# **HY-WF Series**

Programmable Wide-Frequency Power Source

Military Quality Power Expert













www.hypower.cn

High purity High precision High reliability

### **Product Features**

- Output frequency range 300Hz-550kHz
- Output capacity range 50VA-2000VA
- Output voltage optional range AC 0-300Vrms
- Support front panel programming, no need for PC software control
- Voltage rising and falling slopes are adjustable
- Power output soft-start function
- 16 bits D/A high precision converter, accurate output
- 16 bits A/D high precision converter, more accurate readback
- Multiple protection functions OVP/OCP/OTP
- 19-inch standard rack size or floor-standing cabinet
- 4 inch & 7 inch large LCD screen
- Touch screen operation & numeric key input
- Multi-level shuttle adjustment knob
- The power input is controlled by a circuit breaker, which is more secure
- Output ON/OFF button
- Fan intelligent speed regulation design to reduce noise
- Front/side air intake, rear air outlet, saving cooling space
- Support Modbus protocol
- Standard interface: RS-485&RS-232
- Optional interface: LAN&CAN
  - USB
  - GPIB

Analog programming and monitoring (isolated)



### **Application Field**

 High frequency transformer

- Current Transformer
- ♦ Sensor
- Piezoelectric Ceramics
- ♦ Magnetic material
- Scientific research





### In the selection table, special specifications outside the range of voltage/ frequency/output capacity can be customized

	HY-W	/F Series Programmable Wi	de-Frequency Power Sour	rce		
Output frequency	Output voltage(Vrms)/Output capacity(VA)					
(Hz)	300Vrms	150Vrms	50Vrms	30Vrms		
300Hz-10kHz			2000VA/1000	VA/500VA		
300Hz-50kHz		300VA/100VA	./50VA			
5kHz-100kHz						
5kHz-150kHz						
5kHz-200kHz	1000VA/500VA/300VA/100VA					
5kHz-300kHz						
10kHz-300kHz						
100kHz-550kHz						

Product N	lodel Naming	g Rules	
Product	Output	Output	Customized function
series	voltage	current	
HY-WF	10	- 30	- 100k
Series	Output voltage	Output current	Optional frequency
name	is 10V	is 30A	Max:100kHz

Selection example:

Product model: HY-WF 10-300-100k

Output voltage 0-10V, output current 30A, optional frequency Max: 100kHz

# HY-WF Series Technical Parameters

AC Input					
Wiring	L+N+PE (1 <b>Φ</b> )				
Input voltage 220V±10%					
Input frequency	47Hz -	63Hz			
AC Output					
Wiring L+N+PE		Ξ (1Φ)			
Output capacity	50VA - 2	000VA (Customization is acceptable)			
Output voltage	Optiona	al voltage range AC 0 -300Vrms (Customization is acceptable)			
Output frequency	Optiona	I range 300HZ - 550kHZ (Customization is acceptable)			
Input Regulation	≤1%F.S.	(Resistive test)			
Waveform distortion(THD)	Sine way	ve, THD<3%			
Programming And Readback Ac	curacy & Re	esolution			
Frequency Output   Programming	Accuracy	±0.01% F.S.			
Voltage Setting   Resolution		0.01V			
Frequency Setting   Resolution		0.01Hz			
Voltage Readback   Resolution		0.01V			
Current Readback   Resolution		0.01A			
Frequency Readback   Resolution		0.01Hz			
Protective Function					
Protective function OVP, OC		CP, internal overheating, short circuit			
Environmental Conditions					
Surroundings	Indoor use; installation overvoltage class: II; pollution class: P2; class II equipment				
Working temperature	0°C to 45°C; optional -20℃ to 45℃				
Storage ambient temperature	-20°C to 65°C				
Working environment humidity	20%-90%RH, no condensation, continuous operation				
Storage environment humidity	10%-95%RH, no condensation				
Altitude	working meters a	000 meters above sea level, the power decreases by 2% for every 100 meters, or the maximum environment temperature decreases by 1 °C every 100 meters;When not in operation, up to 12,000 bove sea level			
Cool down	Forced the rear	air cooling, intelligent speed-adjustable fan, air intake from both sides/front, air out fror			
Noise ≤ 65dB(A), weighted measurements with 1m					

## **HY-WF Series Technical Parameters**

Control Panel					
Display	4"/7", LCD display, touch screen				
Show items	Voltage (set value & measurement value), current measurement value, operating time, cumulative operating time, current time and date				
Control function	Digital key input, multi-level shuttle knob adjustment (coarse adjustment of outer ring / fine adjustment of inner ring) Output ON/OFF switch, Lock keyboard and touch lock, Reset restart Status Indicators (Shift / Local / Remote / Alarm / Lock / Output)				
Programming function	Step/ladder/gradient				
Communication Interface					
Standard	RS-485 & RS-232				
Options	LAN、CAN、USB、GPIB, analog programming and monitoring interface (isolated)				
Appearance Color & Size					
Appearance Color & Size Color	RAL 7035				

### **Customized Interface**

<ul> <li>LAN LAN Communication Interface</li> </ul>
---

- CAN CAN Communication Interface

- USB USB Communication Interface

- GPIB GPIB Communication Interface

- APM Analog programming and monitoring interface (isolated)

#### **Customized Function**

- T2 Operating temperature -20°C to 45°C

- CF User-defined functions (please specify when ordering)

- MR Measurement report (issued by a third party certified by CNAS)

\*The equipment runs continuously for more than 30 minutes at the specified operating temperature All technical indicators can be guaranteed.

### Programmable Function Introduction



Main interface of single-phase power supply

航裕明	<b>电源系统(上海)有限公司</b>	可编程交流电源	步阶设	定模式
步号	頻 率 (Hz)	电压(V)	运行时间(H:M:S:mS)	起始步
			: : : :	结束步
			: : :	
			: : :	循环次数
			: : :	
			: : :	保存
				退出
			: : :	
			: : :	上一页
			4 4 4	下一页

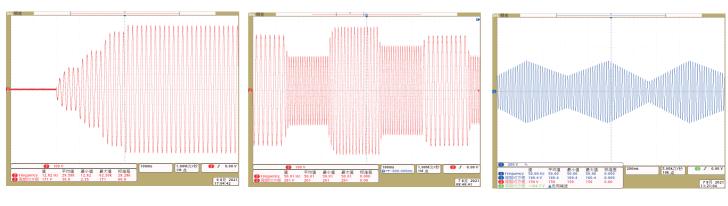
The step setting page can set the desired frequency, voltage, Run time, initial step, end step, and number of cycles

	:海)有限公司 可编程交流电源	阶梯设定模式
初始频率	Hz	保存
步进频率	Hz	
初始电压	V	
步进电压	V	
步进次数		
<b>步进时间</b> (時: <del>分:</del> 秒:毫秒)	: : :	
V▲ 示意图	Tim	e 退出

The ladder setup page can set the desired initial frequency, Step frequency, initial voltage, step voltage, step times and. Step time

步号		频 率 (Hz)	电压(V)	运行时间(	时:分	:秒:毫秒)	起始步
	起						
	止				<u> </u>		结束步
	起			:		:	
	止			<u> </u>	•	•	循环次数
	起				:		
	止			1 .		•	保存
	起						
	止			1 :		:	退出
							上一页

The gradient settings page can set the desired voltage and frequency. Run time, initial step, end step



Step

Single Phase

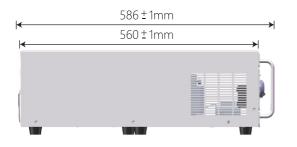


Gradient

### 4U 430(W)\*560(D)\*178(H)mm





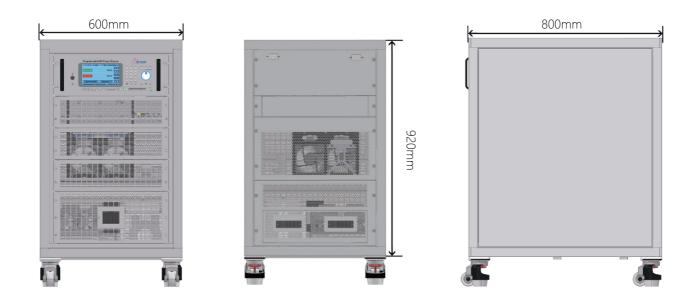




### 10U 440(W)\*600(D)\*445(H)mm



### 18U 600(W)\*800(D)\*920(H)mm

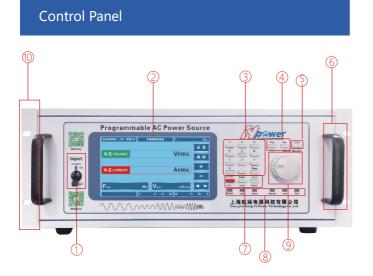


### 24U 600(W)\*800(D)\*1190(H)mm 30U 600(W)\*800(D)\*1453(H)mm 36U 600(W)\*800(D)\*1718(H)mm









- ① Power input circuit breaker
- ② LCD monitor (7 inches, touch screen)
- ③ Numerical input keyboard
- ④ Frequency/voltage or current setting key
- ⑤ Shift function key
- 6 Chassis handle
- ⑦ Lock to lock, Enter to confirm, Esc to exit Local local, Reset restart
  - Output ON/OFF switch
- ⑧ Status indicator

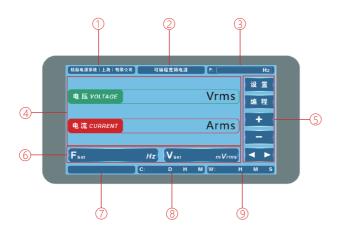
 Multi-stage shuttle adjustment knob (fine adjustment of inner ring/coarse adjustment of outer ring)

19-inch standard rack mounting holes



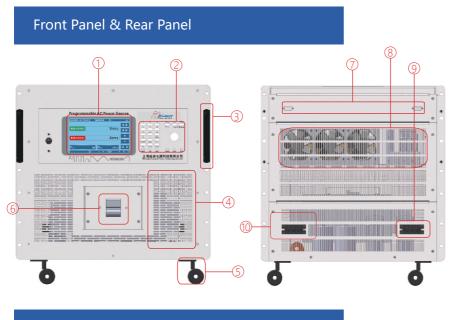
- ① AC input terminal
- ② RS485 and RS232 communication interface
- ③ AC output terminal
- ④ Cooling air outlet

### **Display Interface**



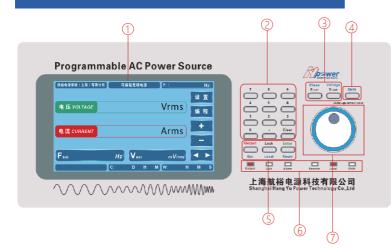
- ① Manufacturer's name
- ② Product name
- ③ Product frequency
- ④ Three-phase voltage and current display area
- ⑤ Function setting area
- 6 Frequency/voltage setting value
- ⑦ Current time
- (8) Cumulative running time
- (9) The current running time

# **Display & Control Pannel**



- ① LCD display (7 inches, touch screen)
- ② Control area
- ③ 19-inch standard rack handle
- ④ Cooling air inlet
- ⑤ Casters
- 6 Power input circuit breaker
- O Communication interface
- ⑧ Cooling air outlet
- AC input terminal
   AC
   AC

### **Control Panel**



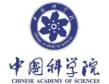
- ① LCD display (7 inches, touch screen)
- ② Numerical input keyboard
- ③ Frequency/voltage or current setting key
- ④ Shift function multiplexing key
- (5) Lock to lock, Enter to confirm, Esc to exit Local local, Reset restart
  - Output ON/OFF switch
- 6 Status indicator
- ⑦ Multi-stage shuttle adjustment knob (fine adjustment of inner ring/coarse adjustment of outer ring)

# **Cooperative Clients (Partial)**

#### Aerospace And National Defense Military Industry Research Institute

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china aerospace	CASIC	aviatio industr		Ehina rospace	CETC	CSSC	CSIC
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CASC 804 institute CASC 805 institute	Cupinent Research Institute	)	AVIC 618 institute AVIC 631 institute	(Xi'an Automatio of China Radio	· Flight Research Institute Aviation Research Institute ) Computing Technology	CETC 36 institute CETC 38 institute	(Research institute )
CASC 808 institute	(Shanghai Institute of Precision Metro and Testing (Shanghai Space Power Research In	<i>(, )</i>	AVIC 105 factory AVIC 115 factory	(Tianjin Aviation E	lectromechanical Co., Ltd)	CETC 50 institute CETC 51 institute	( Shanghai Microwave Technology ) Research Institute ( Shanghai Microwave Equipment )
CASC 812 institute	(Shanghai Satellite Equipment)	sindle)			Electrical Appliances Co., Ltd)	CETC 54 institute	Research Institute (Shijiazhuang Communication Measurement and Control Technology Research Institute
	(Beijing Institute of Control Enginee (Lanzhou Institute of Space Technol		AVIC 181 factory AVIC 607 institute		lectronic Technology		(Nanjing Institute of Electronic Devices)
CASIC 206 institute	e (Beijing Institute of Mechanical Eq	uipment)	AVIC 304 institute		'all Metrology and Testing \	CSIC 7107 institut	Equipment Co., Ltd /
CASIC 307 factory CASIC 33 institute	(Institute 33 of Aerospace Science a		AECC 606 institut	:e (Shenyang Eng	ine Research Institute)	CSIC 719 institute CSIC 704 institute	۲ Research Institute ۲ Shanghai Shipbuilding Equipment
CASIC 3651 factory	<ul> <li>Industry Third Institute</li> <li>(Guizhou Aerospace Linquan Mot</li> </ul>	or Co., Ltd)				CSIC 726 institute Jiangnan Shipbuilding (C	Cquipment ,

### Scientific Research & Third Party Quality Inspection Institutions



Institute of Physical and Chemical Technology (Beijing) Urban Environment Research Institute (Xiamen) Institute of Electrical Engineering (Beijing) Institute of Applied Physics (Shanghai)



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 Search Langhal Electrical Supervision and Procuratorate

Nanjing Panda Electronics Co., Ltd

State owned 741 Factory (Nanjing East China Electronics Group Co., Ltd.)

## **Cooperative Clients (Partial)**

#### The Chinese People's Liberation Army

South China Sea Fleet East China Sea Fleet North Sea Fleet Navy Factory 701/702 4724 Factory (Shanghai Haiying Machinery Factory) 95861 Unit (Air First Base) The 5720th Factory of the People's Liberation Army of China

#### **Commercial Aviation**



Corporation of China Limited

G

MECO

Guangzhou Aircraft Maintenance

Engineering Co., Ltd



Rockwell Collins





### Military Academies And Local Universities



national university of defense technology Engineering University



Beihang University



University of Science and Technology of China



University of Electronic Science and technology



Huazhong University of Science and Technology



Xiamen University



Army Engineering

University

Harbin Institute

of Technology

Peking

University

Beijing University

of Technology

Aerospace



Beijing Institute of Technology



Tsinghua University



Shanghai University



Xi'an Electronic Technology



north china electric

power university

Xi'an Jiaotong

University

Chanachun Institute of Technology



air force engineering university



Harbin Engineering University



Shanghai Jiaotong University



Shanghai Maritime University



Sichuan University





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naval university of engineering

Nanjing University

of Aeronautics

and Astronautics

Zhejiang

University

Dalian Naval Academy



Nanjing University of Science and Technology







Tianjin

University

Dalian Maritime University



north china institute of aerospace engineering



Xi'an University of technology



Naval Aviation

University

Huazhong University of Science and Technology



South China University of Technology



Fudan University



University of Electronic Science and Technology of China









donghua

university

zhejiang university

of technology



#### Official WeChat: HY Power-cn



# **About Us**

Hangyu Power was founded in 2011 and is a national high-tech enterprise, Located in Songjiang, the birthplace of the G60 Science and Technology Innovation Corridor in the Yangtze River Delta, for over a decade Strive to provide customers with accurate, intelligent, and convenient testing power solutionsPlan.

Our company adheres to the product positioning of "specialty, precision, specialty, and novelty", and On the basis of targeting the market demand for "import substitution", propose "poor The development strategy of "differentiated import substitution" and "high-quality manufacturing"is committed to Innovative development of testing power supply technology in China, promoting the rejuvenation of science and technology in China The national cause is thriving.

Hangyu Power Series products cover power semiconductors, automotive electronics Aerospace, Defense and Military Industry, Low Voltage Electrical Appliances, Medical, Sensors Capacitors, inductors, smart grids, airborne, shipborne, weapons, ships.

Radar, communication, rail transit, power electronics, and other testing and other disciplines In the field of research, we strive to achieve perfect import substitution, with excellent military q uality and service,

Win unanimous praise from users.

# Contact Us

Tel: +86 1380 1800 699 Email:sales@hangyupower.com neo@hangyupower.com Address: Building 9, No. 615 Lianhe Road, Songjiang District, Shanghai, China website:www.hangyupower.com

2009	•	Establishing Shanghai Ouzu Electronics Brand
2010		Successfully delivered 400kVA high-power AC power supply
2011		Hangyu Power Supply was established and officially put into operation as a three-phase precision AC power supply and militaryUsing a gyroscope to test the power supply, replacing Russian made products
2012		Formal production of programmable variable frequency power supply and AC constant current source
2013	•	Formal production of programmable AC/DC power supply and HY-AE excitation power supply
2014	•	Formal production of high-power bipolar testing power supply
2015		Formal production of HY-PM series and HY-GT series new models Dual phase/three-phase gyroscope power supply
2016		HY-HP series programmable high-power DC power supply officially put into operation
2017		HY-HV series programmable high-voltage DC power supply officially put into operation
2018	•	HY-CTL/CTS capacitor testing high-frequency high current testing power supply And successfully delivered 100kHz, 100Arms
2019	•	Official production of high-speed power supply for automotive electronic testing within 500kHz
2020	•	Officially put into operation LV123 new energy vehicle testing high-voltage ripple testing power supply
2021	•	HY-UHS series ultra-high stability magnet power supply officially put into operation
2022	•	HY-HVL series linear high-voltage programmable DC power supply officially put into operation

