AC&DC Power Source

Hangyu Power System (Shanghai) Co., Ltd.

HY-PLDSU Series

Programmable Linear DC Power Supply

High Precision High Reliability

Military quality power supply expert
To provide customers with accurate, intelligent and convenient test power supply solutions

www.hangyupower.com

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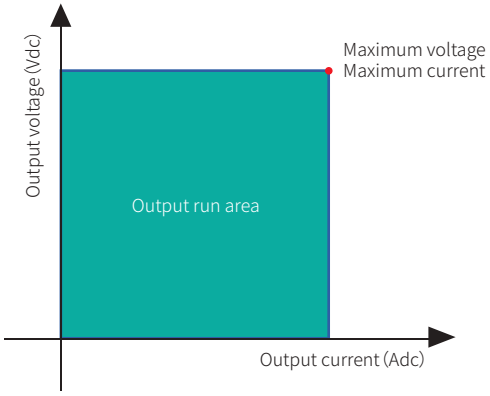
Waveform pure, High precision, High reliability



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-bit D/A high precision converter, accurate output
- 20-bit 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 Testing Field
- Semiconductor industry
- Precision manufacturing testing field
- BMS
- Electric machinery
- Electronic components
- Automotive electronics
- Magnetic material

Product Model Naming Rules

Product Series	Output Voltage		Output Current		Choose And Buy 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

Choose And Buy Function

- T1 : Operating temperature -10°C to 50°C
- T2 : Operating temperature -20°C to 50°C
- CF :User defined features (please specify when ordering)

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 Model 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 Model 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 Model 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 Model 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 Model 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 Product Selection Table

1.5kW Series Power Supply Model 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 Model 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 Model 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 Model 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 Model 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 (⩽60V) ,0.01V (⩽600V) , 0.1V (＞600V)
Current Setting Resolution	0.001A (⩽60A) ,0.01A (⩽600A) , 0.1A (＞600A)
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	0.0001V (⩽100V), 0.001V (100V＜U ⩽1000V), 0.01V (＞1000V)
Current Read Back Resolution	0.0001A (⩽100A), 0.001 A (100A＜ I ⩽ 1000A)

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/℃　I:　70ppm/℃ (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	Beyond the limit output immediately off
OPP Overpower Protection	10-110%, beyond the limit output immediately off

HY-PLDSU Series Technical Parameters

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
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 Sea Level	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 1m to weighted measurement

Control Panel

Display	4/7 inch LCD display, touch screen
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)

Input Power Supply

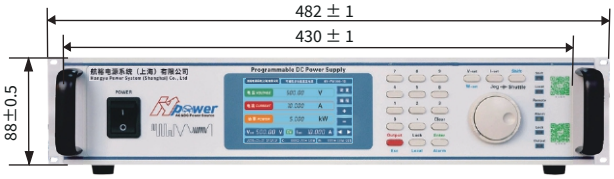
Frequency	47Hz - 63Hz
Connection Mode	Single-phase two-wire + ground wire, 220V ± 15% Three-phase three-wire + ground wire, 380V ± 15% (-3P standard configuration model)

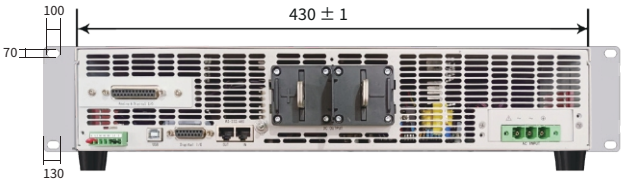
Size And Weight

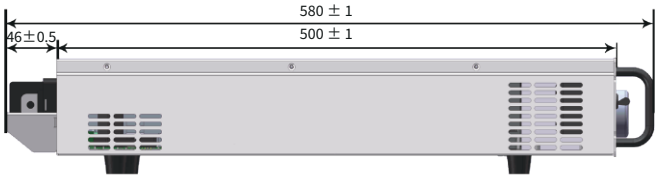
Size	430(W) * 500(D) * 88(H) mm, 2U 450(W) * 660(D) * 133(H) mm, 3U 433(W) * 560(D) * 177(H) mm, 4U Different voltage and power use different chassis
Weight	About 14kg/2U ; About 48kg/3U ; About 47kg/4U
Colour	RAL 7035

Appearance & Size

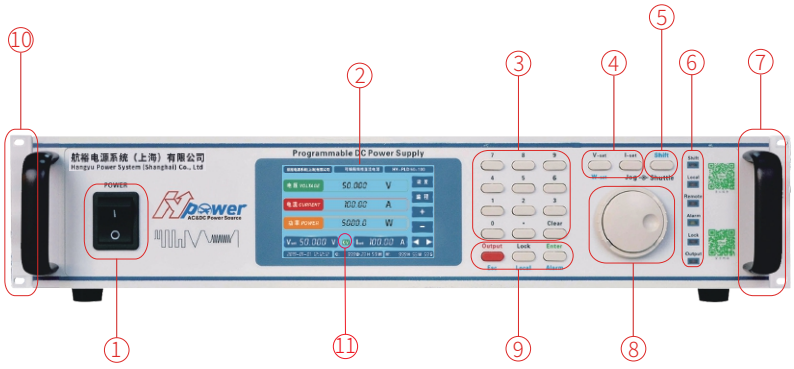
2U model 430(W) * 500(D) * 88(H) mm





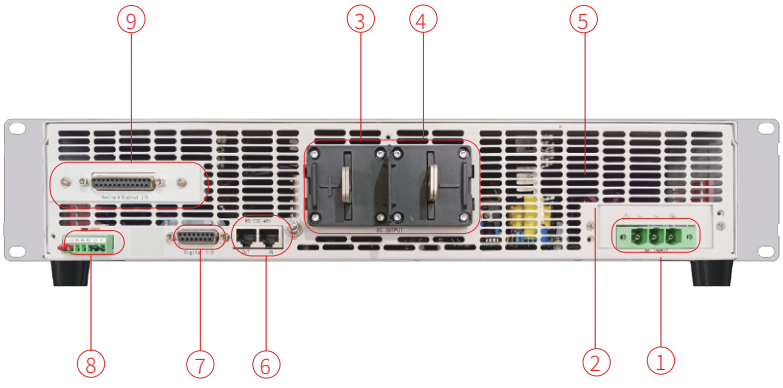


Control Panel



① Power input circuit breaker (2U single-phase, 3U three-phase)
② LCD display (4-inch, touch screen)
③ Number input keyboard
④ Voltage/current setting key
⑤ Shift Function reset key
⑥ Status indicator light
⑦ Chassis handle
⑧ Multi-stage adjustment knob (inner circle fine adjustment/outer circle coarse adjustment)
⑨ Lock, Enter, Esc, Local,Reset,Output ON/OFF
⑩ 19 inch standard rack mounting holes
⑪ CC/CV can be set preferentially

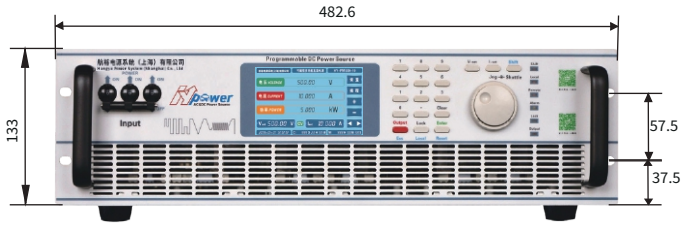
Rear Panel

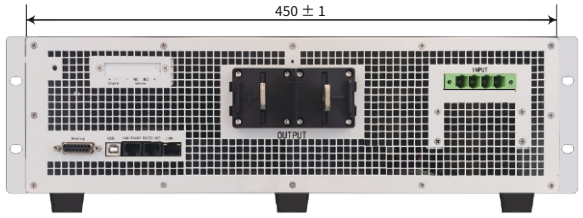


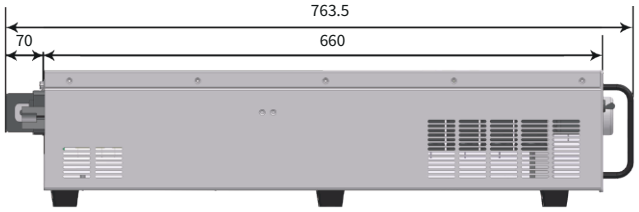
① AC input terminal
② AC input terminal protective cover
③ Output copper bar
④ DC output terminal protective cover
⑤ Heat dissipation air outlet
⑥ RS-485 & RS-232 communication interface
⑦ Digital I/O communication interface
⑧ Distal compensation measuring terminal
⑨ Choose to buy communication interface:
LAN & CAN communication interface
GPIB communication interface
Analog quantity programming and monitoring interface (isolated type)

Appearance & Size

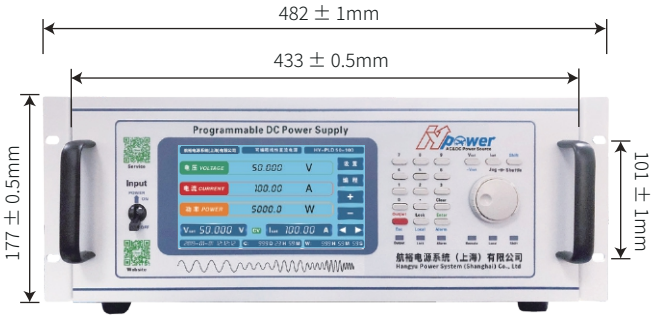
3U model 450(W) * 660(D) * 133(H) mm

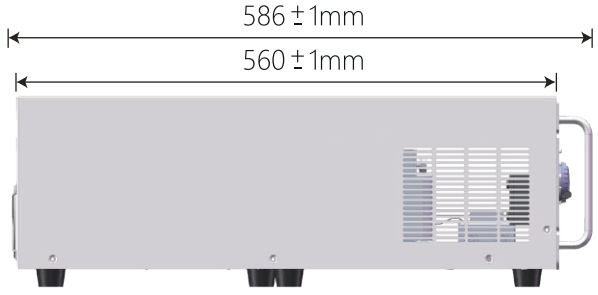




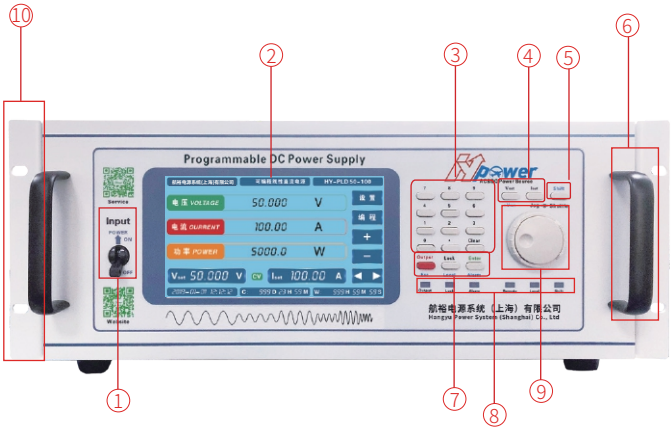


4U model 433(W)*560(D)*177(H)mm



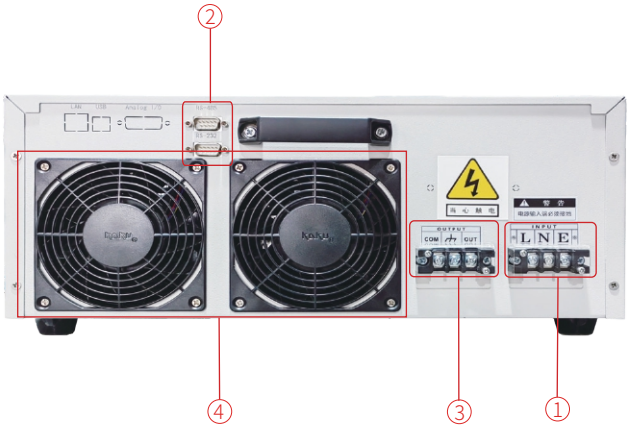


Control Panel



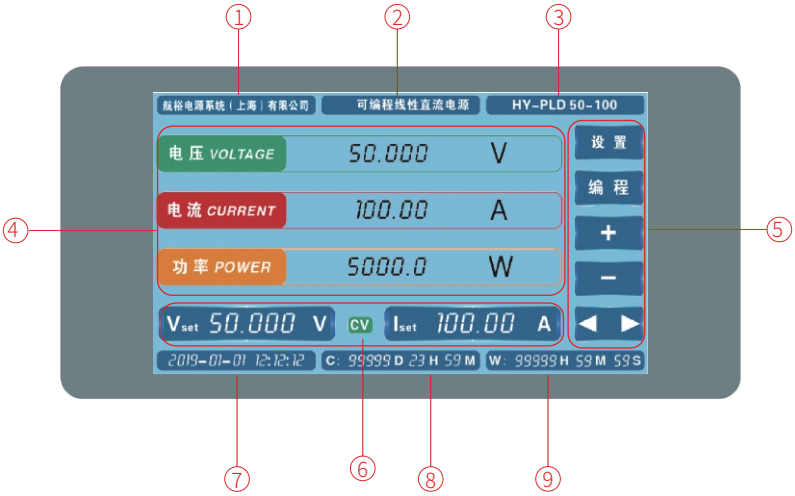
① Power input circuit breaker
② LCD display (7-inch, touch screen)
③ Number input keyboard
④ Voltage/current setting key
⑤ Shift Function reset key
⑥ Chassis handle
⑦ Lock, Enter, Esc, Local,Reset,Output ON/OFF
⑧ Status indicator light
⑨ Multi-stage adjustment knob (inner circle fine adjustment/outer 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

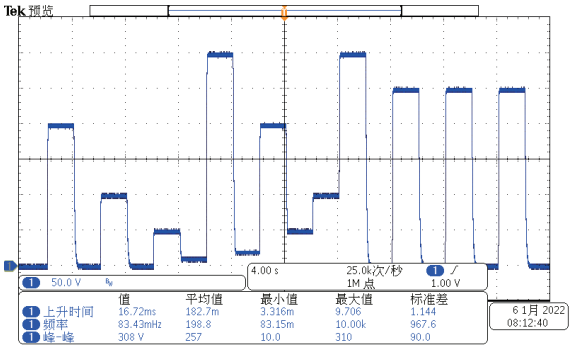


① Manufacturer's name
② Product name
③ Product series
④ Voltage/current/power read back display area
⑤ Function setting area
⑥ Voltage/Current Setpoints&CV/CC Status
⑦ Current time
⑧ Accumulated running time
⑨ This run time

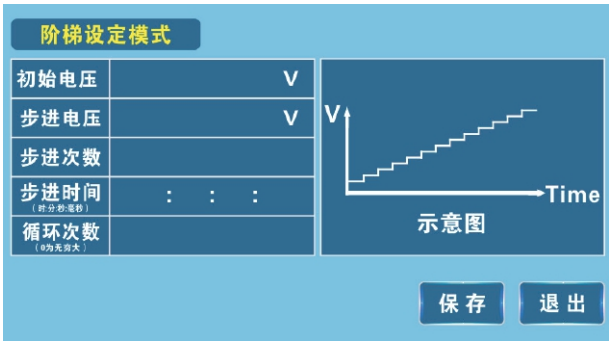
Programmable Function

Programmable Functions Are Introduced

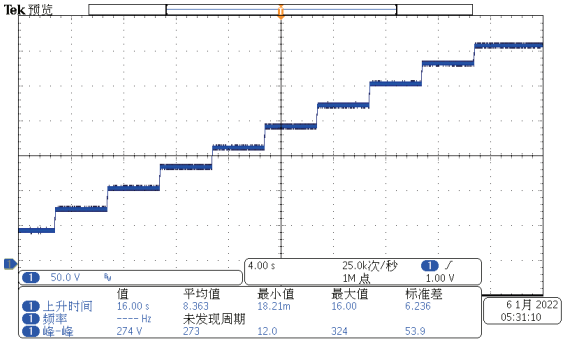
The step setting page allows you to set the required voltage, current, run time, initial step, end step, and number of cycles.



Step

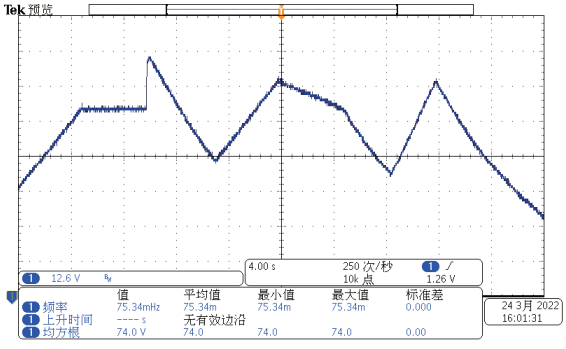


The ladder setting page can set the required initial voltage, stepping voltage, stepping times and stepping time.



Ladder

Gradient Settings page can set the required voltage, current, running time, initial step, end step



Gradient

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Authorized distributor：