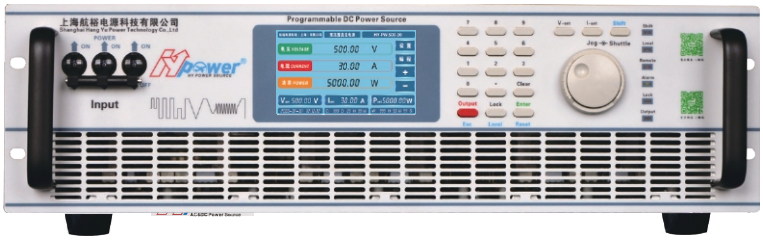
AC&DC Power Source

HY-PW Series

Programmable Wide-range DC Power Supply

Military Quality Power Supply Expert



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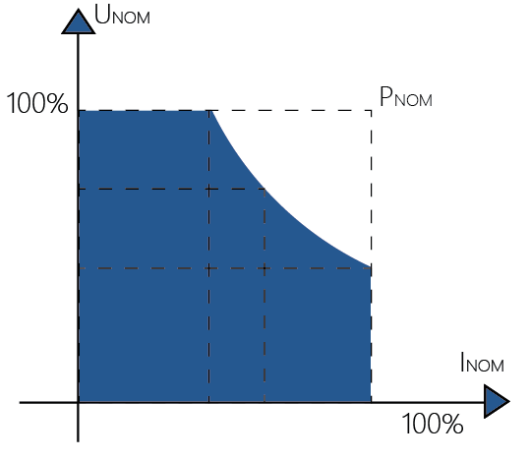
HY-PW Series

Programmable Wide-range DC Power Supply

Wide range, high power, high accuracy



This power supply has an ultra wide range of voltage and current inputs, covering existing Multiple limits, meeting the requirements of high current and low voltage, or high voltage and low current Test requirements.

Product Features

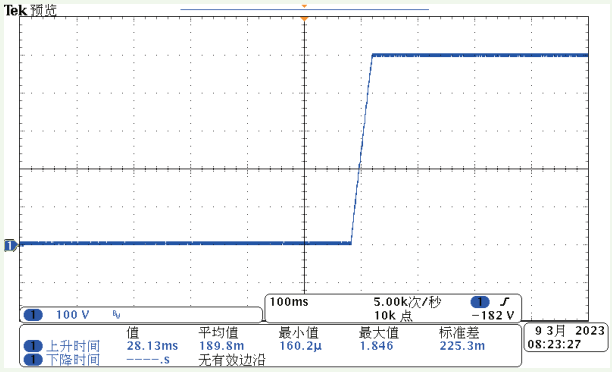
- Maximum output voltage 2250V
- Maximum output current 510A
- High power density, single machine maximum 15kW
- Can be paralleled to obtain higher current
- Input standard configuration PFC, Power factor up to 0.99
- 16 bits D/A High precision converter with precise output
- 20 bits A/D High precision converter for more accurate read back

Application Area

This power supply is widely used in industrial (motor), server power supply High voltage UPS, aerospace, national defense and military industry play important roles.

- Server power、UPS、Inverter design and testing
- Fuel cell, power cell, lead-acid battery, supercapacitor testing
- Simulation of power supply environment for onboard, airborne, and shipborne electronic equipment
- Design and testing system integration of DC chargers and charging stations
- Drones, lasers, sensors
- Power electronics
- New energy

Measured Waveform



HY-PW 500-90 model Full load rise time: 28ms

Product Selection Instructions

Product Model Naming Rules

Product series	Output voltage		Output current		Optional function
HY-PW	1000	-	30	-	CF

Selection examples:
Model: HY-PW 1000-30-CF
Output voltage 0 - 1000V, output current 30A,
Choose User Defined Features

Communication protocol

Modbus
SCPI

Standard communication interface

RS-485
RS-232
Digital I/O
LAN

Optional communication interface (Users can install it themselves)

- CAN : CAN communication interface
- GPIB : GPIB communication interface
- IA : Analog programming and monitoring interface (isolated type)

Purchasing function

- HR : High resolution/precision
- ABD : Anti backflow diode
- BD : Anti reverse diode
- TVS : tvs
- T1 : operation temperature -10℃ to 50℃
- T2 : operation temperature -20℃ to 50℃
- T4 : operation temperature -40℃ to 50℃
- CF : User defined functions (please specify when ordering)
- MR : Measurement report (issued by a third party certified by CNAS)
- SP : Sequence and function programming functions

*Only when the equipment operates continuously at the specified operating temperature for more than 30 minutes can all technical indicators be guaranteed。

HY-PW Series Technical Parameter

HY-PW Series Product Selection And Parameters

In the selection table, special specifications beyond the voltage/current/power range are accepted for customization.

15kW Series Power Selection

Models	Output voltage	Output current	Output power
HY-PW 80-510	80V	510A	15kW
HY-PW 200-210	200V	210A	15kW
HY-PW 360-120	360V	120A	15kW
HY-PW 500-90	500V	90A	15kW
HY-PW 750-60	750V	60A	15kW
HY-PW 1000-40	1000V	40A	15kW
HY-PW 1500-30	1500V	30A	15kW
HY-PW 2250-20	2250V	20A	15kW

10kW Series Power Selection

Models	Output voltage	Output current	Output power
HY-PW 80-340	80V	340A	10kW
HY-PW 200-140	200V	140A	10kW
HY-PW 360-80	360V	80A	10kW
HY-PW 500-60	500V	60A	10kW
HY-PW 750-40	750V	40A	10kW
HY-PW 1000-30	1000V	30A	10kW
HY-PW 1500-20	1500V	20A	10kW

5kW Series Power Selection

Models	Output voltage	Output current	Output power
HY-PW 80-170	80V	170A	5kW
HY-PW 200-70	200V	70A	5kW
HY-PW 360-40	360V	40A	5kW

Models	Output voltage	Output current	Output power
HY-PW 500-30	500V	30A	5kW
HY-PW 750-20	750V	20A	5kW

HY-PW Series Technical Parameters | 5kW

Models		HY-PW 80-170	HY-PW 200-70	HY-PW 360-40	HY-PW 500-30	HY-PW 750-20
Rrated output voltage	V	80	200	360	500	750
Output current	A	170	70	40	30	20
Rated output power	W	5kW				
Efficiency	%	93	95	93	95	94
CV Mode						
Settable output range	V	0 - Rated output value				
Input adjustment rate	mV	0.02% F.S.				
Load regulation	mV	0.05% F.S.				
Telemetry maximum compensation voltage	V	<30V/h 2V; ≥30V/h 8V; (Customizable according to demand)				
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	16	40	55	70	200
Noise peak to peak p-p (20Hz - 20 MHz)	mVpp	200	300	320	350	800
Output voltage tise time	ms	30 ms				
Transient response time	ms	2 ms				
CC Mode						
Settable output range	A	0 - Rated output value				
Input adjustment rate	mA	0.05% F.S.				
Load regulation	mA	0.15% F.S.				
Ripple effective value rms (3 Hz - 300 kHz)	mArms	80	22	18	16	16

HY-PW Series Technical Parameter

HY-PW Series Technical Parameters | 10kW

Models		HY-PW 80-340	HY-PW 200-140	HY-PW 360-80	HY-PW 500-60	HY-PW 750-40	HY-PW 1000-30	HY-PW 1500-20
Rated output voltage	V	80	200	360	500	750	1000	1500
Output current	A	340	140	80	60	40	30	20
Rated output power	W	10kW						
Efficiency	%	93	95	93	95	94	95	95
CV Mode								
Settable output range	V	0 - Rated output value						
Input adjustment rate	mV	0.02%+0.02% (range)						
Load regulation	mV	0.05%+0.05% (range)						
Telemetry maximum compensation voltage	V	<30V/h 2V; ≥30V/h 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	25	40	55	70	200	350	400
Noise peak to peak p-p (20Hz - 20 MHz)	mVpp	320	300	320	350	800	1600	2400
Output voltage rise time	ms	30 ms						
Transient response time	ms	2 ms						
CC Mode								
Settable output range	A	0 - Rated output value						
Input adjustment rate	mA	0.05%+0.05% (range)						
Load regulation	mA	0.15%+0.15% (range)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	160	44	35	32	32	22	16

HY-PW Series Technical Parameters | 15kW

Models		HY-PW 80-510	HY-PW 200-210	HY-PW 360-120	HY-PW 500-90	HY-PW 750-60	HY-PW 1000-40	HY-PW 1500-30
Rated output voltage	V	80	200	360	500	750	1000	1500
Output current	A	510	210	120	90	60	40	30
Rated output power	W	15kW						
Efficiency	%	93	95	93	95	94	95	95
CV Mode								
Settable output range	V	0 - Rated output value						
Input adjustment rate	mV	0.02%+0.02% (range)						
Load regulation	mV	0.05%+0.05% (range)						
Telemetry maximum compensation voltage	V	<30V /h 2V; ≥30V /h 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	25	40	55	70	200	350	400
Noise peak to peak p-p (20Hz - 20 MHz)	mVpp	320	300	320	350	800	1600	2400
Output voltage rise time	ms	30 ms						
Transient response time	ms	2 ms						
CC Mode								
Settable output range	A	0 - Rated output value						
Input adjustment rate	mA	0.05%+0.05% (range)						
Load regulation	mA	0.15%+0.15% (range)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	240	66	50	48	48	32	26

Stability Temperature Coefficient

Stability (rated output voltage/current)	U:0.01%	I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)
Temperature coefficient (rated output voltage/current)	U:50ppm/℃	I: 70ppm/℃ (After 30 minutes of power on)

Programming And Readback Accuracy Resolution

Voltage output programming accuracy	Rated output voltage 0.05%
Current output programming accuracy	Output current 0.1%+Rated output current 0.2%
Voltage setting resolution	0.01V (≤600 V), 0.1V (>600 V)
Current setting resolution	0.01A (≤600 A), 0.1A (>600 A)
Voltage output readback accuracy	Rated output voltage ±0.05%+Actual voltage ±0.05%
Current output readback accuracy	Rated output current ±0.1%+Actual current ±0.1%
Voltage read back resolution	0.001V (≤ 100V), 0.01V (100 V < U ≤ 1000V), 0.1V (> 1000V)
Current read back resolution	0.001A (≤ 100A), 0.01A (100 A < U ≤ 510A)

Protection Function

OVP Over voltage protection setting range	10 - 110%, Immediate shutdown of output beyond limit
OCP Over current protection setting range	0 - 105%, Immediate shutdown of output beyond limit
OTP Over temperature protection	Immediate shutdown of output beyond limit
OPP Over power protection	10 - 110%, Immediate shutdown of output beyond limit

Ambient Condition

Environment	Indoor use; Installation overvoltage level: II; Pollution level: P2; Class II equipment
Ambient temperature	0℃ to 50℃, optional -10℃ to 50℃, -20℃ to 50℃, -40℃ to 50℃
Storage environment temperature	-20℃ to 65℃,
Working environment humidity	20%-90% RH, No condensation, continuous operation
Storage environment humidity	10% - 95% RH, No condensation
Altitude	Above an altitude of 2000 meters, the power decreases by 2% for every 100 meters increase, or the maximum working environment temperature decreases by 1℃ for every 100 meters;When not in operation, it can reach an altitude of 12000 meters
Burial	Forced air cooling, intelligent variable speed fan, front/side air inlet, rear air outlet
Noise	≤ 65dB(A), Weighted measurement with 1 m

Output Waveform

Control Panel

Monitor	4-inch LCD display, touch screen
Control function	Numeric key input, multi-level shuttle knob adjustment (outer circle coarse adjustment/inner circle fine adjustment) output ON/OFF switch, Lock keyboard and touch lock Reset restart, status indicator light (Shift / Local / Remote / Alarm / Lock / Output)
Programming function	Steps, ladder, gradients

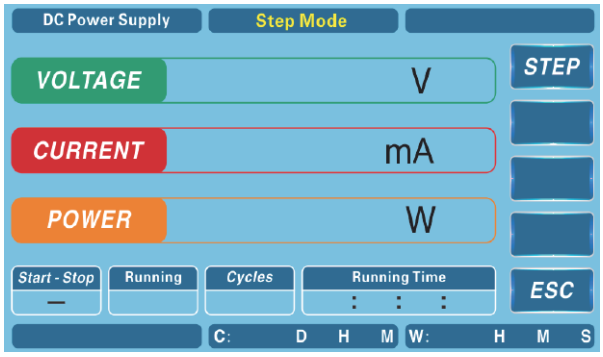
Input Power Supply

Frequency	47 Hz - 63 Hz
Connection	Three phase three wire+ground wire, 380 V ± 15%
Power factor (typical value)	0.99

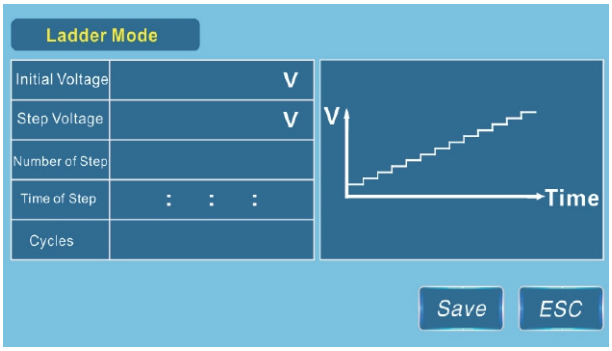
Size & Color

W * D * H	482.6(W) * 660(D) * 133(H) mm, 3U
Color	RAL 7035

Programmable Function

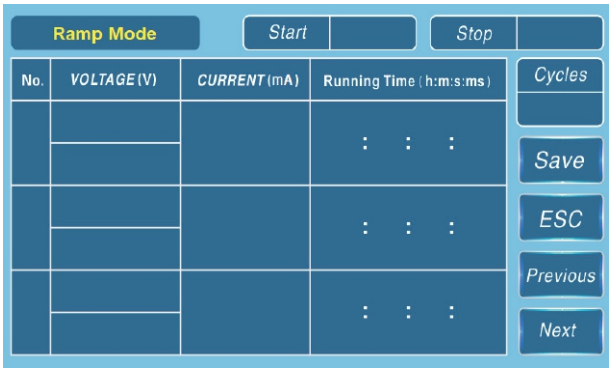


Homepage



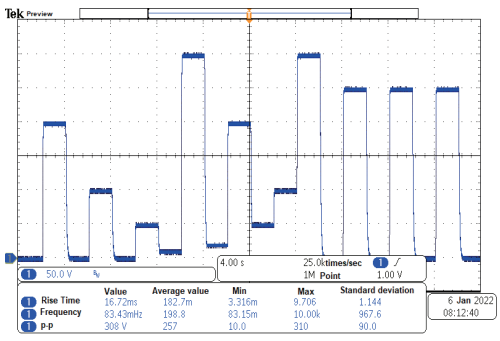
The ladder setting page can set the required initial frequency, step frequency, initial voltage, step voltage, step times and step time.

The step setting page can set the required frequency, voltage, running time, initial step, end step and cycle times.

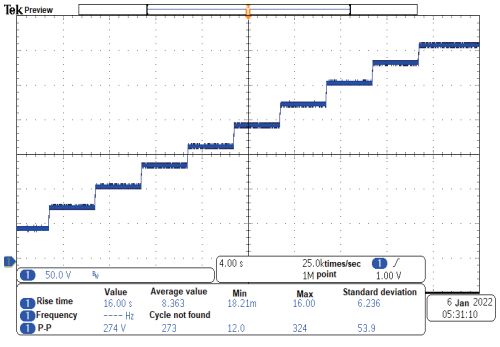


The gradient setting page can set the required voltage, frequency, running time, initial step and end step.

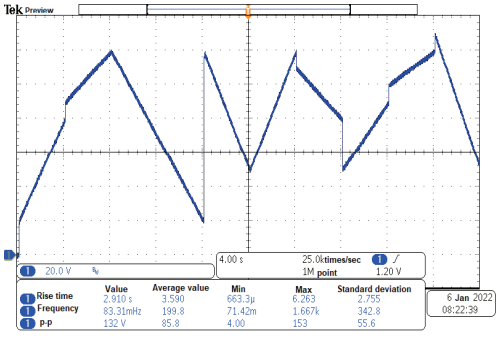
Output Waveform



Step order



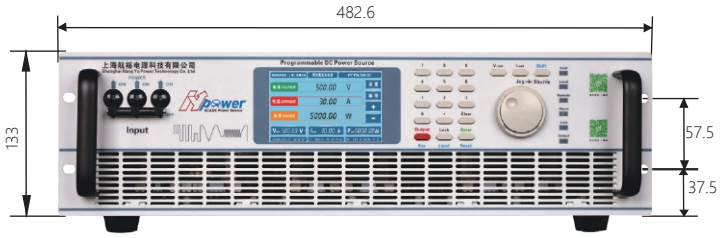
Ladder

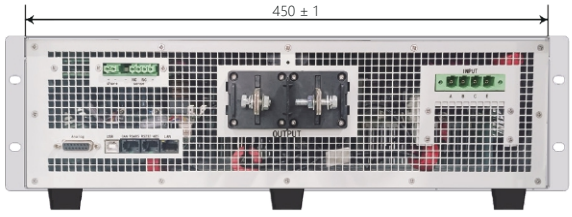


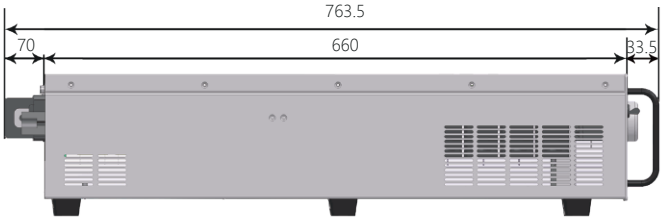
Gradual change

Appearance & Size Outline Dimension

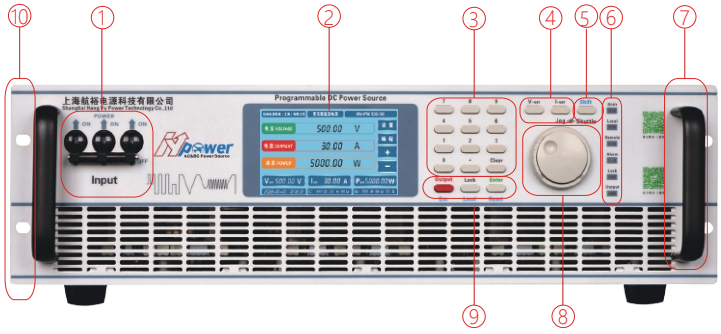
3U 482.6(W) * 660(D) * 133(H) mm





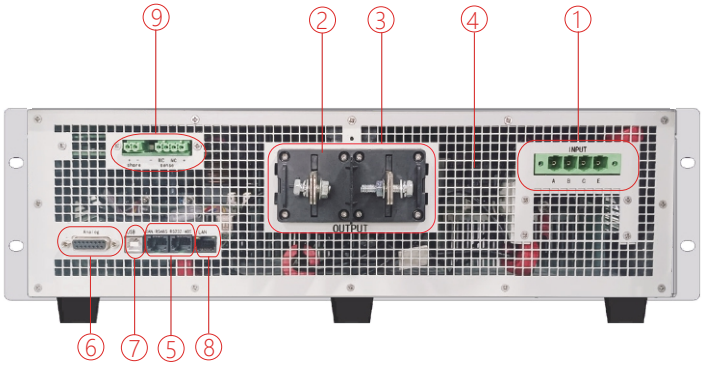


Control Panel



① Power input circuit breaker
② LCD Display (4-inch, touch screen)
③ Number input keyboard
④ Voltage/current/power setting key
⑤ Shift Function reset key
⑥ Status
⑦ Chassis handle
⑧ Multistage shuttle adjustment knob (inner circle fine adjustment/outer circle coarse adjustment)
⑨ Lock, Enter to confirm, Esc to exit Local, Reset restart Output ON/OFF switch
⑩ 19 inch standard rack mounting holes

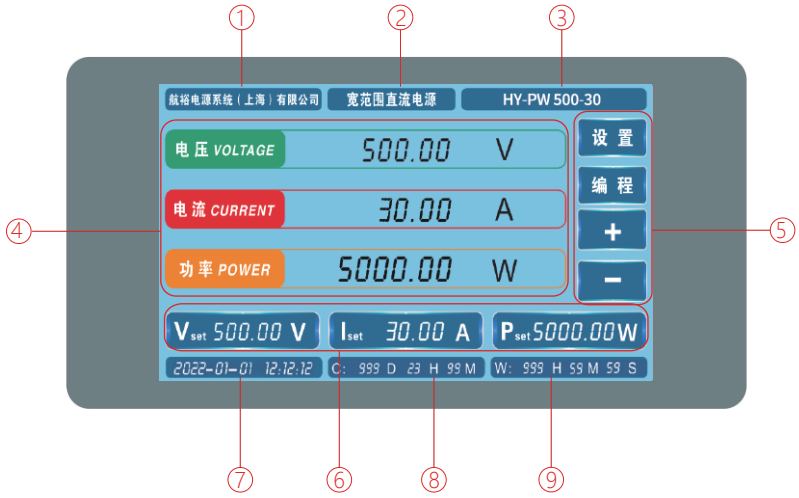
Rear Panel



① AC input terminal
② Output copper bar
③ DC output terminal protective cover
④ Heat dissipation air outlet
⑤ RS-485 & RS-232 communication interface
⑥ Digital I/O communication interface
⑦ USB communication interface (Optional)
⑧ LAN communication interface
⑨ Remote compensation measurement terminal

Appearance&Size Outline Dimension

Display Interface



① Display interface
② Product name
③ Product Series
④ Voltage/current/power read back display area
⑤ Function setting area
⑥ Voltage/Current/Power setpoints&CV/CC/CP Status
⑦ TIME
⑧ Accumulated running time
⑨ This run time

Cooperative Clients (Partial)

Power Semiconductor Customers

Changchun Guoke

Electrical industry

China Resources Microelectronics

Shanghai Huinengtai Semiconductor

Yuexin Technology

Wishing to create technology

Group core microelectronics

Hangzhou Zhongsi

Feishide

Suzhou Lianxun Instrument

Weiyujia Semiconductor

Shanghai Zhanxin Semiconductor

Chengxin Technology

Zhuoxinda Technology

Enterprises In The Field Of Automotive Electronics

China Automotive Research and Development

Heavy Industry Automotive Research and Development

BMW Brilliance

Red Banner

SAIC Group

SAIC Volkswagen

GEELY

tesla

Weilai

Xiaomi Automobile

BYD

value

polary

Lantu Automobile

Inovance

HAOMO.AI

MKLtech

Shanghai Tongmin Vehicle

Ningde Era

Human Horizons

Hezhong New Energy

High Tech R&D Enterprises

Huawei

FARATRONIC

Panasonic

EPCOS

TYCO

Weidmuller

Honeywell

Nader

SIEMENS

ABB

Schneider

NOSRK

HONGFA

EOPLE

FLUKE

Philips

Gree

Guilin Rubber Machinery Factory

CASCO

CRRC

US PI

HILTI

BOSCH

linde

NARI-TECHNOLOGY

Shanghai Electric

New Thunder Energy

Silan

Aerospace And National Defense Military Industry Research Institute

china aerospace | CASIC | aviation industry | China Aerospace | CETC | CSSC | CSIC

CASC 800 institute (Shanghai Aerospace Precision Machinery Research Institute)
CASC 801 institute (Shanghai Institute of Space Propulsion)
CASC 803 institute (Shanghai Institute of Space Propulsion)
CASC 804 institute (Shanghai Aerospace Electronic Communication Equipment Research Institute)
CASC 805 institute (Shanghai Aerospace Systems Engineering Research Institute)
CASC 808 institute (Shanghai Institute of Precision Metrology and Testing)
CASC 811 institute (Shanghai Space Power Research Institute)
CASC 812 institute (Shanghai Satellite Equipment Research Institute)
CASC 502 institute (Beijing Institute of Control Engineering)
CASC 510 institute (Lanzhou Institute of Space Technology Physics)
CASIC 206 institute (Beijing Institute of Mechanical Equipment)
CASIC 307 factory (Aerosun Corporation)
CASIC 33 institute (Institute 33 of Aerospace Science and Industry Third Institute)
CASIC 3651 factory (Guizhou Aerospace Linquan Motor Co., Ltd)

AVIC 603 institute (AVIC Xi'an Aircraft Design and Research Institute)
AVIC 613 institute (China Aviation Industry Group Luoyang Electro Optic Equipment Research Institute)
AVIC 615 institute (China Aviation Industry Group Luoyang Electro Optic Equipment Research Institute)
AVIC 618 institute (Xi'an Automatic Flight Research Institute of China Radio Aviation Research Institute)
AVIC 631 institute (AVIC Aerospace Computing Technology Research Institute)
AVIC 105 factory (Tianjin Aviation Electromechanical Co., Ltd)
AVIC 115 factory (Shaanxi Aviation Electric Co., Ltd)
AVIC 118 factory (Shanghai Aviation Electrical Appliances Co., Ltd)
AVIC 181 factory (Wuhan Aviation Instrument Co., Ltd)
AVIC 607 institute (China Leihua Electronic Technology Research Institute)
AVIC 304 institute (Beijing Great Wall Metrology and Testing Technology Research Institute)
AECC 606 institute (Shenyang Engine Research Institute)

CETC 14 institute (Nanjing Institute of Electronic Technology)
CETC 21 institute (Shanghai Micromotor Research Institute)
CETC 23 institute (Shanghai Transmission Line Research Institute)
CETC 36 institute (Jiangnan Electronic Communication Research Institute)
CETC 38 institute (East China Electronic Engineering Research Institute)
CETC 50 institute (Shanghai Microwave Technology Research Institute)
CETC 51 institute (Shanghai Microwave Equipment Research Institute)
CETC 54 institute (Shijiazhuang Communication Measurement and Control Technology Research Institute)
CETC 55 institute (Nanjing Institute of Electronic Devices)
CSIC 707 institute (Tianjin Institute of Navigation Instruments)
CSIC 7107 institute (Shaanxi Aerospace Navigation Equipment Co., Ltd)
CSIC 719 institute (Wuhan Second Ship Design and Research Institute)
CSIC 704 institute (Shanghai Shipbuilding Equipment Research Institute)
CSIC 726 institute (Shanghai Institute of Ship Electronic Equipment)
Jiangnan Shipbuilding (Group) Co., Ltd
Nanjing Panda Electronics Co., Ltd
State owned 741 Factory (Nanjing East China Electronics Group Co., Ltd.)

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)

中国科学院 CHINESE ACADEMY OF SCIENCES

中国工程物理研究院 CHINA ACADEMY OF ENGINEERING PHYSICS

中国地震局 地壳应力研究所 The Institute of Crustal Dynamics

福建省产品质量检验研究院 FUJIAN INSPECTION AND RESEARCH INSTITUTE FOR PRODUCT QUALITY

SEARI 上电科 上海電器科學研究所(集团)有限公司 Shanghai Electrical Apparatus Research Institute (Group) Co., Ltd.

苏州电器科学研究院股份有限公司
国家智能电网中高压成套设备质量监督检验中心
国家电器产品质量监督检验中心

长春市产品质量监督检验院 Changchun product quality supervision and inspection institute

西安市产品质量监督检验院 Xi'an Supervision & Inspection Institute of Product Quality

杭州市质量技术监督检测院 Hangzhou Technical Supervision and Procuratorate

Cooperative Clients

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

COMAC

Commercial Aircraft Corporation of China Limited

Collins Aerospace

Rockwell Collins

GAMECO

Guangzhou Aircraft Maintenance Engineering Co., Ltd

Ameco

Beijing Aircraft Maintenance Engineering Co., Ltd

Military Academies And Local Universities

national university of defense technology

Aerospace Engineering University

Army Engineering University

air force engineering university

naval university of engineering

Dalian Naval Academy

Naval Aviation University

Beihang University

Beijing Institute of Technology

Harbin Institute of Technology

Harbin Engineering University

Nanjing University of Aeronautics and Astronautics

Nanjing University of Science and Technology

Northwestern Polytechnical University

University of Science and Technology of China

Tsinghua University

Peking University

Shanghai Jiaotong University

Zhejiang University

Tianjin University

Huazhong University of Science and Technology

University of Electronic Science and technology

Shanghai University

Beijing University of Technology

Shanghai Maritime University

Dalian University of Technology

Dalian Maritime University

South China University of Technology

Huazhong University of Science and Technology

Xi'an Electronic Technology

Xi'an Jiaotong University

Sichuan University

donghua university

north china institute of aerospace engineering

Fudan University

Xiamen University

north china electric power university

Changchun Institute of Technology

xiangtan university

zhejiang university of technology

Xi'an University of technology

University of Electronic Science and Technology of China

Official WeChat:
hypower-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.

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neo@hangyupower.com
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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