normal, or check if the gel on the hashboard is effective
P:2	Low temperature protection	Check if the environment temperature is normal
P:4	Product id are different	Update the firmware to the latest version, replace the power supply, or return to factory for repair
P:5	Load pattern file failed	Update the firmware to the latest version, replace the power supply
S:0	Sweep type error	Check the sweep type
J1:5	Chain1 PIC error	Check if chain1 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J2:5	Chain2 PIC error	Check if chain2 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J4:5	Chain3 PIC error	Check if chain3 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J8:5	Chain4 PIC error	Check if chain4 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
M:1	Memory allocation error	Update the firmware to the latest version, replace the control board, or return to factory for repair
J1:2	The number of chain1 chips is less than the design	Check if chain1 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J2:2	The number of chain2 chips is less than the	Check if chain2 connection is normal, update the firmware to the latest version, replace the



	design	hashboard, or return to factory for repair
	acoign	national and return to ractory for repair
J4:2	The number of chain3 chips is less than the design	Check if chain3 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
J8:2	The number of chain4 chips is less than the design	Check if chain4 connection is normal, update the firmware to the latest version, replace the hashboard, or return to factory for repair
L1:1	Chain1 voltage or frequency exceeds the limit	Update the firmware to the latest version, or return to factory for repair
L2:1	Chain2 voltage or frequency exceeds the limit	Update the firmware to the latest version, or return to factory for repair
L4:1	Chain3 voltage or frequency exceeds the limit	Update the firmware to the latest version, or return to factory for repair
L8:1	Chain4 voltage or frequency exceeds the limit	Update the firmware to the latest version, or return to factory for repair
L:2	Cannot find the mixed level	Update the firmware to the latest version, or return to factory for repair
L1:2	Chain1 voltage or frequency mismatch	Update the firmware to the latest version, or return to factory for repair
L2:2	Chain2 voltage or frequency mismatch	Update the firmware to the latest version, or return to factory for repair
L4:2	Chain3 voltage or frequency mismatch	Update the firmware to the latest version, or return to factory for repair



L8:2	Chain4 voltage or	Update the firmware to the latest version, or
	frequency	return to factory for repair
	mismatch	

#### 4.4.6 API

Visit the following URL to access the API documentation

# **5 Environmental Requirements**

Please ensure that your server operates in accordance with the following environmental requirements.

### **5.1 Basic Environmental Requirements**

### **5.1.1 Site Requirements of the Server Running Room**

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Please ensure that the server operating room is kept away from industrial pollution sources:

- (1) For heavy pollution sources such as smelters and coal mines, maintain a distance of more than 5 km.
- (2) For moderate pollution sources such as chemical industries, rubber, and electroplating industries, maintain a distance of more than 3.7 km.
- (3) For light pollution sources such as food factories and leather processing factories, maintain a distance of more than 2 km. If unavoidable, choose a site in the perennial upwind direction of the pollution source.

Please do not set up your location within 3.7 km of the seaside or a saltwater lake. If this is unavoidable, ensure that the structure is as airtight as possible and equipped with air conditioning for cooling.

### 5.1.2 Electromagnetic Environmental Conditions

Please keep your site away from transformers, high-voltage cables, transmission lines, and high-current equipment. For example, there should be no high-power AC transformers (>10KA) within 20 meters, and no high-voltage power lines within 50 meters. Additionally, keep your site away from high-power radio transmitters; for example, there should be no high-power radio transmitters (>1500W) within 100 meters.

### 5.2 Other Environmental Requirements

The server running room shall be free of explosive, conductive, magnetically conductive and corrosive dust. The requirements of mechanical active substances are shown below.

#### 5.2.1 Mechanical Active Substances

Table 5-1 Requirements of mechanical active substances

Mechanical Active Substance	Requirement	
Sand, <b>mg/m</b> <sup>3</sup>	≤30	
Dust (suspended), <b>mg/m</b> <sup>3</sup>	≤0.2	
Dust (deposited) , mg/ m²h	≤1.5	

#### 5.2.2 Corrosive Gas

Table 5-2 Requirements of corrosive gas

Corrosive Gas	Unit	Concentration
H2S	ppb	< 3





S02	ppb	< 10
Cl2	ppb	<1
NO2	ppb	< 50
HF	ppb	<1
NH3	ppb	< 500
03	ppb	< 2

Note: **ppb** (part per billion) refers to the unit of concentration, 1**ppb** stands for the volume ratio of part per billion.



### **6 Regulations**

### 6.1 Federal Communications Commission (FCC)

#### **FCC Notice:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### **Caution:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 6.2 Industry Canada

CAN ICES-003(A) / NMB-003(A)

### 6.3 European Community

**Warning:** Operation of this equipment in a residential environment could causeradio interference.

#### **UAB Bitmain Development Lithuania**

Vilnius, Bistrycios g.40-21

#### **EU WEEE**

Disposal of Waste Equipment by Users in Private Household in the European Union:



This symbol on the product or on its packaging indicates that this product



must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handling it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where your purchased the product.

### 6.4 Taiwan ROHS

設備名稱:服務器型號:U3S19XP+H						
	限用物質及其化學符號					
單元	鉛	汞	妇姻	六價鉻	多溴聯苯	多溴二苯 醚
	(Pb)	(Hg)	(Cd)	( Cr <sup>6+</sup> )	(PBB)	(PBDE)
外殼	0	0	0	0	0	0
電源	_	0	0	0	0	0
管道配件	_	0	0	0	0	0
控制板	_	0	0	0	0	0
算力板	0	0	0	0	0	0
線材組件	0	0	0	0	0	0

備考 1. "超出 0.1 wt %"及"超出 0.01 wt %"係指限用物質之百分比含量超出百分比含量基準值。

備考 2. "○" 係指該項限用物質之百分比含量未超出百分比含量基準值。

備考 3. "一" 係指該項限用物質為排除項目。

### 6.5 FCC Supplier's Declaration of Conformity

**Supplier's Declaration of Conformity** 

**Trade Name:** 

Model Number: U3S19XP+H









### **6.6 EU Declaration of Conformity**

## BITMAIN



# **C E** U Declaration of Conformity

Manufacturer's Name: BITMAIN DEVELOPMENT PTE. LTD.

Manufacturer's Address: 1 Raffles Place, #36-01 One Raffles Place, Singapore 048616

For the following equipment

Trade Mark:



**Product: Server** 

Model No.: U3S19XP+H

is herewith confirmed to comply with the requirements set out in Directive 2014/35/EU, Directive 2014/30/EU, and Directive 2011/65/EU. Compliance with 2014/35/EU and 2014/30/EU are evaluated by applying the following standards:

Safety standard: EN 62368-1:2014+A11

EMC standard: EN 55032:2015+A11:2020(Class A); EN 55032: 2015;

EN 55035: 2017; EN 55035: 2017+A11:2020

EN IEC 61000-3-2: 2019; EN 61000-3-3: 2013+A1:2019

This declaration of conformity is issued under the sole responsibility of the manufacture.

Signature: Date:

Position/Title:



# 7 Warranty

- 1. A 365-day warranty is provided starting from the shipping date. BITMAIN will cover shipping costs when shipping a replacement unit within the warranty period.
- 2. The warranty only applies to the original purchaser who purchased the machine directly from BITMAIN. Once the miner is resold, warranty coverage becomes the responsibility of the re-seller.
- 3. If the user fails to use the product per the given instructions, specifications, and conditions provided or changes the function settings of the unit without BITMAIN's prior consent, BITMAIN will not be liable for any damage arising therefrom.
- 4. Click <a href="https://service.bitmain.com/support/policy">https://service.bitmain.com/support/policy</a> for a complete list of the Terms & Conditions that apply to all orders placed on <a href="https://shop.bitmain.com">https://shop.bitmain.com</a>.

#### Note:

Only new machines are eligible for a 365-day warranty; used machines are not included