WHATSMINER M5X Series

Product Manual

October 2024

Shenzhen MicroBT Electronics Technology Co.,Ltd.

www.whatsminer.com

Content

WHATSMINER M56S++

Immersion Cooling

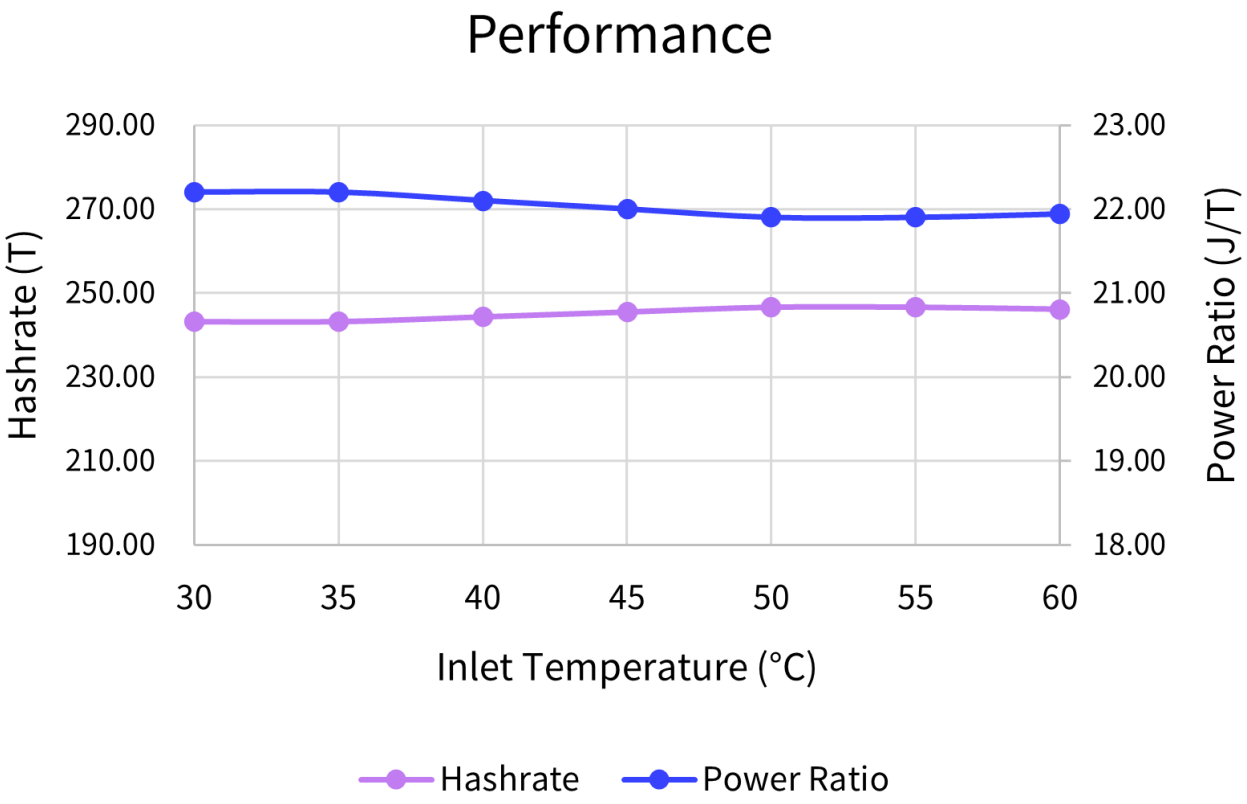
SPECIFICATION

Power Ratio	**22 J/T ± 5 %**	Hashrate	**222 T – 236 T ± 10 %**
Weight	**16 kg (Net)** **17 kg (Gross)**	Size with Handle	**267.5 mm × 147 mm × 401 mm**
Input Voltage	**AC 380 V – 480 V**	Power Cable Model	**Custom made, ⩾ 16 A**
Internet Connections	**Ethernet**	—	—

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 25 °C – 55 °C @ normal mode, 25 °C – 45 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 24 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Medium	**Special coolant: Insulating liquid (S5X/S3X)**
Humidity	① **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ② **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M56S+

Immersion Cooling

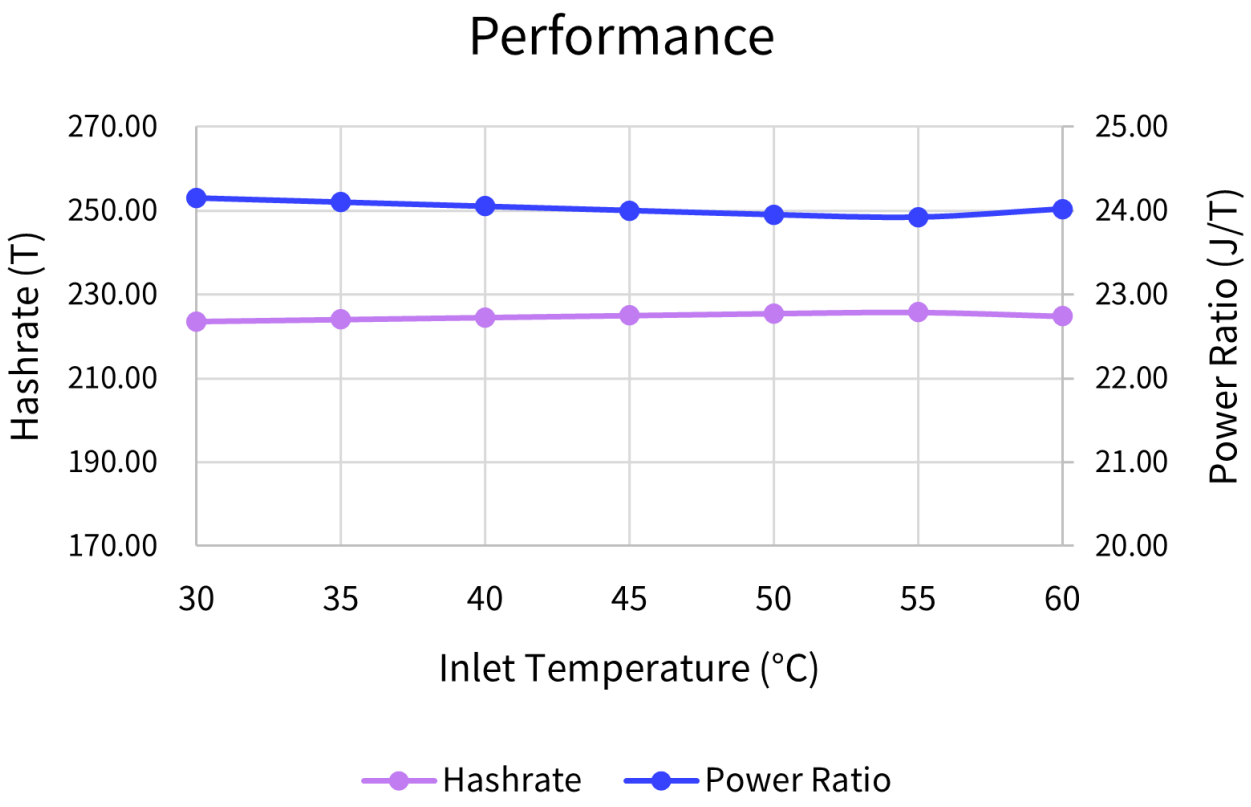
SPECIFICATION

Power Ratio	**24 J/T ± 5 %**	Hashrate	**206 T – 224 T ± 10 %**
Weight	**16 kg (Net)** **17 kg (Gross)**	Size with Handle	**267.5 mm × 147 mm × 401 mm**
Input Voltage	**AC 380 V – 480 V**	Power Cable Model	**Custom made, ⩾ 16 A**
Internet Connections	**Ethernet**	—	—

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 45 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 24 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Medium	**Special coolant: Insulating liquid (S5X/S3X)**
Humidity	① **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ② **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M56S

Immersion Cooling

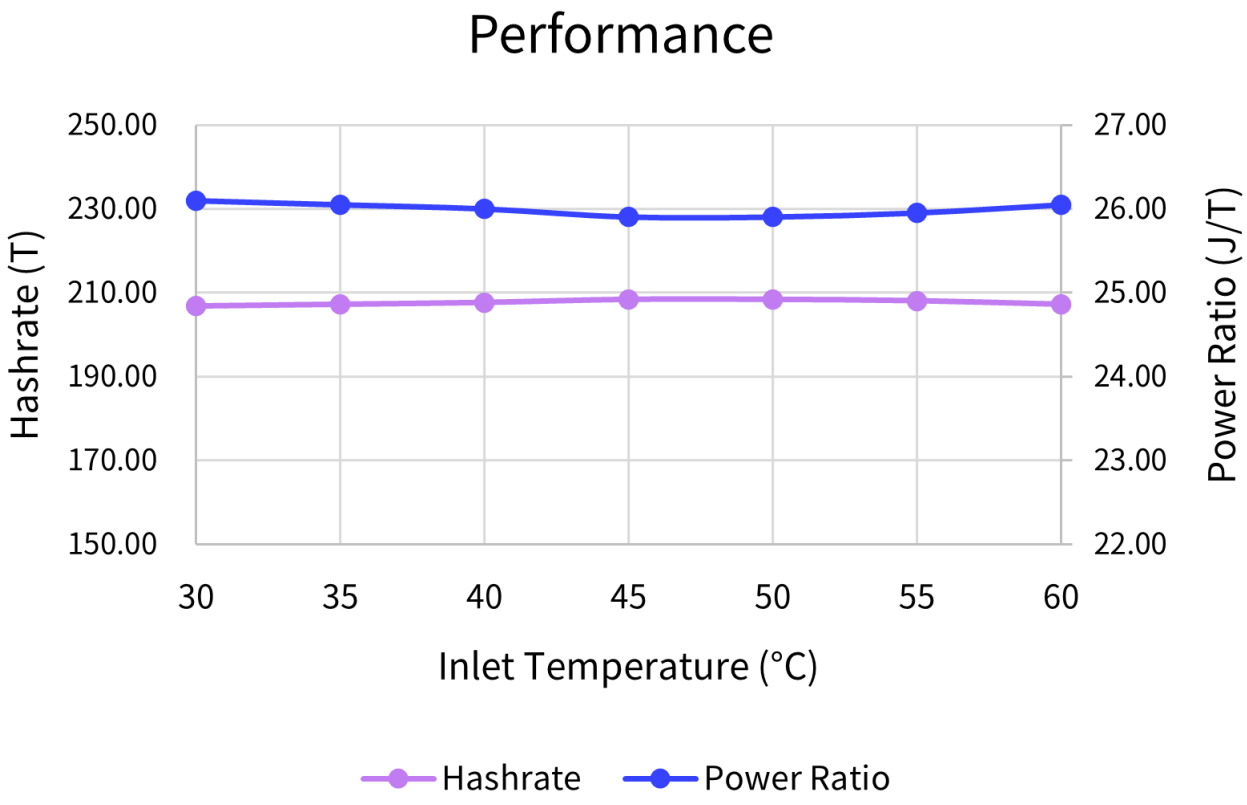
SPECIFICATION

Power Ratio	**26 J/T ± 5 %**	Hashrate	**194 T – 220 T ± 10 %**
Weight	**16 kg (Net)** **17 kg (Gross)**	Size with Handle	**267.5 mm × 147 mm × 401 mm**
Input Voltage	**AC 380 V – 480 V**	Power Cable Model	**Custom made, ⩾ 16 A**
Internet Connections	**Ethernet**	—	—

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 45 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 24 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Medium	**Special coolant: Insulating liquid (S5X/S3X)**
Humidity	① **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ② **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M56

Immersion Cooling

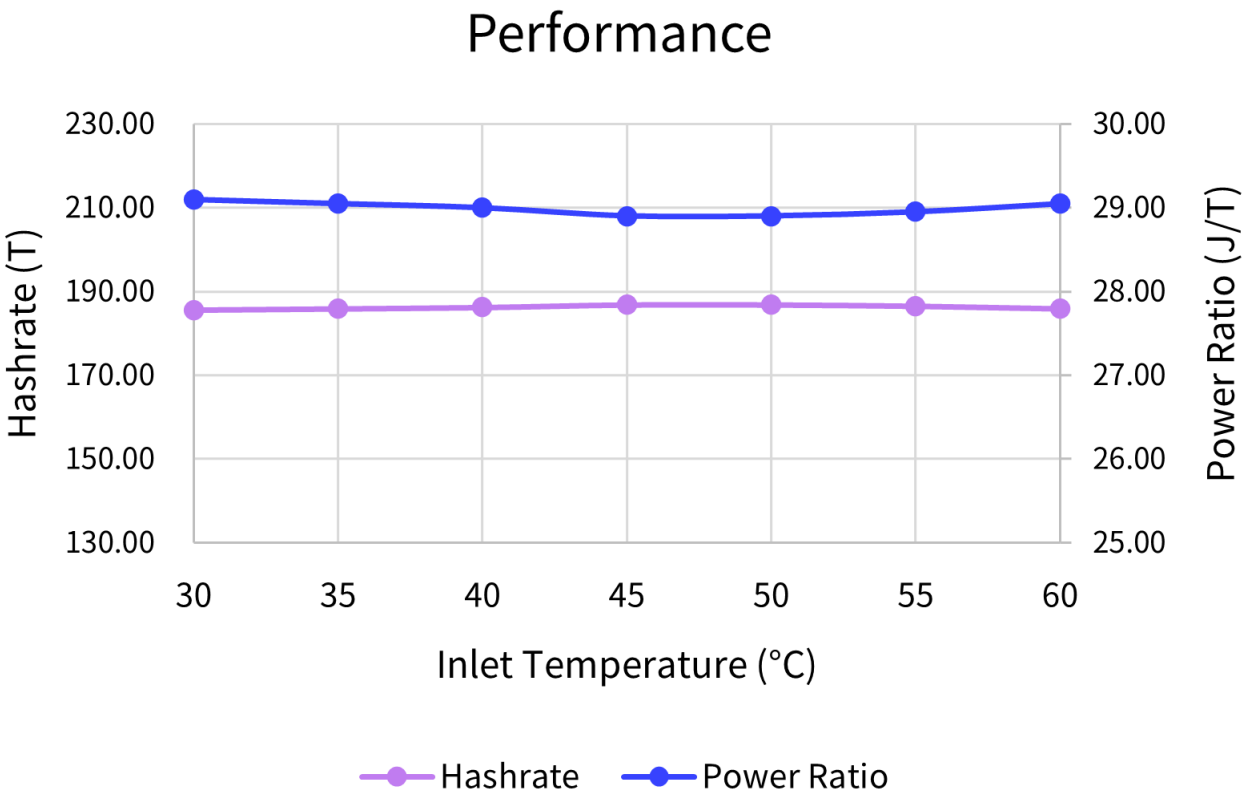
SPECIFICATION

Power Ratio	**29 J/T ± 5 %**	Hashrate	**168 T – 194 T ± 10 %**
Weight	**16 kg (Net)** **17 kg (Gross)**	Size with Handle	**267.5 mm × 147 mm × 401 mm**
Input Voltage	**AC 380 V – 480 V**	Power Cable Model	**Custom made, ⩾ 16 A**
Internet Connections	**Ethernet**	—	—

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 45 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 24 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Medium	**Special coolant: Insulating liquid (S5X/S3X)**
Humidity	① **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ② **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M54S++

Hydro-Cooling

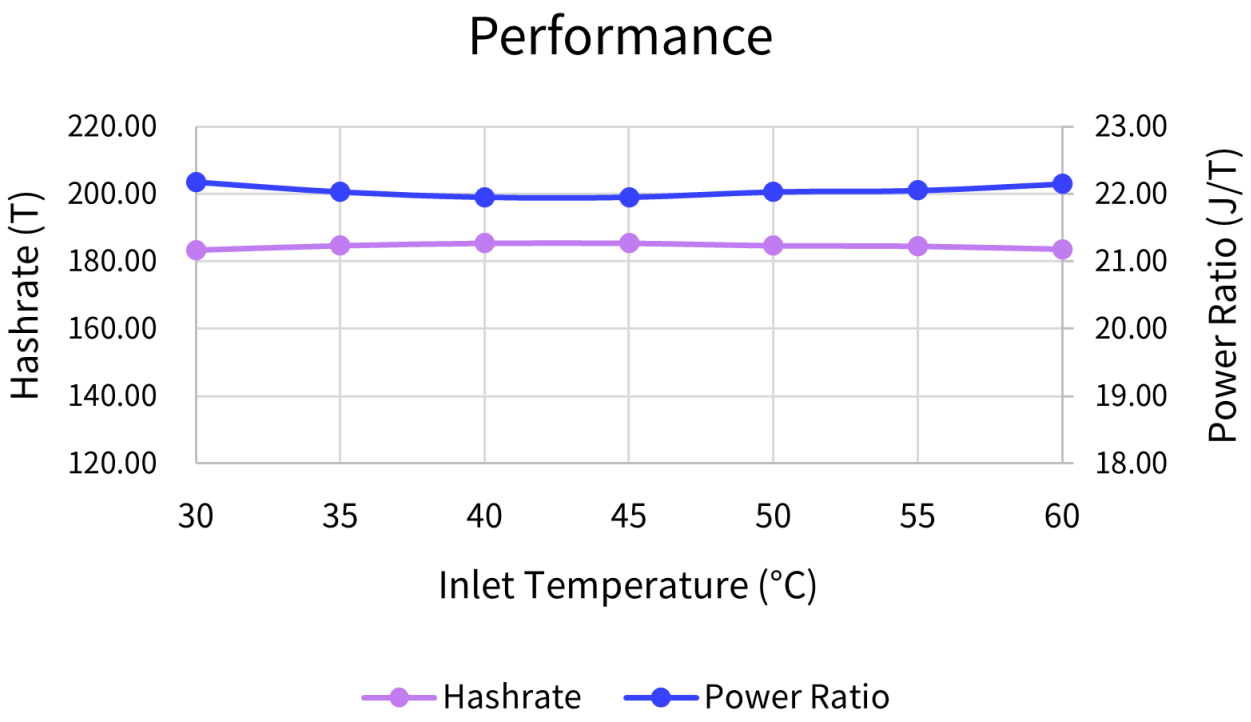
SPECIFICATION

Power Ratio	**22 J/T ± 5 %**	Hashrate	**168 T – 190 T ± 10 %**
Weight	**16 kg (Net)** **17 kg (Gross)**	Size with Handle	**371 mm × 290 mm × 109 mm**
Input Voltage	**AC 220 V – 277 V** **Input 5 kW**	Power Cable Model	**Custom made, ⩾ 25 A**
Coolant Demand Per Machine	**About 1 L**	Internet Connections	**Ethernet**

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 35 °C – 70 °C @ normal mode, 35 °C – 55 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 3.5 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Pressure	**⩽ 400 Kpa**
Liquid Medium	**Special coolant: Pure water (or distilled water) + special corrosion inhibitor + antifreeze (select a ratio according to a freezing point)**
Liquid PH	**Control range: 7 – 8.7**
Humidity	① **Working humidity: 5 % RH – 85 % RH (non-condensing)** ② **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ③ **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M53S++

Hydro-Cooling

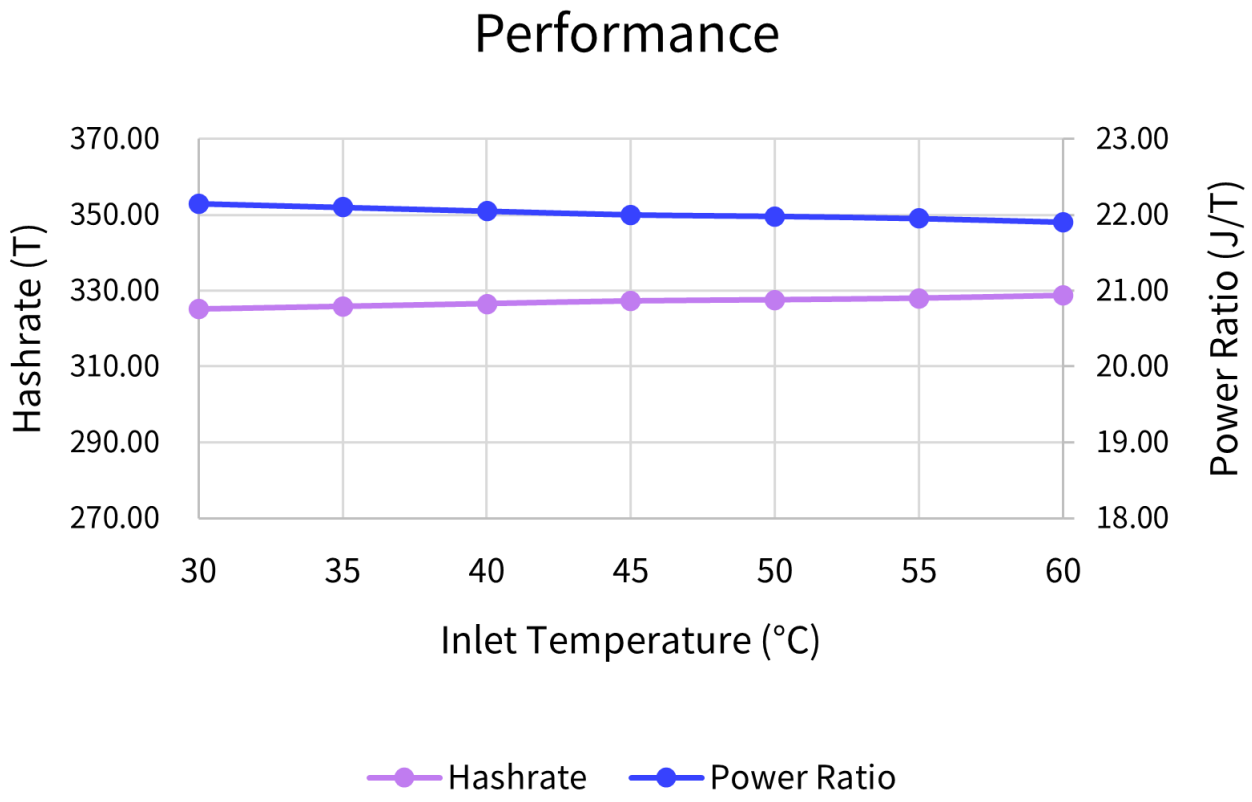
SPECIFICATION

Power Ratio	**22 J/T ± 5 %**	Hashrate	**310 T – 328 T ± 10 %**
Weight	**27.5 kg (Net)** **30 kg (Gross)**	Size with Handle	**86 mm × 482.6 mm × 663 mm**
Input Voltage	**AC 380 V – 480 V** **Input 10 kW**	Power Cable Model	**Custom made, ⩾ 16 A**
Coolant Demand Per Machine	**About 1 L**	Internet Connections	**Ethernet**

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 25 °C – 55 °C @ normal mode, 25 °C – 45 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 10 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Pressure	**⩽ 400 Kpa**
Liquid Medium	**Special coolant: Pure water (or distilled water) + special corrosion inhibitor + antifreeze (select a ratio according to a freezing point)**
Liquid PH	**Control range: 7 – 8.7**
Humidity	① **Working humidity: 5 % RH – 85 % RH (non-condensing)** ② **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ③ **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M53S+

Hydro-Cooling

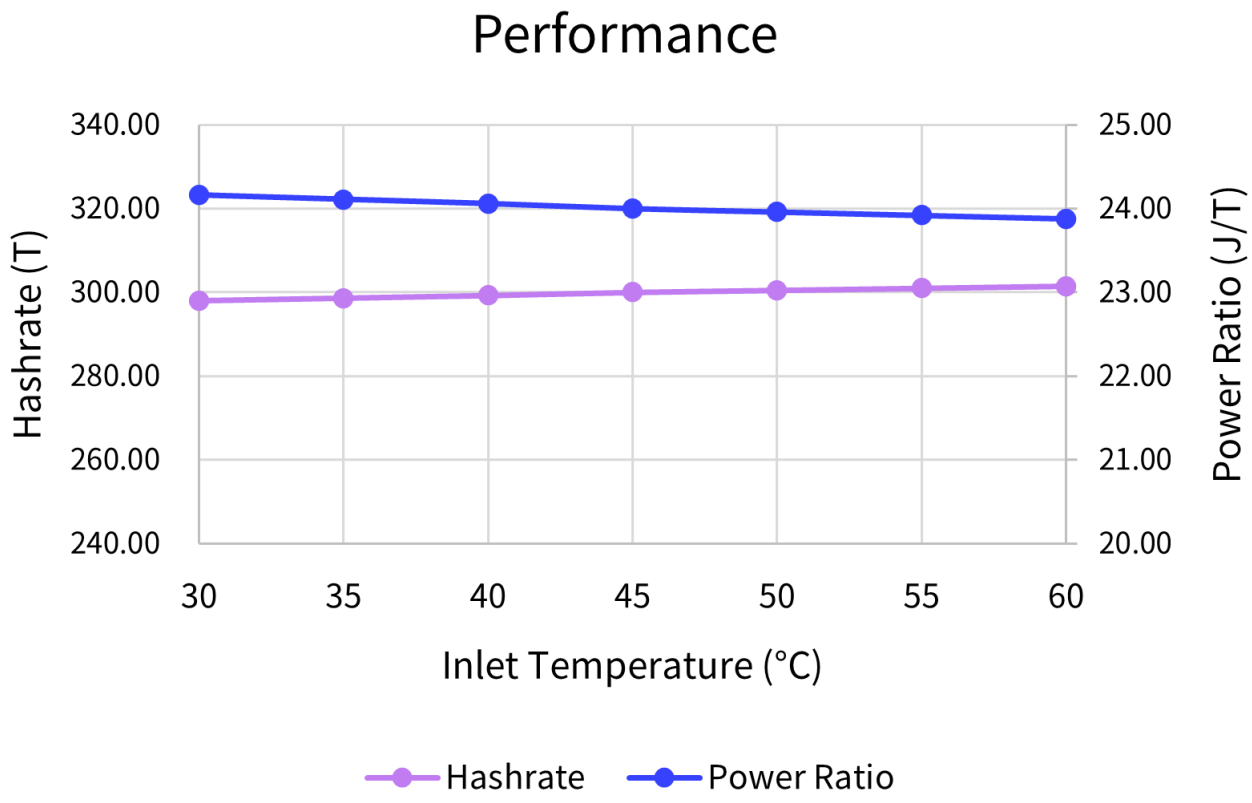
SPECIFICATION

Power Ratio	**24 J/T ± 5 %**	Hashrate	**282 T – 298 T ± 10 %**
Weight	**27.5 kg (Net)** **30 kg (Gross)**	Size with Handle	**86 mm × 482.6 mm × 663 mm**
Input Voltage	**AC 380 V – 480 V** **Input 10 kW**	Power Cable Model	**Custom made, ⩾ 16 A**
Coolant Demand Per Machine	**About 1 L**	Internet Connections	**Ethernet**

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 50 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 10 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Pressure	**⩽ 400 Kpa**
Liquid Medium	**Special coolant: Pure water (or distilled water) + special corrosion inhibitor + antifreeze (select a ratio according to a freezing point)**
Liquid PH	**Control range: 7 – 8.7**
Humidity	① **Working humidity: 5 % RH – 85 % RH (non-condensing)** ② **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ③ **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M53S

Hydro-Cooling

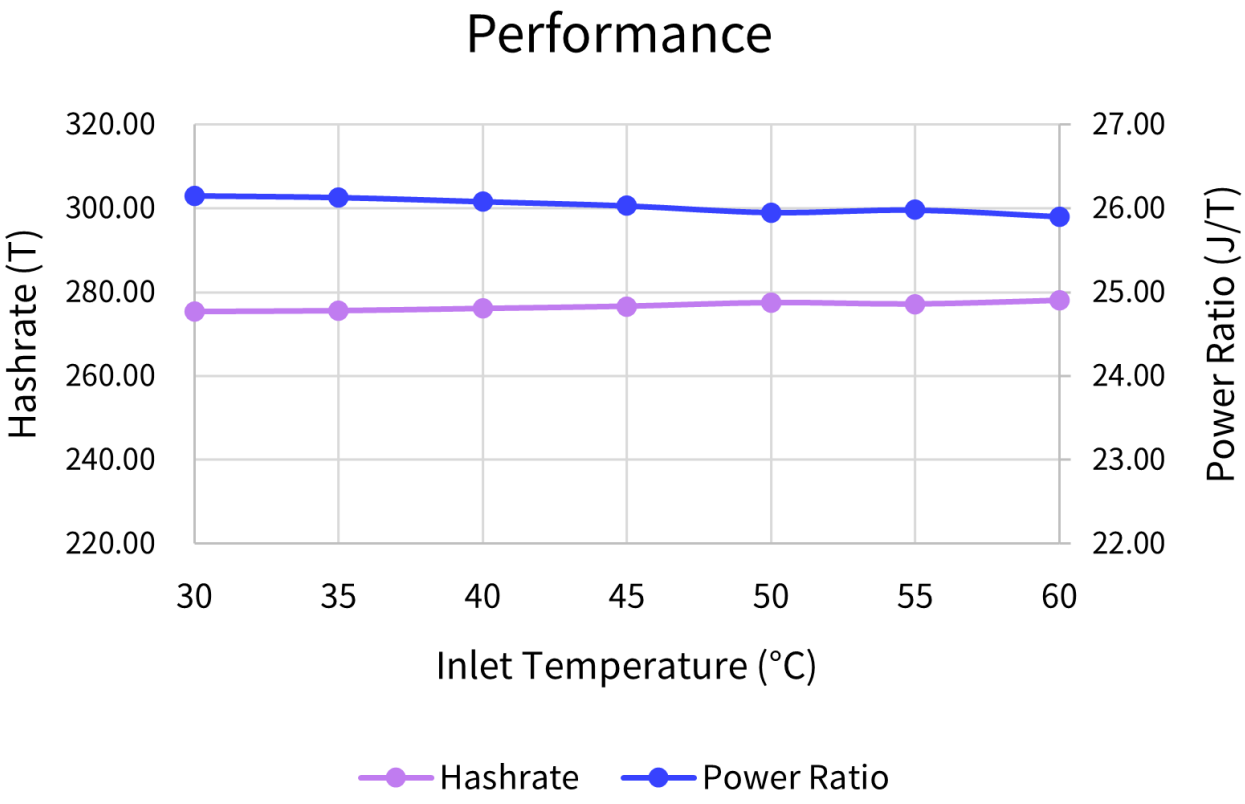
SPECIFICATION

Power Ratio	**26 J/T ± 5 %**	Hashrate	**260 T – 274 T ± 10 %**
Weight	**27.5 kg (Net)** **30 kg (Gross)**	Size with Handle	**86 mm × 482.6 mm × 663 mm**
Input Voltage	**AC 380 V – 480 V** **Input 10 kW**	Power Cable Model	**Custom made, ⩾ 16 A**
Coolant Demand Per Machine	**About 1 L**	Internet Connections	**Ethernet**

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 50 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 10 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Pressure	**⩽ 400 Kpa**
Liquid Medium	**Special coolant: Pure water (or distilled water) + special corrosion inhibitor + antifreeze (select a ratio according to a freezing point)**
Liquid PH	**Control range: 7 – 8.7**
Humidity	① **Working humidity: 5 % RH – 85 % RH (non-condensing)** ② **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ③ **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

WHATSMINER M53

Hydro-Cooling

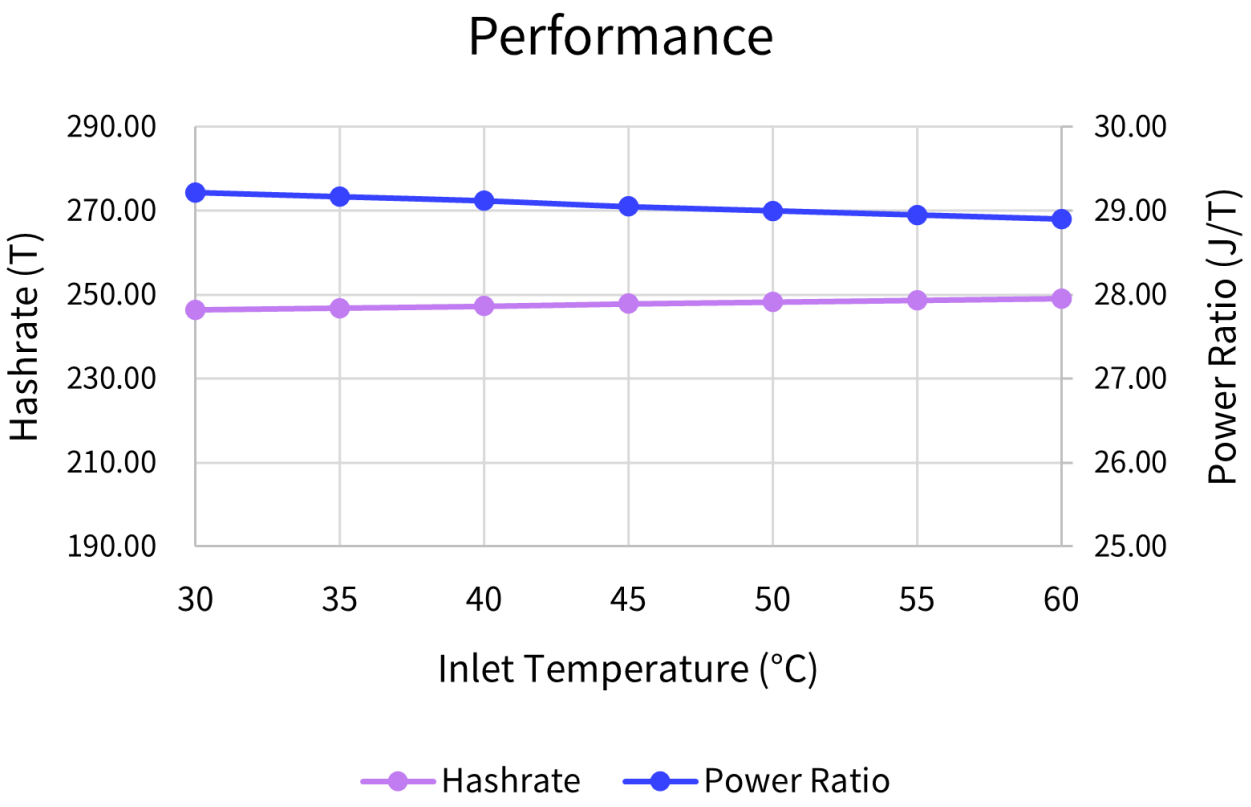
SPECIFICATION

Power Ratio	**29 J/T ± 5 %**	Hashrate	**226 T – 250 T ± 10 %**
Weight	**27.5 kg (Net)** **30 kg (Gross)**	Size with Handle	**86 mm × 482.6 mm × 663 mm**
Input Voltage	**AC 380 V – 480 V** **Input 10 kW**	Power Cable Model	**Custom made, ⩾ 16 A**
Coolant Demand Per Machine	**About 1 L**	Internet Connections	**Ethernet**

ENVIRONMENTAL PARAMETERS

Liquid Temperature	① **Working temperature (inlet): 20 °C – 50 °C @ normal mode, 20 °C – 40 °C @ high performance mode** ② **Inlet temperature control accuracy: ± 2 °C** ③ **Storage and transportation temperature: -40 °C – +70 °C**
Liquid Flow	① **Rated flow: ⩾ 10 L/min** ② **Flow control accuracy: ± 10 %**
Liquid Pressure	**⩽ 400 Kpa**
Liquid Medium	**Special coolant: Pure water (or distilled water) + special corrosion inhibitor + antifreeze (select a ratio according to a freezing point)**
Liquid PH	**Control range: 7 – 8.7**
Humidity	① **Working humidity: 5 % RH – 85 % RH (non-condensing)** ② **Storage humidity: 5 % RH – 95 % RH (non-condensing)** ③ **Long-term storage humidity: 30 % RH – 69 % RH (non-condensing)**

PERFORMANCE



Prototype data for reference only.

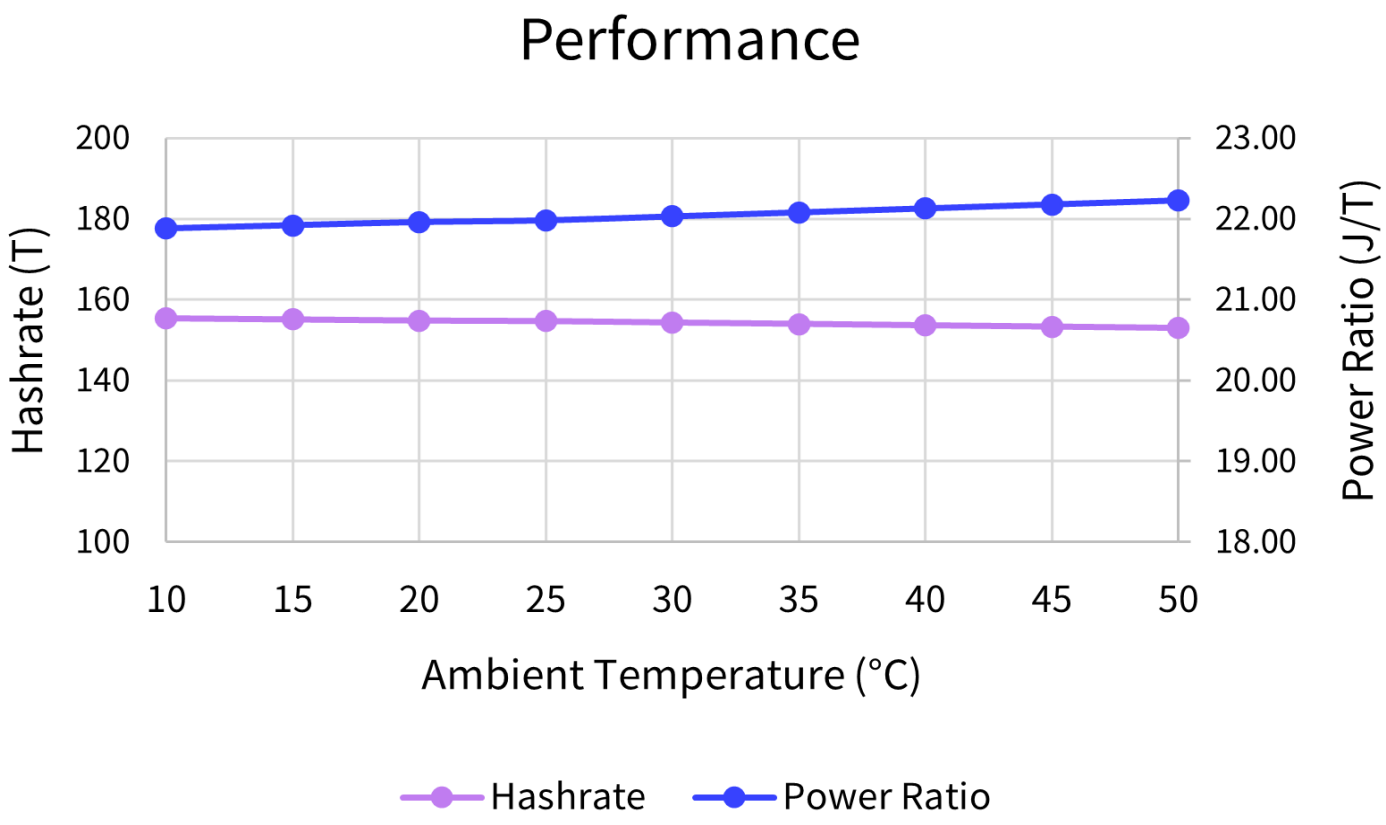
WHATSMINER M50S++

Air Cooling

SPECIFICATION

Power Ratio	**22 J/T ± 5 % @ 25 °C**	Hashrate	**138 T – 158 T ± 5 %**
Weight	**11.5 kg (Net)** **12.6 kg (Gross)**	Size	**430 mm × 155 mm × 226 mm**
Working Temperature	**-5 °C – +35 °C**	Air Flow	**350 CFM**
Power On Wall	**3036 W – 3476 W ± 10 %**	Power Cable Model	**IEC C19, ⩾ 16 A**
Input Voltage	**AC 220 V – 240 V**	Internet Connections	**Ethernet**

PERFORMANCE



Prototype data for reference only.

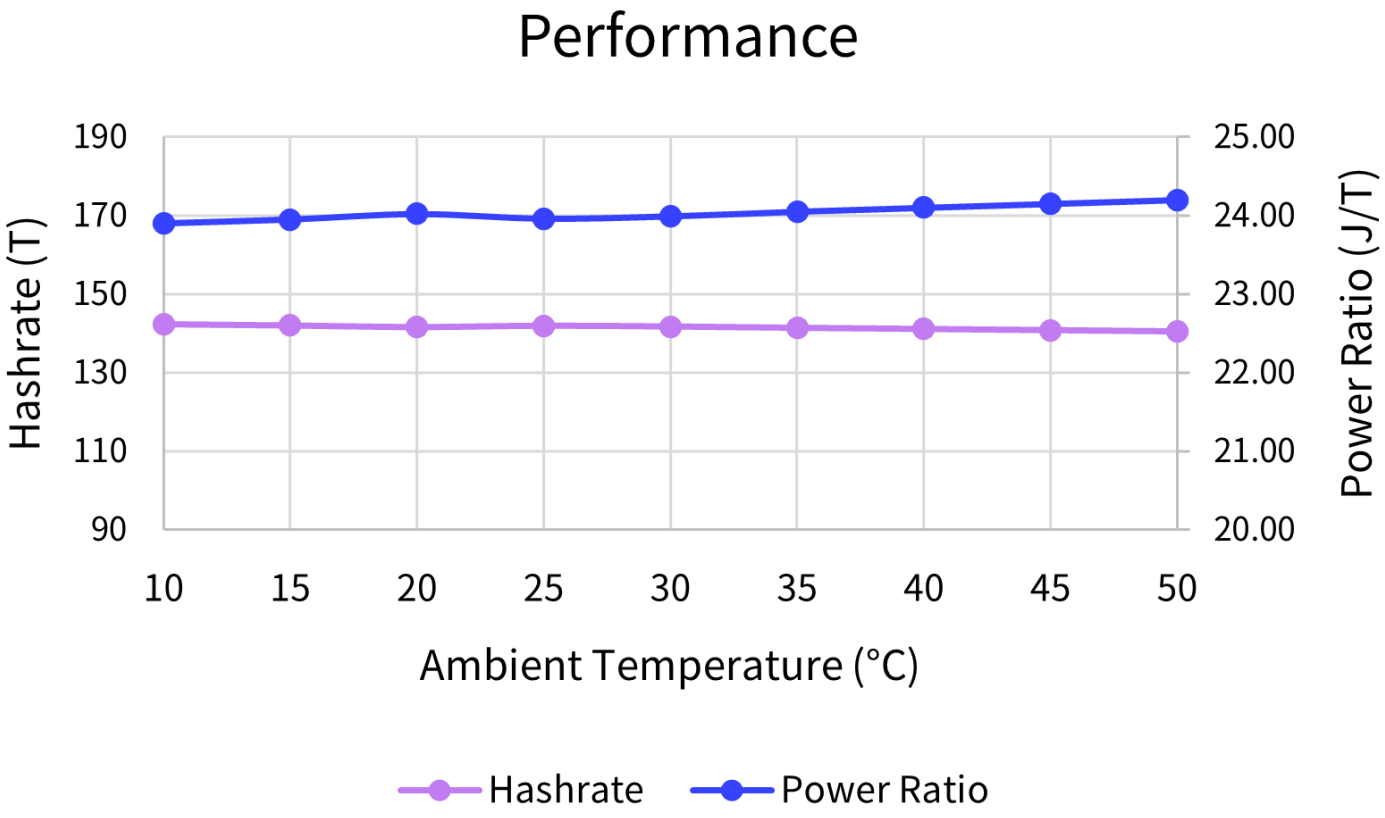
WHATSMINER M50S+

Air Cooling

SPECIFICATION

Power Ratio	**24 J/T ± 5 % @ 25 °C**	Hashrate	**130 T – 142 T ± 5 %**
Weight	**11.5 kg (Net)** **12.6 kg (Gross)**	Size	**430 mm × 155 mm × 226 mm**
Working Temperature	**-5 °C – +35 °C**	Air Flow	**350 CFM**
Power On Wall	**3120 W – 3408 W ± 10 %**	Power Cable Model	**IEC C19, ⩾ 16 A**
Input Voltage	**AC 220 V – 240 V**	Internet Connections	**Ethernet**

PERFORMANCE



Prototype data for reference only.

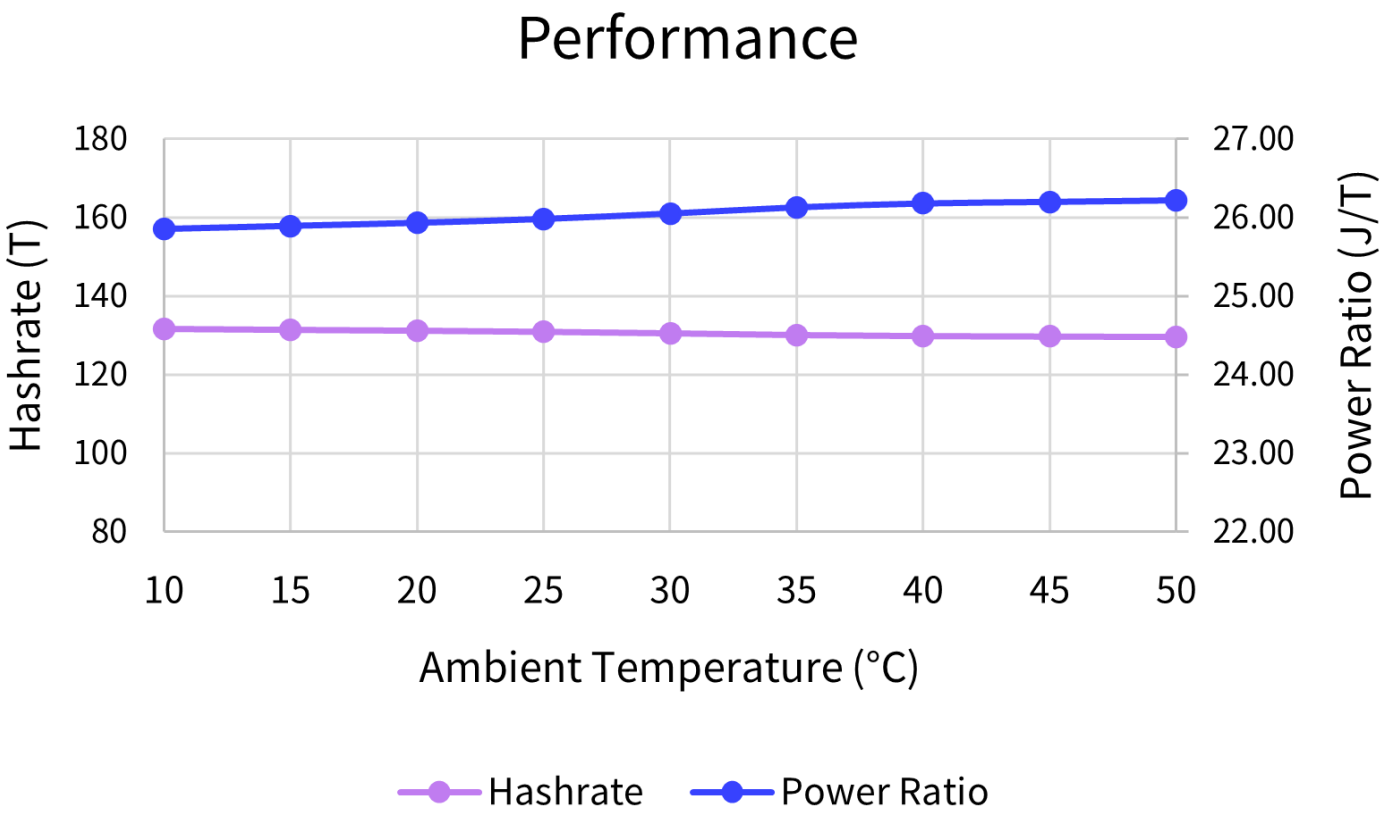
WHATSMINER M50S

Air Cooling

SPECIFICATION

Power Ratio	**26 J/T ± 5 % @ 25 °C**	Hashrate	**120 T – 134 T ± 5 %**
Weight	**11.5 kg (Net)** **12.6 kg (Gross)**	Size	**430 mm × 155 mm × 226 mm**
Working Temperature	**-5 °C – +35 °C**	Air Flow	**350 CFM**
Power On Wall	**3120 W – 3484 W ± 10 %**	Power Cable Model	**IEC C19, ⩾ 16 A**
Input Voltage	**AC 220 V – 240 V**	Internet Connections	**Ethernet**

PERFORMANCE



Prototype data for reference only.

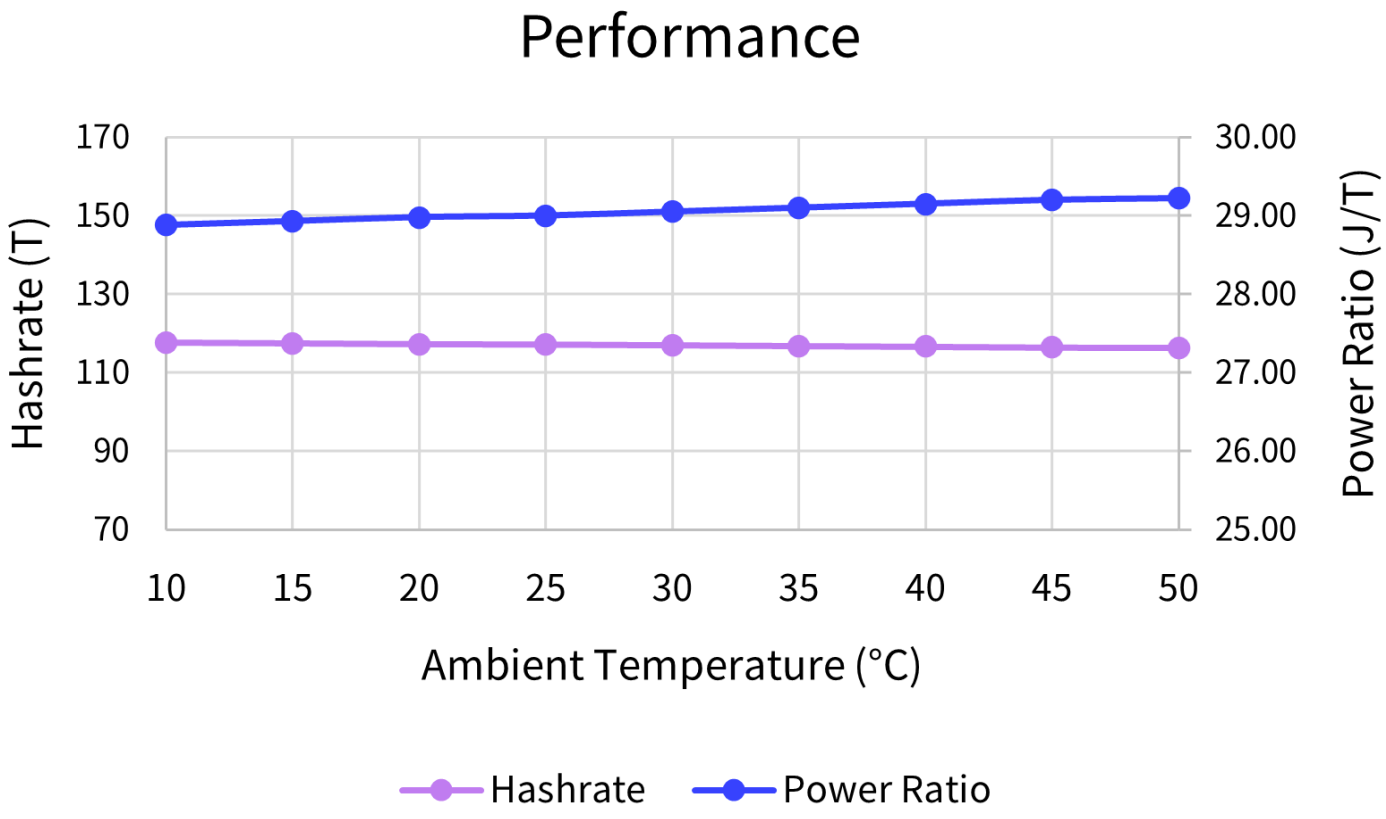
WHATSMINER M50

Air Cooling

SPECIFICATION

Power Ratio	**29 J/T ± 5 % @ 25 °C**	Hashrate	**110 T – 130 T ± 5 %**
Weight	**11.5 kg (Net)** **12.6 kg (Gross)**	Size	**430 mm × 155 mm × 226 mm**
Working Temperature	**-5 °C – +35 °C**	Air Flow	**350 CFM**
Power On Wall	**3190 W – 3770 W ± 10 %**	Power Cable Model	**IEC C19, ⩾ 16 A**
Input Voltage	**AC 220 V – 240 V**	Internet Connections	**Ethernet**

PERFORMANCE



Prototype data for reference only.