

## Antminer S19

# BITMAIN Antminer S19 86TH/S Bitcoin ASIC Miner Instruction Manual

Model: S19 | Hashrate: 86 TH/S | Algorithm: SHA256

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your BITMAIN Antminer S19 86TH/S Bitcoin ASIC Miner. Please read this document thoroughly before setting up and operating the device. Proper installation and maintenance are crucial for optimal performance and longevity.

The Antminer S19 is designed for high-performance cryptocurrency mining using the SHA256 algorithm, supporting currencies such as Bitcoin (BTC), Bitcoin Cash (BCH), and Bitcoin SV (BSV). It features an air-cooling system and is optimized for energy efficiency.

## 2. SETUP

### 2.1. Unboxing and Inspection

Carefully remove the Antminer S19 from its packaging. Inspect the device for any visible damage that may have occurred during transit. Ensure all components are present.



Figure 1: Front view of the Antminer S19.



Figure 2: Multiple Antminer S19 units, illustrating their compact design.

## 2.2. Power Connection

The Antminer S19 requires a **200-240V AC input voltage**. A power cord is **NOT INCLUDED** with the unit. Use an appropriate power cord and ensure the voltage supply is within the specified range. Incorrect voltage can cause severe damage to the miner.



Figure 3: Rear panel of the Antminer S19, highlighting power input ports and the RJ45 Ethernet port.

## 2.3. Network Connection

Connect the miner to your network using an **RJ45 Ethernet cable**. The device supports 10/100M Ethernet connections. Ensure a stable internet connection for continuous mining operations.

## 2.4. Initial Configuration

Once powered on and connected to the network, the miner will typically acquire an IP address via DHCP. Access the miner's web interface using its IP address to configure mining pool settings, worker names, and other parameters. Refer to the BITMAIN official website for detailed software configuration guides.

# 3. OPERATING THE ANTMINER S19

## 3.1. Performance Overview

The Antminer S19 delivers a hashrate of **86 TH/S  $\pm$  3%**, with a power efficiency of **34.5 J/TH  $\pm$  5%**. It operates on approximately **2967 W  $\pm$  5%** at 77°F (25°C) ambient temperature. These figures are crucial for calculating potential profitability and ensuring your electrical infrastructure can support the load.

## 3.2. Environmental Requirements

To ensure stable and long-term operation, adhere to the following environmental conditions:

- **Operation Temperature:** 32°F to 113°F (0°C to 45°C)
- **Storage Temperature:** -4°F to 158°F (-20°C to 70°C)
- **Operation Humidity (non-condensing):** 10% to 90% RH
- **Operation Altitude:**  $\leq$  2000 meters

Operating outside these ranges may lead to reduced performance, instability, or permanent damage to the unit.

## 4. MAINTENANCE

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### 4.1. Air Filter and Fan Cleaning

The Antminer S19 utilizes an air-cooling system. Regular cleaning of the air intake and exhaust fans is essential to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air to gently clear dust from the fan blades and heatsinks. Ensure the device is powered off and disconnected from the power source before performing any cleaning.



Figure 4: Front view of the Antminer S19, highlighting the air-cooling fans.

### 4.2. Environmental Monitoring

Continuously monitor the operating temperature and humidity of the mining environment. Maintaining optimal conditions will extend the lifespan of your miner and ensure consistent performance.

## 5. TROUBLESHOOTING

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### 5.1. Common Issues

- **No Power:** Verify the power cord is securely connected and the power supply is receiving adequate voltage (200-240V).
- **No Network Connection:** Check the Ethernet cable connection and ensure your network is operational. Confirm the miner has obtained an IP address.
- **Low Hashrate:** This can be caused by poor network connectivity, incorrect mining pool settings, or environmental factors such as high temperatures.
- **Overheating:** Ensure proper ventilation and clean the fans. Check ambient room temperature.

### 5.2. Important Note on Voltage

Using an incorrect input voltage (e.g., 110V instead of 220-240V) will likely cause irreversible damage to the miner. Always confirm your power source meets the specified requirements before connecting the device.

## 6. SPECIFICATIONS

Feature	Specification
Model	S19
Algorithm   Cryptocurrency	SHA256   BTC/BCH/BSV
Hashrate	86 TH/S $\pm$ 3%
Power on wall @77°F(25°C)	2967 W $\pm$ 5%
Power efficiency on wall @77°F(25°C)	34.5 J/TH $\pm$ 5%
Power supply AC Input voltage	200~240 V
Power supply AC Input Frequency Range	47~63 Hz
Power supply AC Input current	20 Amp
Networking connection mode	RJ45 Ethernet 10/100M
Miner Size (Length*Width*Height, w/o package)	15.75 x 7.68 x 11.42 inches
Miner Size (Length*Width*Height, with package)	22.45 x 12.45 x 16.93 inches
Net weight	33.96 lbs
Gross weight	37.92 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	$\leq$ 2000m

## 7. WARRANTY AND SUPPORT

### 7.1. Warranty Coverage

Brand new BITMAIN Antminer units are covered by a warranty provided directly by BITMAIN. The seller is not responsible for warranty claims. Customers are required to contact BITMAIN's official website for warranty service and support. Dedicated personnel at BITMAIN will assist you with any warranty-related inquiries.

### 7.2. Return Policy

For brand new BITMAIN Antminer units, if a return is not due to product malfunction, a **40% restocking fee** will be applied. Please consider your purchase carefully before proceeding.

### 7.3. Technical Support

For technical assistance, troubleshooting beyond this manual, or any operational questions, please refer to the official BITMAIN support channels. Their website typically provides comprehensive FAQs, forums, and direct contact options for technical support.

## Related Documents - S19

 <p><b>S19 XP Hyd.</b> Product Manual</p>	<p><a href="#">Antminer S19 XP Hyd. Product Manual - Bitmain Technologies</a></p> <p>Detailed specifications, environmental requirements, and performance curves for the Bitmain Antminer S19 XP Hyd. ASIC miner, covering models 257T, 246T, 235T, and 224T.</p>
 <p><b>S19 XP Hyd.</b> Product Manual</p>	<p><a href="#">Antminer S19 XP Hyd. Product Manual</a></p> <p>This product manual provides detailed specifications, performance curves, and environmental requirements for the Antminer S19 XP Hyd. mining hardware.</p>
 <p><b>S19 Pro Hyd.</b> Product Manual</p>	<p><a href="#">AntMiner S19 Pro Hyd. Product Manual - Specifications</a></p> <p>Detailed specifications for the AntMiner S19 Pro Hyd. mining hardware, including power supply, hardware configuration, and environmental requirements. Learn about its performance metrics and operating conditions.</p>
 <p><b>S21 Imm.</b> Product Manual</p>	<p><a href="#">Antminer S21 Imm. Product Manual - Specifications and Performance</a></p> <p>Detailed product manual for the Antminer S21 Imm. cryptocurrency mining hardware, including specifications, performance curves, and environmental requirements.</p>
 <p><b>S21 XP Hyd.</b> Product Manual</p>	<p><a href="#">Antminer S21 XP Hyd. Product Manual</a></p> <p>Product manual for the Antminer S21 XP Hyd. cryptocurrency mining hardware, detailing specifications, performance curves, and environmental requirements.</p>



**S21 Hyd.**  
Product Manual



[Antminer S21 Hyd. Product Manual: Specifications and Performance Curves](#)

Comprehensive product manual for the Bitmain Antminer S21 Hyd. ASIC miner, detailing technical specifications, environmental requirements, and performance characteristics. Includes hashrate and power efficiency data.