Antminer S19

BITMAIN Antminer S19 90TH/S Bitcoin ASIC Miner User Manual

Model: S19 | Brand: Antminer

1. INTRODUCTION AND OVERVIEW

This manual provides essential instructions for the safe and efficient operation of your BITMAIN Antminer S19 90TH/S Bitcoin ASIC Miner. The Antminer S19 is designed for mining SHA256 algorithm-based cryptocurrencies such as Bitcoin (BTC), Bitcoin Cash (BCH), and Bitcoin SV (BSV), offering a high hashrate and air-cooling efficiency.
Please read this manual thoroughly before setting up and operating the device to ensure proper functionality and to prevent damage or injury.

2. SAFETY INFORMATION

- **Voltage Requirement:** The Antminer S19 requires a 200-240V AC input voltage. Using an incorrect voltage (e.g., 110V-120V) will likely cause severe damage to the miner and void the warranty.

- **Power Cord:** The power cord is NOT included with the unit. Ensure you use a suitable power cord rated for 200-240V and the miner's power consumption (3105W).

- **Ventilation:** Ensure adequate airflow around the miner. Do not obstruct the intake or exhaust vents. Operate in a well-ventilated area to prevent overheating.

- **Environment:** Maintain operating temperatures between 32°F (0°C) and 113°F (45°C) and humidity between 10% and 90% (non-condensing).

- **Electrical Safety:** Always disconnect power before performing any maintenance or inspection. Do not operate the miner if any cables are damaged or if the unit shows signs of physical damage.

3. PRODUCT COMPONENTS AND PHYSICAL OVERVIEW

The Antminer S19 unit consists of the main mining chassis, integrated power supply, and cooling fans. Familiarize yourself with the external features of the device.

Figure 3.1: Front-side view of the Antminer S19. This image displays the overall compact design of the miner, highlighting the cooling fans on one end and the power input ports on the other, with the control board visible on top.

Figure 3.2: Top-rear view of the Antminer S19. This image shows the control board with its network port (RJ45), IP Report button, and status indicator lights (Fault, Normal).

Figure 3.3: Rear view of the Antminer S19. This image details the exhaust fans and the dual power input ports, emphasizing the air-cooling system and power connectivity.

4. SETUP INSTRUCTIONS

4.1 Unpacking and Inspection

1. Carefully remove the Antminer S19 from its packaging.

2. Inspect the unit for any signs of physical damage during transit. If damage is found, contact your vendor immediately.

3. Ensure all components are present. Note that the power cord is not included.

4.2 Environmental Placement

- Place the miner in a location with stable power supply and good ventilation.

- Ensure the operating temperature is within 32~113°F (0~45°C) and humidity is 10~90% (non-condensing).

- Avoid placing the miner in direct sunlight, near heat sources, or in dusty environments.

4.3 Connecting Power

- Connect a 200-240V AC power cord (not supplied) to the power input ports on the miner.

- Ensure the power source can provide the required 3105W.

- **WARNING:** Using incorrect voltage will damage the unit.

4.4 Network Connection

- Connect an Ethernet cable to the RJ45 port on the control board of the miner.

- Connect the other end of the Ethernet cable to your network router or switch.

5. OPERATING INSTRUCTIONS

5.1 Powering On

After connecting power and network, the miner will automatically power on. The status indicator lights on the control board will illuminate.

5.2 Accessing the Miner Interface

1. Use an IP scanner tool on your network to find the IP address of the Antminer. Alternatively, press the 'IP Report' button on the control board for 1-5 seconds, and the IP address will be reported to the IP Reporter tool on your computer.

2. Open a web browser and enter the miner's IP address.

3. Log in using the default credentials (usually 'root' for both username and password, refer to official BITMAIN documentation for specifics).

5.3 Configuring Mining Settings

- Navigate to the 'Miner Configuration' or 'Settings' section within the web interface.

- Enter your mining pool URL, worker name, and password. You can typically configure up to three mining pools for redundancy.

- Save the settings. The miner will restart its hashing process with the new configuration.

5.4 Monitoring Performance

The web interface provides real-time data on hashrate, temperature, fan speed, and other operational parameters. Regularly monitor these metrics to ensure optimal performance and detect potential issues early.

6. MAINTENANCE

6.1 Cleaning

- Regularly inspect the miner for dust accumulation, especially on the fans and heatsinks.

- **Before cleaning, always disconnect the power supply.**

- Use compressed air to gently remove dust from the fans and internal components. Do not use liquids.

6.2 Environmental Control

Ensure the operating environment remains within the specified temperature and humidity ranges to prevent component degradation and ensure stable operation.

7. TROUBLESHOOTING

- **Miner Not Powering On:** Check power connections and ensure the 200-240V supply is active. Verify the power cord is correctly seated.

- **No Network Connection:** Verify the Ethernet cable is securely connected to both the miner and the

router/switch. Check network settings on your router.

- **Low Hashrate/No Hashing:** Check mining pool configuration in the web interface. Ensure your internet connection is stable. Monitor temperatures; overheating can cause performance throttling.

- **Fault Indicator Light:** If the 'Fault' light is on, it indicates a hardware issue. Refer to BITMAIN's official troubleshooting guides or contact their support.

For more detailed troubleshooting, refer to the official BITMAIN support resources.

8. SPECIFICATIONS

Feature	Specification
Model	S19
Algorithm | Cryptocurrency	SHA256 | BTC/BCH/BSV
Hashrate	90 TH/S ± 3%
Power on wall @77°F(25°C)	3105 W ± 5%
Power efficiency on wall @77°F(25°C)	34.5 J/TH ± 5%
AC Input Voltage	200~240 V
AC Input Frequency Range	47~63 Hz
Networking Connection Mode	RJ45 Ethernet 10/100M
Miner Size (L*W*H, w/o package)	15.75 x 7.68 x 11.42 inches
Net Weight	33.96 lbs
Operation Temperature	32~113°F (0~45°C)
Storage Temperature	-4~158°F (-20~70°C)
Operation Humidity (non-condensing)	10~90% RH
Operation Altitude	≤2000 m
Cooling Method	Air

9. WARRANTY AND SUPPORT

Brand new BITMAIN Antminer units come with warranty coverage directly provided by BITMAIN. For any warranty claims, technical support, or assistance, customers are required to proactively contact BITMAIN's official website. Dedicated personnel at BITMAIN will assist you with product-related inquiries and support. Please note that the vendor is not responsible for warranty claims; all support and warranty services are handled directly by BITMAIN.