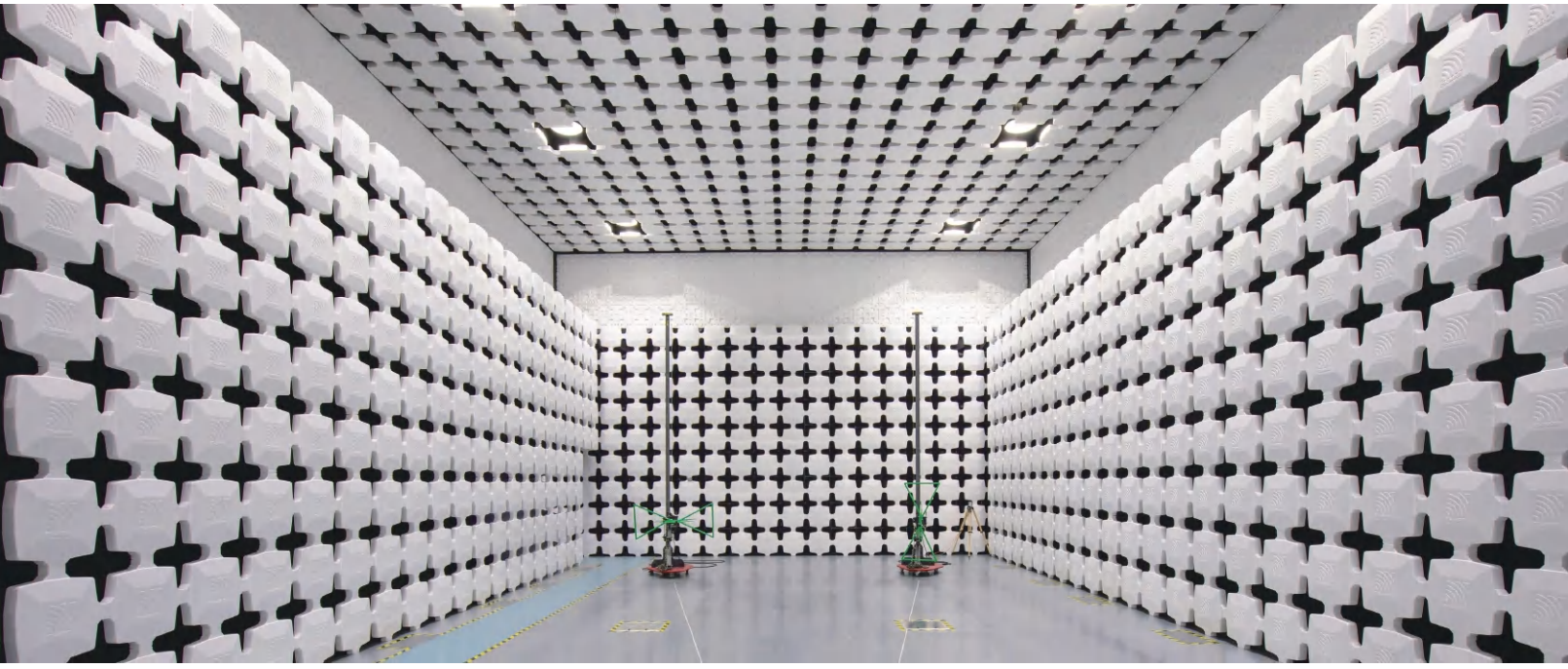
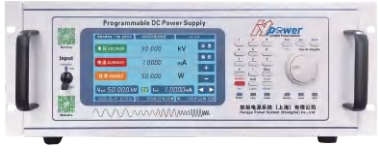
AC&DC Power Source

HY-PLDSU Series

Programmable Linear DC Power Supply

Military Quality Power Supply Expert

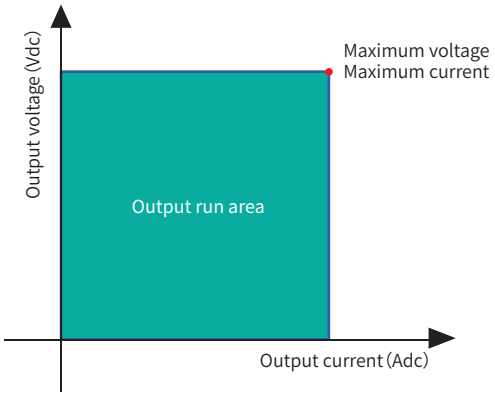




www.hypower.cn

HY-PLDSU Series Programmable Linear DC Power Supply

High purity, High precision, High reliability



This power supply adopts linear amplification technology, with the advantages of low ripple and low interference, accurate test, widely used, convenient and intelligent operation, without the control of the upper computer, greatly simplify the programming difficulty, reduce the difficulty of testing.

Product Features

- Linear amplification technology, ultra-low ripple noise
- Maximum output voltage 300V
- Maximum output current 500A
- Maximum output power 10kW
- 16 bits D/A high precision converter, accurate output
- 20 bits A/D high precision converter, more accurate read back

Application Field

This power supply is widely used, especially in the EMC darkroom test, precision intelligent manufacturing field, play an important role.

- EMC test field
- Semiconductor industry
- Precision manufacturing testing field
- BMS
- Motor
- Electronic components
- Automotive Electronics
- Magnetic material

Product Model Naming Rules

Product series	Output voltage		Output current		Optional function
HY-PLDSU	300	-	34	-	CF

Model selection Example:
Product model: HY-PLDSU 300-34-CF
Output voltage 0-300 V, output current 0-34 A,
Custom features that users choose to purchase

Optional function

- HR : High resolution/precision
- T1 : Operating temperature -10°C to 50°C
- T2 : Operating temperature -20°C to 50°C
- T4 : Operating temperature -40°C to 50°C
- CF : User-defined functions (please specify when ordering)
- MR : Measurement report (issued by CNAS certified third party)

Communication protocol	Standard communication interface	Optional communication interface
Modbus SCPI	RS-485 RS-232 Digital I/O	- LAN : Ethernet communicationinterface - CAN : CAN communication interface - GPIB : GPIB communication interface - IA : Analog quantity programming and monitoring interface (isolated type)

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

HY-PLDSU Series Product Selection Table

HY-PLDSU Series Product Model Selection And Parameters

Special specifications outside the voltage/current/power range in the selection table can be customized.

100W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-5	20V	5A	100W
HY-PLDSU 30-3.4	30V	3.4A	100W
HY-PLDSU 35-3	35V	3A	100W
HY-PLDSU 50-2	50V	2A	100W
HY-PLDSU 60-1.7	60V	1.7A	100W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-1.3	80V	1.3A	100W
HY-PLDSU 110-1	110V	1A	100W
HY-PLDSU 160-0.7	160V	0.7A	100W
HY-PLDSU 250-0.4	250V	0.4A	100W
HY-PLDSU 300-0.4	300V	0.4A	100W

200W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-10	20V	10A	200W
HY-PLDSU 30-6.7	30V	6.7A	200W
HY-PLDSU 35-6	35V	6A	200W
HY-PLDSU 50-4	50V	4A	200W
HY-PLDSU 60-3.4	60V	3.4A	200W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-2.5	80V	2.5A	200W
HY-PLDSU 110-1.8	110V	1.8A	200W
HY-PLDSU 160-1.3	160V	1.3A	200W
HY-PLDSU 250-0.8	250V	0.8A	200W
HY-PLDSU 300-0.7	300V	0.7A	200W

300W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-15	20V	15A	300W
HY-PLDSU 30-10	30V	10A	300W
HY-PLDSU 35-8.6	35V	8.6A	300W
HY-PLDSU 50-6	50V	6A	300W
HY-PLDSU 60-5	60V	5A	300W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-4	80V	4A	300W
HY-PLDSU 110-2.8	110V	2.8A	300W
HY-PLDSU 160-1.9	160V	1.9A	300W
HY-PLDSU 250-1.2	250V	1.2A	300W
HY-PLDSU 300-1	300V	1A	300W

500W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-25	20V	25A	500W
HY-PLDSU 30-16.7	30V	16.7A	500W
HY-PLDSU 35-15	35V	15A	500W
HY-PLDSU 50-10	50V	10A	500W
HY-PLDSU 60-8.4	60V	8.4A	500W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-6.3	80V	6.3A	500W
HY-PLDSU 110-4.6	110V	4.6A	500W
HY-PLDSU 160-3.2	160V	3.2A	500W
HY-PLDSU 250-2	250V	2A	500W
HY-PLDSU 300-1.7	300V	1.7A	500W

1000W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-50	20V	50A	1000W
HY-PLDSU 30-33.4	30V	33.4A	1000W
HY-PLDSU 35-28.6	35V	28.6A	1000W
HY-PLDSU 50-20	50V	20A	1000W
HY-PLDSU 60-16.7	60V	16.7A	1000W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-12.5	80V	12.5A	1000W
HY-PLDSU 110-9.1	110V	9.1A	1000W
HY-PLDSU 160-6.3	160V	6.3A	1000W
HY-PLDSU 250-4	250V	4A	1000W
HY-PLDSU 300-3.4	300V	3.4A	1000W

HY-PLDSU Series Technical Parameter

1500W Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-75	20V	75A	1500W
HY-PLDSU 30-50	30V	50A	1500W
HY-PLDSU 35-43	35V	43A	1500W
HY-PLDSU 50-30	50V	30A	1500W
HY-PLDSU 60-25	60V	25A	1500W

Models	Output voltage	Output current	Output power
HY-PLDSU 80-18.8	80V	18.8A	1500W
HY-PLDSU 110-13.7	110V	13.7A	1500W
HY-PLDSU 160-9.4	160V	9.4A	1500W
HY-PLDSU 250-6	250V	6A	1500W
HY-PLDSU 300-5	300V	5A	1500W

2kW Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-100	20V	100A	2kW
HY-PLDSU 30-66.7	30V	66.7A	2kW
HY-PLDSU 35-57.2	35V	57.2A	2kW
HY-PLDSU 50-40	50V	40A	2kW
HY-PLDSU 60-33.4	60V	33.4A	2kW

Models	Output voltage	Output current	Output power
HY-PLDSU 80-25	80V	25A	2kW
HY-PLDSU 110-18.2	110V	18.2A	2kW
HY-PLDSU 160-12.5	160V	12.5A	2kW
HY-PLDSU 250-8	250V	8A	2kW
HY-PLDSU 300-6.7	300V	6.7A	2kW

3kW Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-150	20V	150A	3kW
HY-PLDSU 30-100	30V	100A	3kW
HY-PLDSU 35-85.8	35V	85.8A	3kW
HY-PLDSU 50-60	50V	60A	3kW
HY-PLDSU 60-50	60V	50A	3kW

Models	Output voltage	Output current	Output power
HY-PLDSU 80-37.5	80V	37.5A	3kW
HY-PLDSU 110-27.3	110V	27.3A	3kW
HY-PLDSU 160-18.8	160V	18.8A	3kW
HY-PLDSU 250-12	250V	12A	3kW
HY-PLDSU 300-10	300V	10A	3kW

5kW Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-250	20V	250A	5kW
HY-PLDSU 30-167	30V	167A	5kW
HY-PLDSU 35-143	35V	143A	5kW
HY-PLDSU 50-100	50V	100A	5kW
HY-PLDSU 60-83.4	60V	83.4A	5kW

Models	Output voltage	Output current	Output power
HY-PLDSU 80-62.5	80V	62.5A	5kW
HY-PLDSU 110-45.5	110V	45.5A	5kW
HY-PLDSU 160-31.3	160V	31.3A	5kW
HY-PLDSU 250-20	250V	20A	5kW
HY-PLDSU 300-16.7	300V	16.7A	5kW

10kW Series Power Supply Selection

Models	Output voltage	Output current	Output power
HY-PLDSU 20-500	20V	500A	10kW
HY-PLDSU 30-334	30V	334A	10kW
HY-PLDSU 35-286	35V	286A	10kW
HY-PLDSU 50-200	50V	200A	10kW
HY-PLDSU 60-167	60V	167A	10kW

Models	Output voltage	Output current	Output power
HY-PLDSU 80-125	80V	125A	10kW
HY-PLDSU 110-91	110V	91A	10kW
HY-PLDSU 160-62.6	160V	62.6A	10kW
HY-PLDSU 250-40	250V	40A	10kW
HY-PLDSU 300-34	300V	34A	10kW

Constant Pressure Mode（CV Mode）

Output Range Can Be Set	0- Rated Output Value
Input Adjustment Rate	⩽ 0.01% +0.01% (Range of measuring)
Load Adjustment Rate	⩽ 0.01% +0.01% (Range of measuring)
Maximum Compensation Voltage For Telemetry	<30V 2V; ⩾30V 8V; (can be customized according to demand)
Ripple Effective Value rms (3Hz-300kHz)	⩽0.01% (80%-100% rated output)
Transient Response Time	⩽ 100μS

Constant Current Mode（CC Mode）

Output Range Can Be Set	0- Rated Output Value
Input Adjustment Rate	⩽ 0.03% +0.03% (Range of measuring)
Load Adjustment Rate	⩽ 0.03% +0.03% (Range of measuring)
Ripple Effective Value rms (3Hz-300kHz)	⩽ 0.03% (80%-100% rated output)

Programming And Readback Accuracy & Resolution

Voltage Output Programming Accuracy	0.05% of the rated output voltage
Current Output Programming Accuracy	0.1% of output current + 0.1% of rated output current
Voltage Setting Resolution	0.001V (⩽60 V) ,0.01V (⩽600 V) , 0.1V (>600 V)
Current setting resolution	0.001A (⩽60 A) ,0.01A (⩽600 A) , 0.1A (>600 A)
Voltage Output Read-Back Accuracy	±0.02% of rated output voltage + ±0.02% of actual voltage
Current Output Read-Back Accuracy	±0.1% of rated output current + ±0.1% of actual current
Voltage Read Back Resolution	0.0001 V (⩽ 100 V), 0.001 V (100 V< U ⩽ 1000 V), 0.01 V (>1000 V)
Current Read Back Resolution	0.0001 A (⩽ 100 A), 0.001 A (100 A< I ⩽ 1000 A)

Stability And 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/°C I: 70ppm/°C (30 minutes after power on)

Protection Function

OVP Overvoltage Protection Setting Range	10-110%, beyond the limit output immediately off
OCP Overcurrent Protection Setting Range	0-105%, beyond the limit output immediately off
OTP Overtemperature Protection	Output beyond the limit is turned off immediately
OPP Overpower Protection	10-110%, beyond the limit output immediately off

HY-PLDSU Series Technical Parameter

Environmental Condition

Environment	Indoor use; Installation overvoltage class: II; Pollution level: P2; Class II equipment
Operating Ambient Temperature	0°C to 50°C, optional -10°C to 50°C, -20°C to 50°C, -40°C to 50°C
Storage Ambient Temperature	-20°C to 65°C,
Working Ambient Humidity	20%-90% RH, no dew formation, continuous operation
Storage Environment Humidity	10% - 95% RH, no dew formation
Altitude	Above 2000 meters above sea level, every 100 meters up, the power will be reduced by 2%, or reduce the maximum working ambient temperature by 1°C per 100 meters; When not in operation, the altitude can reach 12,000 meters
Cooling	Forced air cooling, intelligent speed regulating fan, front/side air inlet, rear air outlet
Noise	⩽ 65dB(A), use 1 m to weighted measurement

Control Panel

Display	4/7 inch LCD display, touch screen
Control Function	Digital key input, multi-stage shuttle knob adjustment (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)

Input Power Supply

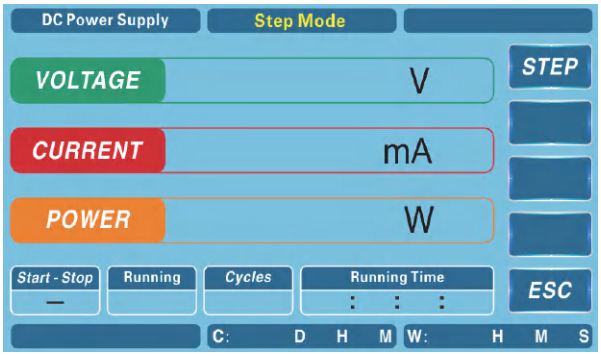
Frequency	47 Hz - 63 Hz
Connection Mode	Single-phase two-wire + ground, 220 V ± 15% Three-phase three-wire + ground wire, 380 V ± 15% (-3P standard configuration model)

Size And Weight

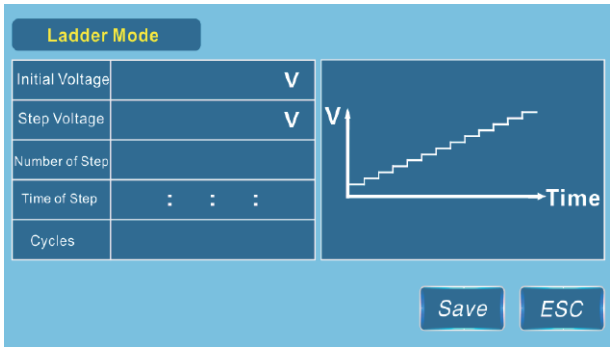
Note: See page P112 for more information on appearance and display

Size	430(W) * 500(D) * 88(H) mm, 2U 482.6(W) * 660(D) * 133(H) mm, 3U 430(W) * 560(D) * 178(H) mm, 4U Different voltage and power use different chassis
Weight	15kg/2U ; 35kg/3U ; 45k/4U
Colour	RAL 7035

Programmable Function

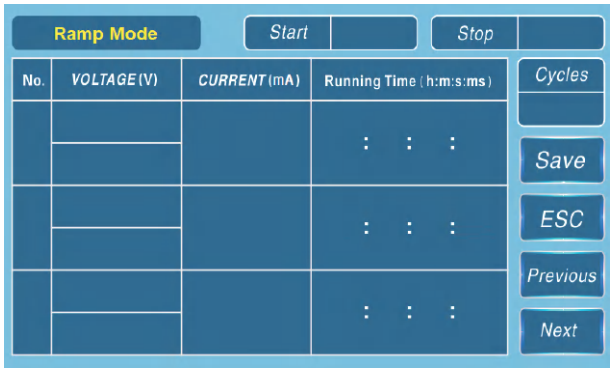


Homepage



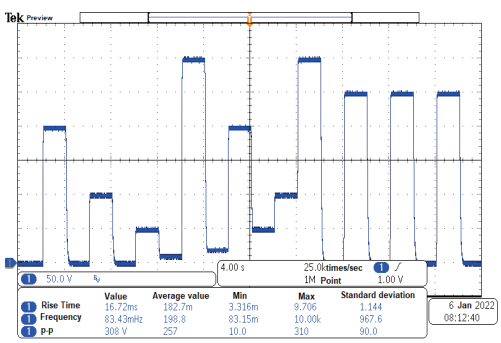
The ladder setting page can set the required initial frequency, step frequency, initial voltage, step voltage, step times and step time.

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

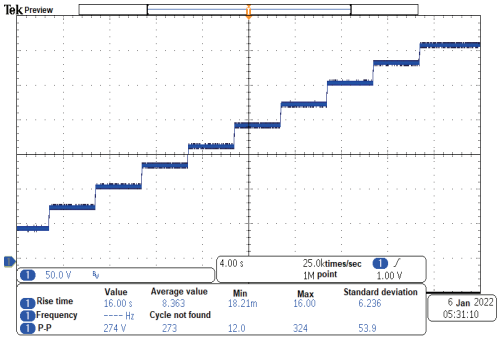


The gradient setting page can set the required voltage, frequency, running time, initial step and end step.

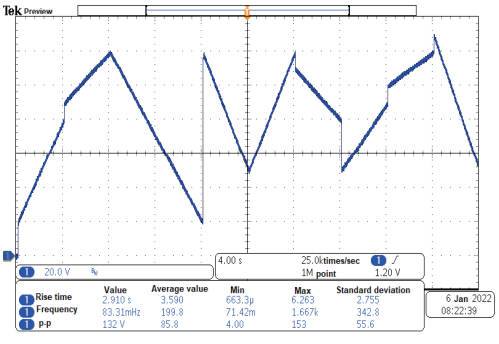
Output Waveform



Step order



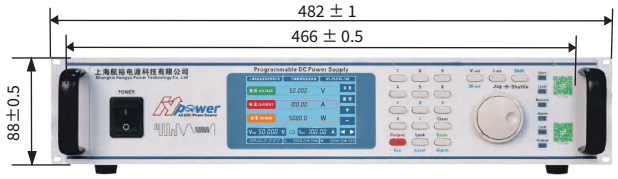
Ladder

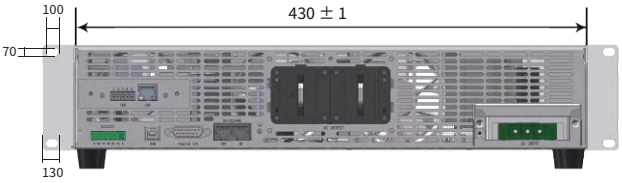


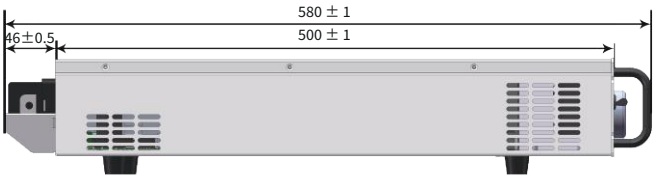
Gradual change

Appearance&Size Outline Dimension

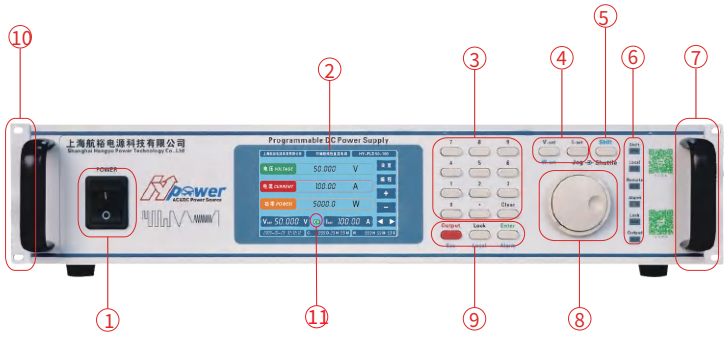
2U 430(W) * 500(D) * 88(H) mm





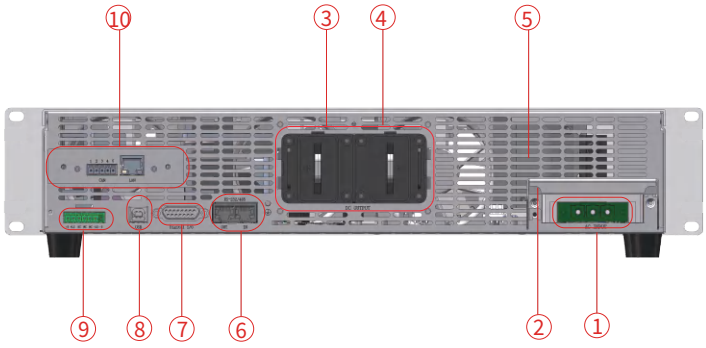


Control Panel



① Power input circuit breaker
② LCD Display (4-inch, touch screen)
③ Number input keyboard
④ Voltage/current 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 Multi level shuttle adjustment knob (inner circle fine adjustment/outer circle coarse adjustment) Lock lock, Enter confirmation, Esc exit Local, R eset restart Output ON/OFF switch
⑩ 19 inch standard rack mounting holes
⑪ CC/CV priority can be set

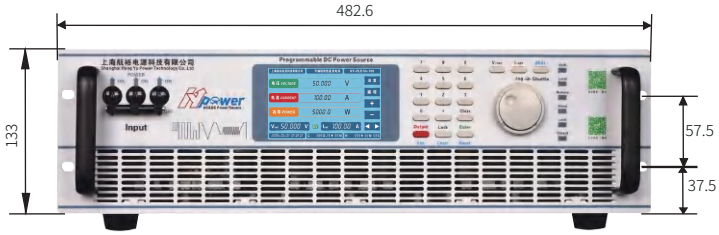
Rear Panel

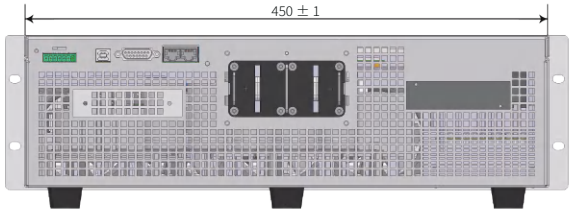


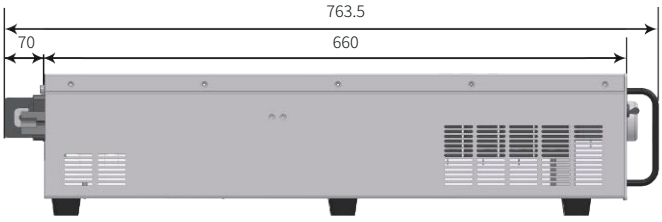
① AC input terminal
② AC input terminal protective cover
③ Output copper bar
④ DC output terminal protective cover
⑤ Heat dissipation air outlet
⑥ RS-485 & RS-232 communication interface
⑦ Digital I/O communication interface
⑧ USB communication interface
⑨ Remote compensation measurement terminal
⑩ Purchase communication interface (one out of three)
LAN & CAN communication interface
GPIB communication interface
Analog programming and monitoring interface (isolated type)

Outline Dimension Appearance&Size

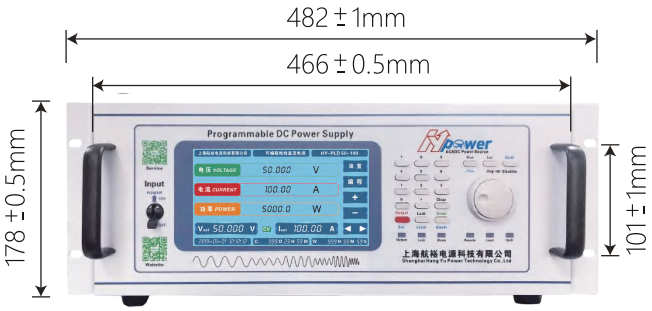
3U 482.6(W) * 660(D) * 133(H) mm

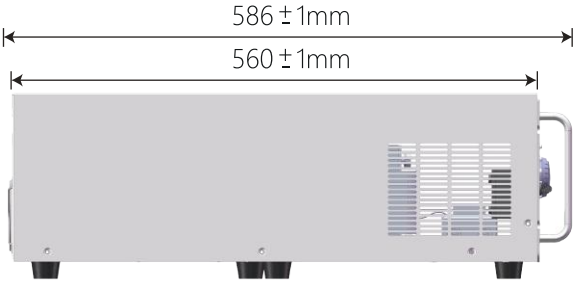






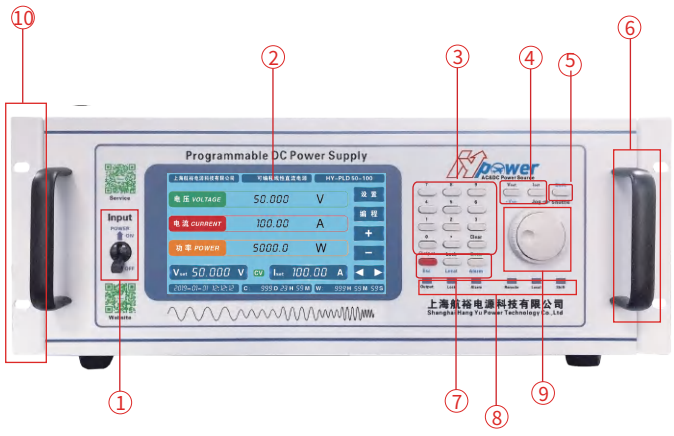
4U 430(W)*560(D)*178(H)mm





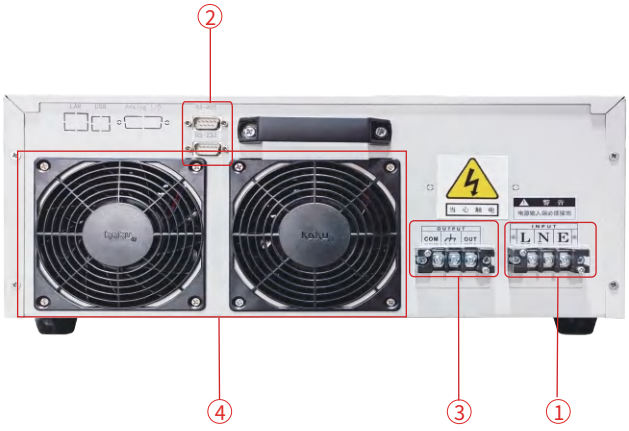
Display & Control Pannel Display and Control Panel

Control Panel



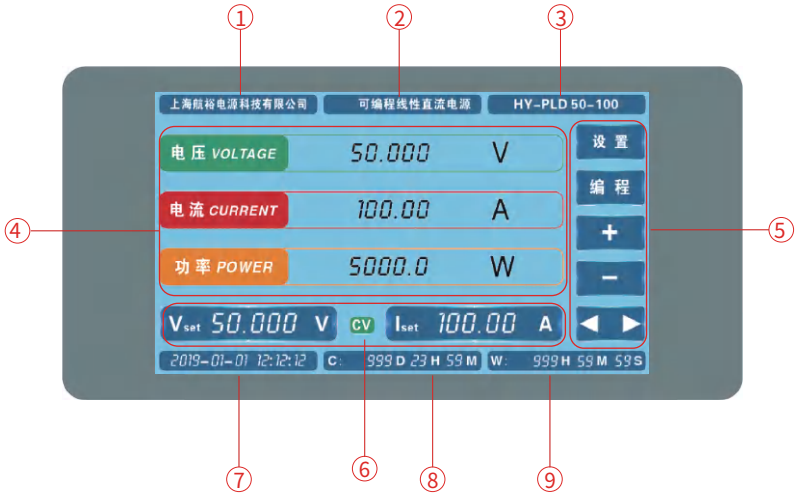
① Power input circuit breaker
② LCD Display (7-inch, touch screen)
③ Number input keyboard
④ Voltage or current or power setting key
⑤ Shift Function reset key
⑥ Chassis handle
⑦ Lock, Enter to confirm, Esc to exit Local, Reset restart Output ON/OFF switch
⑧ Status
⑨ Multistage shuttle adjustment knob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

Rear Panel



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

Display Interface



① Manufacturer's name
② product name
③ Product Series
④ Voltage/current/power read back display area
⑤ Function setting area
⑥ Voltage/Current Setpoints&CV/CC Status
⑦ TIME
⑧ Accumulated running time
⑨ This run time

Power Semiconductor Customer

Changchun National Science
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

Enterprise In The Field Of Automotive Electronics

CATARC
CAERI
BMW
China FAW Group Corporation
Hong Qi Automobile
SAIC Motor
Saic Volkswagen
Tesla Inc.
Weilai
Xiaomi Automobile
BYD
Valeo
polary
Lantu Automobile
GEELY Automobile
Huichuan
HAOMO.AI
Shanghai Tongmin
Ningde Age
Human Horizons
Hezhong New Energy

High-Tech R&D Enterprise

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

Cooperative Clients (Partial)

Aerospace & Defense Military Industry Research Institute

CASC　CASIC　AVIC　AECC　CETC　CSSC　CSIC

CASC 800 (Shanghai Aerospace Precision Machinery Research Institute)
CASC 801 (Shanghai Institute of Space Propulsion)
CASC 803 (Shanghai Aerospace Control Technology Institute)
CASC 804 (Shanghai Aerospace Electronic Communication Equipment Research Institute)
CASC 805 (Shanghai Aerospace System Engineering Institute)
CASC 808 (Shanghai Precision Measurement and Testing Institute)
CASC 811 (Shanghai Space Power Research Institute)
CASC 812 (Shanghai Satellite Equipment Research Institute)
CASC 502 (Beijing Control Engineering Research Institute)
CASC 510 (Lanzhou Institute of Space Technology Physics)
CASC 203 (China Ordnance Industry 203 Research Institute)
CASIC 206 (Beijing Machinery and Equipment Research Institute)
CASIC 242 Factory (Lanzhou Flight Control Co., LTD.)
CASIC 307 Factory (Aerospace Chenguang Co., LTD.)
CASIC 33 (33 Aerospace Science and Industry Institutes)
CASIC 3651 Factory (Shanghai Aerospace Control Technology Institute)

AVIC 603 (AVIC Xi 'an Aircraft Design and Research Institute)
AVIC 613 (Luoyang Electro-Optical Equipment Research Institute of Aviation Industry Corporation of China)
AVIC 615 (Aeronautical Radio Electronics Research Institute of China)
AVIC 618 (Xi 'an Flight Automatic Control Research Institute)
AVIC 631 (Aviation Computing Technology Research Institute of AVIC)
AVIC 105 Factory (Tianjin Aviation Electromechanical Co., LTD.)
AVIC 115 Factory (Shaanxi Aero Electric Co., LTD.)
AVIC 118 Factory (Shanghai Aviation Electric Appliance Co., LTD.)
AVIC 135 Factory (State-owned Wanli Electromechanical Factory)
AVIC 181 Factory (Wuhan Aviation Instrument Co., LTD.)
AVIC 304 (Beijing Great Wall Institute of Measurement and Testing Technology)
AECC 606 (Shenyang Engine Research Institute)
AVIC 607 (China Leihua Electronic Technology Institute)
Jiangnan Shipbuilding (Group) Co., LTD
Nanjing Panda Electronics Co., LTD
State-owned 741 Factory (Nanjing Huadong Electronics Group Co., LTD.)
Institute of Modern Physics, Chinese Academy of Sciences

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

Scientific Research & Third Party Quality Inspection Agency

Technical Institute of Physics and Chemistry (Beijing)
Institute of Urban Environment (Xiamen)
Electrotechnical Research Institute (Beijing)
Institute of Applied Physics (Shanghai)

Cooperative Clients (Partial)

The Chinese People's Liberation Army

South Sea Fleet

East China Sea Fleet

North Sea Fleet

Navy Factory 701 / Factory 702

4724 Factory (Shanghai Haiying Machinery Factory)

Unit 95861 (Air First Base)

5720 Factory of the People's Liberation Army of China

Commercial Aviation

COMAC
Commercial Aircraft Corporation of China

Collins Aerospace
Rockwell Collins

GAMECO
Guangzhou Aircraft Maintenance Engineering Co., LTD

Ameco
Beijing Aircraft Maintenance Engineering Co., LTD

Military Academies & 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

Contact us

Hangyu Power System (Shanghai) Co., Ltd.

Mobile/Whatsapp:+8613801800699
Fax:+86-21-67285228-8009
Email:sales@hangyupower.com
neo@hangyupower.com
Address: Block B, Building 11, No. 1698 Minyi Road, Songjiang District, Shanghai
Web:www.hangyupower.com

Programmable DC Power Supply Product Catalog, version 08.00, April 2024

Authorized distributor：