

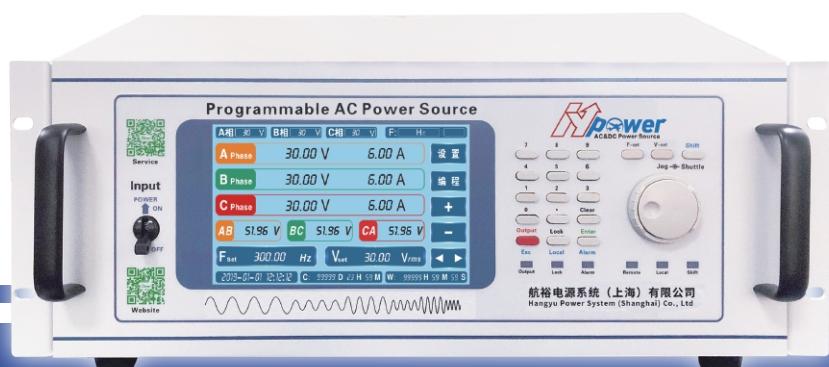


Hangyu Power System (Shanghai) Co., Ltd.

HY-GTSU Series

Gyroscope Test Power Source

Military Quality Power Supply Expert



HY-GTSU Series Gyroscope Power Source (Compass Power Supply)



Product Features

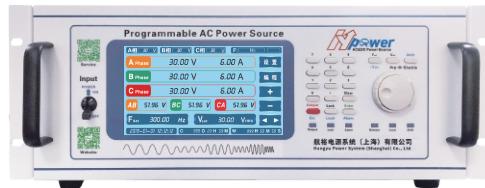
- GTSU**
- 01**
- Output frequency range 300Hz-1500Hz,
Optional 300Hz-5000Hz, set resolution: 0.01Hz
 - Output capacity range 100VA-3000VA
 - Output voltage AC 0-30Vrms, AC 0-60Vrms selectable, set resolution 0.01V
 - Output phase difference bi-phase 90°/ three-phase 120°
 - Output waveform sinusoidal wave, select square wave output
 - Linear power technology, low ripple noise, high stability, no high-frequency interference
 - Support front panel programming, without upper computer software control
 - Power output soft start function
 - 16-bit D/A high precision converter for accurate output
 - 16-bit A/D high precision converter, more accurate read back
 - Multiple protection functions OVP, OCP, and OTP
 - 19 inch standard rack size or floor type cabinet
 - 7-inch ultra large LCD display screen
 - Touch screen operation & digital key input
 - Multi-stage adjustment knob
 - Output the ON/OFF button
 - Fan intelligent speed control design, reduce noise
 - Front/side air in, rear air out, saving heat dissipation space
 - Support modbus protocol
 - Standard interface: RS-485&RS-232
 - Choose buy interface: LAN&CAN

GPIB

Analog quantity programming and monitoring

(Isolation type)

Waveform Pure, High Precision, High Reliability



Application Field

- Guidance system gyroscope test
- Rotating transformer
- Gyro motor
- Scientific research



HY-GTSU Series Product Selection Table

Product Model Naming Rules

Product Series	Input Phase Number	Output Phase Number	Output Capacity	Wave Form	Choose And Buy Function
HY-GTSU	1	2	100	- A	
Series name	1: Input single phase 3: Input three phases	2: Output biphasic phase 3: Output three phase	Output capacity 100VA	Wave form A: Sinusoidal wave B: Square wave	<ul style="list-style-type: none"> - T2 Operating temperature -20°C to 45°C - CF User defined features (please specify when ordering)
<p>Selection example: Product Model: HY-GTSU 12100-A Input single phase, output dual phase, output capacity 100VA, Sinusoidal wave.</p>					

GTSU

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■ In the selection table, special specifications outside the voltage/frequency/output capacity range are accepted for customization

HY-GTSU Series Gyroscope Power Source (Compass Power Supply)

Frequency	300-1500Hz (Optional: 300-5000Hz)					
Voltage	0-30Vrms (Optional: 0-60Vrms)					
Wave form	Sinusoidal wave (A), square wave (B)					
Diphase	100VA	200VA	400VA	600VA	1000VA	2000VA
Three phase	150VA	300VA	600VA	900VA	1500VA	3000VA

* When the equipment runs continuously for more than 30 minutes at the specified operating temperature, all technical indicators can be guaranteed.

AC Output

Connection mode	Single-phase two-wire or three-phase four-wire + ground wire
Frequency setting range	Standard: 300-1500Hz, optional: 300-5000Hz
Input adjustment rate	≤0.5%F.S.
Load adjustment rate	≤0.5%F.S.
Waveform distortion (THD)	Sinusoidal wave, THD≤0.6% (resistance test) * According to 1000Hz, * Test when the output voltage is more than 50% of the rated voltage
Phase difference	Three-phase voltage independent adjustable, phase difference 0-359.99° adjustable
Output waveform	Sinusoidal wave, select configure square wave

Communication Interface

Standard configuration	RS-485 & RS-232
Choose and buy	LAN, CAN, GPIB, Analog quantity programming and monitoring (Isolation type)

Appearance Color & Size

Colour	RAL 7035
Size	4U, standard 19-inch rack mount, or desktop (fixed foot mat); 10U, standard 19-inch rack type, or floor type (with movable universal casters and brakes)

HY-GTSU Series Technical Parameter

Programming And Readback Accuracy & Resolution

Voltage output programming accuracy	≤0.5%F.S., Optional ≤0.1%
Frequency output programming accuracy	±0.01%F.S.
Voltage setting resolution	0.01V
Frequency setting resolution	0.01Hz
Voltage output read-back accuracy	±0.5%F.S.
Current output read back accuracy	±0.5%F.S.
Voltage read back resolution	0.01V
Current read back resolution	0.0001A (≤ 6A) ;0.001A (≤ 60A) ;0.01A (< 650A) ;0.1A (>650A)

Protection Function

Overload capacity	125% current 15s, 150% current 5s, 200% current 2s, 300% current stop immediately
Protection function	Ovvoltage, overcurrent, internal overheating, short circuit

Environmental Condition

Environment	Indoor use; Installation overvoltage class: II; Pollution level: P2; Class II equipment
Operating ambient temperature	0°C to 45°C; Choose from -20°C to 45°C
Storage ambient temperature	-20°C to 65°C
Working ambient humidity	20%-90%RH, no condensation, continuous operation
Storage environment humidity	10%-95%RH, no condensation
Altitude	Above 2000 meters above sea level, the power is reduced by 2% per 100 meters, or the maximum working ambient temperature is reduced by 1°C per 100 meters;When not in operation, it can reach an altitude of 12,000 meters
Cooling condition	Forced air cooling, intelligent speed regulating fan, front/side air inlet, rear air outlet
Noise	≤ 65dB(A), use 1m to weigh the measurement

Control Panel

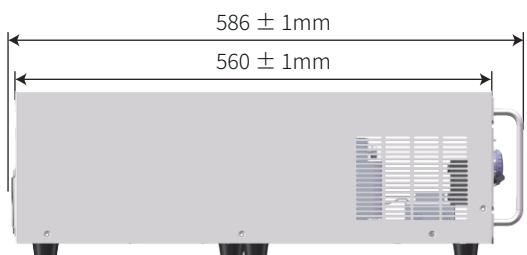
Display	7 inches, LCD LCD display, touch screen
Display item	Phase voltage/line voltage (set value & measured value), current measured value ,frequency set value, working time, cumulative working time, current time and date
Control function	Digital key input, Multi-stage adjustment knob(outer ring coarse adjustment/inner ring fine adjustment) output ON/OFF switch, Lock keyboard and touch lock, Reset restart Status indicator (Shift/Local/Remote/Alarm/Lock/Output)
Programming function	Step/ladder/gradient

GTSU

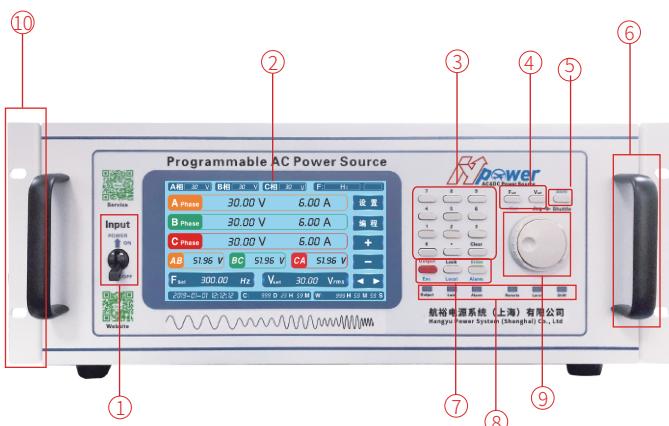
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Appearance & Size

4U 433(W)*560(D)*177(H)mm



Control Panel



- ① Power input circuit breaker
- ② LCD display (7 inches, touch screen)
- ③ Numeric input keyboard
- ④ Frequency/voltage setting key
- ⑤ Shift function reuse key
- ⑥ Chassis handle
- ⑦ Lock, Enter, Esc, Local, Reset, Output ON/OFF
- ⑧ Status indicator light
- ⑨ Multi-stage adjustment knob (inner ring fine adjustment/outer ring coarse adjustment)
- ⑩ 19-inch standard rack mounting holes

Size

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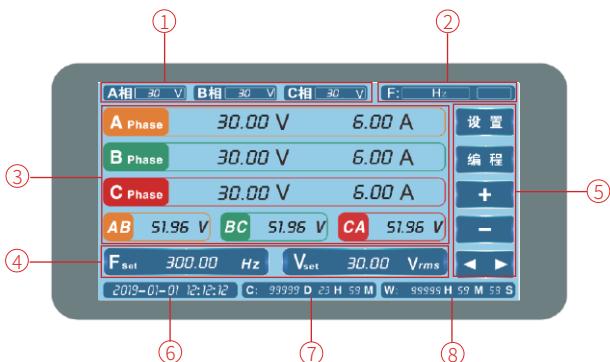
Rear Panel



- ① AC output terminal
- ② RS-485 & RS-232 communication interface
- ③ AC input terminal
- ④ Heat dissipation air outlet

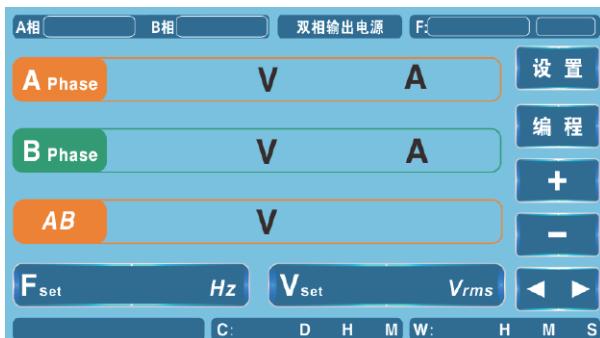
Display And Control Panel

Display Interface



- ① Three phase phase voltage set value
- ② Frequency display area
- ③ Phase voltage, line voltage, current display area
- ④ Frequency/voltage setting value
- ⑤ Function setting area
- ⑥ Current time
- ⑦ Cumulative running time
- ⑧ This run time

Display Interface



Main interface of the dual phase power supply



Main interface of three-phase power supply

Panel

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航裕电源系统(上海)有限公司				可编程交流电源				步阶设定模式				
步号	频率(Hz)	电压(V)	运行时间(H:M:S.mS)					起始步				
			: : :					起始步				
			: : :					结束步				
			: : :					循环次数				
			: : :					保存				
			: : :					退出				
			: : :					上一页				
			: : :					下一页				

Step setting page can set the required frequency, voltage, Run time, initial step, end step, and number of cycles

航裕电源系统(上海)有限公司				可编程交流电源				梯级设定模式			
步号	初始频率	步进频率	步进电压	步进电压	步进次数	步进时间	示意图	保存	退出	退出	退出

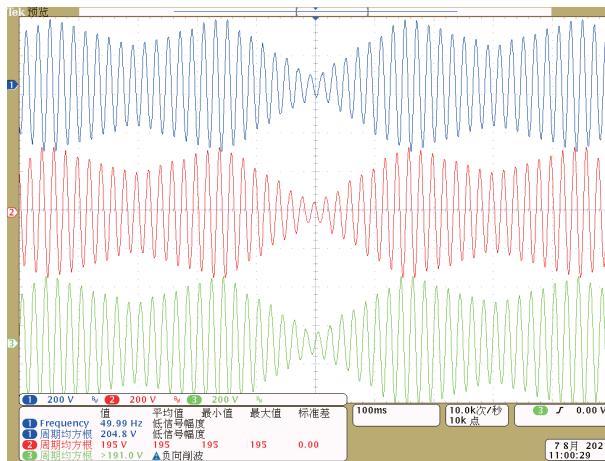
Ladder setting page can set the required initial frequency,Step frequency, initial voltage, step voltage, step number and step time

航裕电源系统(上海)有限公司				渐变设定模式								
步号	频率(Hz)	电压(V)	运行时间(时:分:秒:毫秒)					起始步				
起			: : :					起始步				
止			: : :					结束步				
起			: : :					循环次数				
止			: : :					保存				
起			: : :					退出				
止			: : :					上一页				
起			: : :					下一页				
止			: : :									

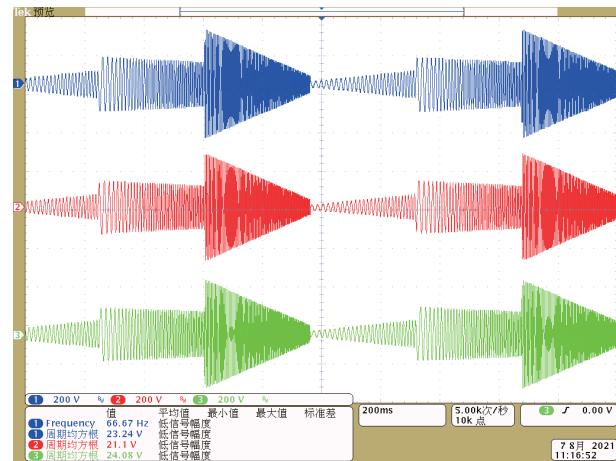
Gradient Setting page can set the required voltage and frequency, Run time, initial step, end step

Measured Waveform

Output Voltage Waveform Of Single Phase Power Supply



Three phase steps



Three-phase gradient

Panel

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*Hangyu Power System, 2024

HY-GTSU Series Product Manual, Version 06.12, June 2025

All technical data and instructions are based on the actual product

If there is any change, Hangyu Power has the final interpretation right

Authorized distributor:

