

DATASHEET

- Ultrasonic Generator -

Model: KM-H20-C

Version: Rev. 7.0



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- Anti-resonance
- Constant amplitude
- Visualization
- High energy efficiency

Frequency	Power	Type
20KHz	2600W	- Uses a self-developed "source tracing" system; 4-channel digital output; 4-channel digital input; 2-channel DA output; 2-channel AD input; 1-channel 485 communication, switchable between digital and analog control.
28KHz	1800W	
30KHz	1500W	
35KHz	1200W	
40KHz	800W	
External Dimensions (CM)	Weight (kg)	Input Voltage AC
362012	4.76	220V 50Hz

Equipment Introduction

Ultrasonic System

The ultrasonic system comes with built-in cycle count, operation time, and idle time controls, eliminating the need for additional time control devices. It offers both time mode and energy mode for customers to choose from according to their preferences. In demanding applications, the system can also activate the self-calibration function to reset the ultrasonic system. Equipped with two-way electromagnetic valve control, it can simultaneously manage the gripper and gas cylinder.

Additionally, this generator features a soft-start design that protects the electrical box, extends its service life, and ensures system stability.

Standard Configuration

The HighPower series ultrasonic power supply is equipped with eight channels of digital input/output, four channels of 0~10V analog input/output, and one channel of 485 communication. It features a 4.3-inch high-definition touch screen.

Enhanced Configuration

The HighPower series ultrasonic power supply utilizes a mainstream power generation system with a patented controllable integration signal processing system. It comes with self-developed "source tracing" ultrasonic software, which provides a more intuitive way to display changes in frequency, power, and phase of the ultrasonic system during operation. It also offers real-time logging capabilities, allowing customers to review the operational status of previous equipment through the logs when necessary.

Equipment Application

This equipment is a high-power ultrasonic generator with a maximum power of 2600W. It is widely applicable for food cutting, plastic welding, plastic riveting, non-woven fabric welding, splitting, trademark cutting, and more.

System Features/Characteristics

Adjustable Starting Frequency & Wide-Frequency Direct Start — Users can set an approximate starting frequency based on the frequency of the energy converter for direct startup. (Frequency error range is related to the mold.) This flexibility ensures easy and efficient initiation of operations, saving you time and hassle.

Adjustable Soft Start Time — When the mold is too large or parameters are not optimal, this parameter can be adjusted to extend the lifespan of both the mold and the energy converter. This feature protects your investment and reduces long-term costs.

Startup Scanning Mode — Whether the device scans upon startup can be set by the user. This customization enhances user experience and operational efficiency.

Power Voltage Adaptability — This equipment supports an input voltage range of AC 220V, 50Hz, ensuring compatibility and ease of integration into your existing setup.

Amplitude Adjustment — Within the rated power range, users can freely adjust the amplitude to achieve desired effects. This precision control allows for tailored performance to meet your specific needs.

Time Adjustment — The device has a built-in timer, allowing users to set the duration as needed, with a resolution of 10ms. This feature ensures accurate timing for your operations.

Energy Adjustment — The device has built-in energy metering, enabling users to set the output as required, with a resolution of 1 joule. This precise energy management optimizes performance and efficiency.

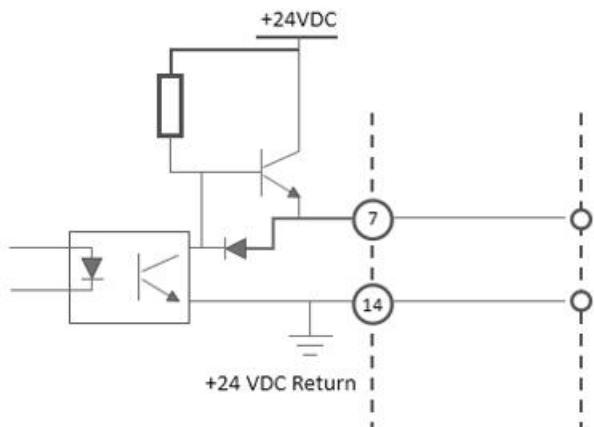
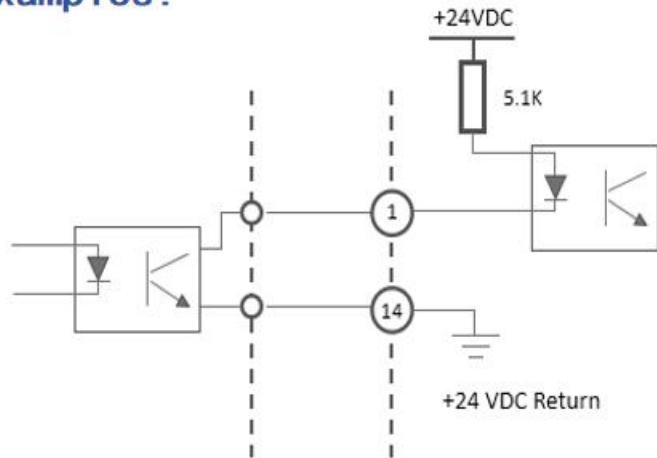
System Protection — Protection for the ultrasonic system is achieved through both software and hardware means. ① Voltage protection ② Current protection ③ Frequency protection. These comprehensive safeguards ensure the longevity and reliability of your equipment, giving you peace of mind.

485 Communication — The device features 485 communication functionality, allowing users to remotely modify parameters using a host computer equipped with 485 communication. This remote accessibility enhances convenience and control.

These outstanding features make our system a standout choice, designed to enhance your operational efficiency, protect your investment, and provide unparalleled control and flexibility. Choose our system for a seamless, efficient, and reliable ultrasonic solution.

Typical Digital I/O Wiring

Examples:



PIN	I/O Type	Function	Values
1	Input Digital	External Start (启动)	Apply +24 VDC Return to run cycle
2	Input Digital	External Seek (搜频)	Apply +24 VDC Return to perform a seek
3	Input Digital	External Reset (报警复位)	Apply +24 VDC Return to reset alarm
4	Input Digital	External Digital or analog switching (数字模拟切换)	Apply +24 VDC Return to switching
5	I/O Signal Source	+24 VDC Source	+24V, 500 MA max
6			
7	Output Digital	Ready (已准备好信号)	+24V indicates the system is ready
8	Output Digital	Sonic Active (超声工作)	+24V indicates ultrasonic are active
9	Output Digital	General Alarm (报警)	+24V indicates an alarm occurred
10	Output Digital	Seek/Scan Out (搜频中)	+24V indicates Seek/Scan in progress
11	NC		
12	NC		
13	NC		
14	I/O Signal Return	+24 VDC Return and I/O Return	Return for all pins except pins 17, 18, 24, and 25
15			
16	NC		
17	Input Analog	Amplitude In (振幅模拟控制)	1V to +10V(10% to 100%*4096)
18	Input Analog	Freq. Comp (频率补偿模拟控制)	1V to +10V (5V is zero offset)
19	Communication	485_A	Communication
20	Communication	485_B	Communication
21	Communication	485_GND	Communication
22	NC		
23	NC		
24	Output Analog	Power Out (功率模拟输出)	0V to +10V(0% to 100%*功率上限)
25	Output Analog	Amplitude Out (振幅模拟输出)	0V to +10V(0 to 4096)

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