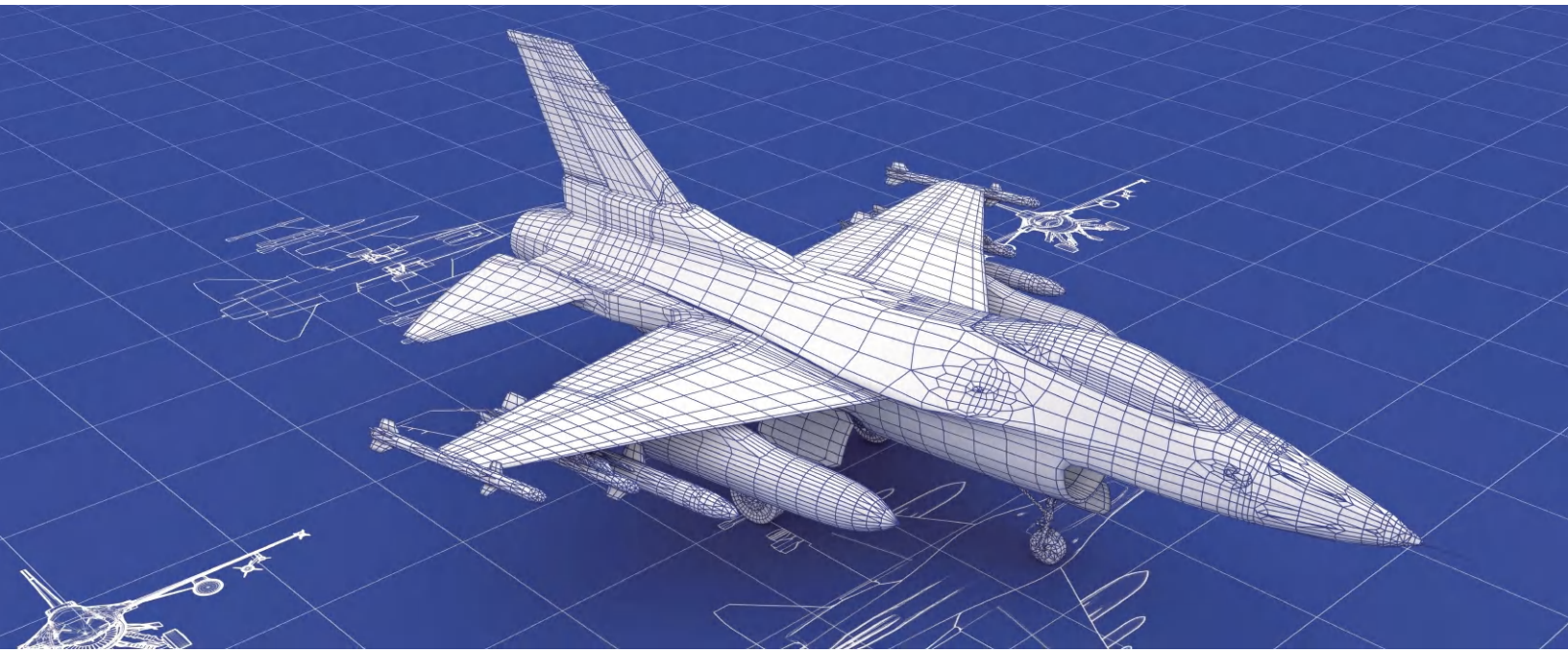
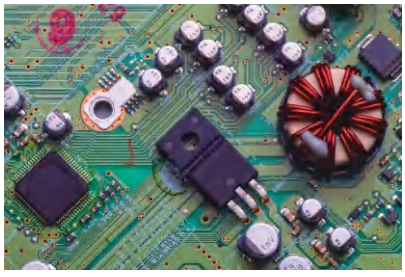
AC&DC Power Source

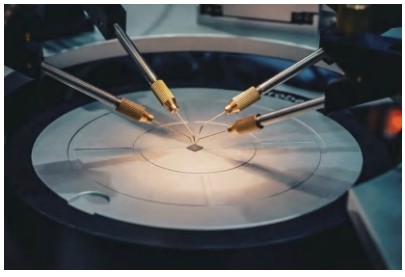
HY-SSU Series

1U Ultra-thin Programmable DC Power Supply

Military Quality Power Supply Expert



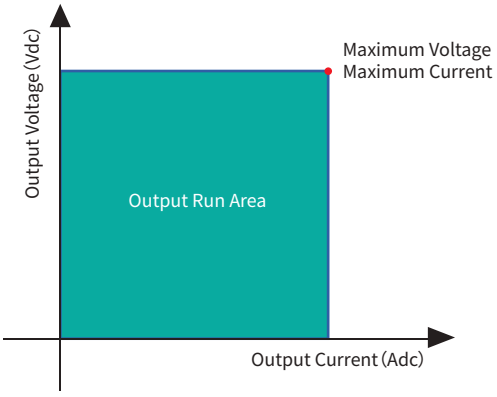




www.hypower.cn

HY-SSU Series 1U Ultra-thin Programmable DC Power Supply

High Performance
High Precision
High Power Density



This power supply uses a new type of silicon carbide material, has a very high power density, the size is only: 430(W) * 513(D) * 44(H) mm, very lightweight, easy to move, often used for system integration power supply.

Product Features

- Maximum output voltage 600V, maximum output current 180A
- High power density: 3.6kW
- Anti-seismic, military-grade three (anti-mold, anti-moisture, anti-salt spray)
- Input standard PFC, power factor up to 0.99
- 16 bits D/A high precision converter, accurate output
- 20 bits A/D high precision converter, more accurate read back

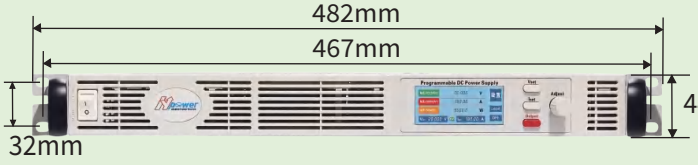
Application Field

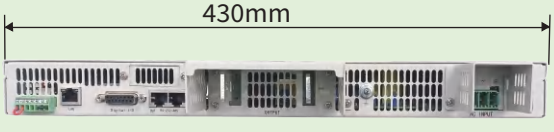
It is commonly used for dynamic and static testing in the following application fields, such as power supply, aging, conduction, etc. Standard machine width, ultra-thin volume, very convenient for various test system integration.

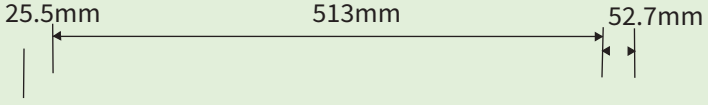
- Low voltage electrical test
- Power semiconductor test
- Power electronics testing
- Scientific research testing
- Aerospace
- National defense Industry
- Automotive electronic testing
- Smart grid

Product Display

1U 430(W) * 513(D) * 44(H) mm







HY-SSU Series Product Selection Table

Product Model Naming Rules

Product series	Output voltage		Output current		Optional function
HY-SSU	20	-	180	-	CF

Product model: HY-SSU 20-180-CF
The model information is: Output voltage 0-20V, output current 0-180A
Custom features that users choose to purchase

Optional function

- HR : High resolution/precision
- TP : Three-phase input, AC 380 V
- 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-SSU Series Product Model Selection And Parameters

If there is no model in the selection table that meets your needs, you can put forward another one for special customization.

HY-SSU Series 1kW Series Power supply model selection

Models	Output voltage	Output current	Output power
HY-SSU 10-100	10V	100A	1kW
HY-SSU 20-50	20V	50A	1kW
HY-SSU 30-34	30V	34A	1kW
HY-SSU 40-25	40V	25A	1kW
HY-SSU 60-17	60V	17A	1kW
HY-SSU 80-12.5	80V	12.5A	1kW
HY-SSU 100-10	100V	10A	1kW
HY-SSU 150-7	150V	7A	1kW
HY-SSU 200-5	200V	5A	1kW
HY-SSU 250-4	250V	4A	1kW
HY-SSU 300-3.5	300V	3.5A	1kW
HY-SSU 350-3	350V	3A	1kW
HY-SSU 400-2.5	400V	2.5A	1kW
HY-SSU 500-2	500V	2A	1kW
HY-SSU 600-1.7	600V	1.7A	1kW

HY-SSU Series 1.6kW Series Power supply model selection

Models	Output voltage	Output current	Output power
HY-SSU 10-160	10V	160A	1.6kW
HY-SSU 20-80	20V	80A	1.6kW
HY-SSU 30-54	30V	54A	1.6kW
HY-SSU 40-40	40V	40A	1.6kW
HY-SSU 60-26.7	60V	26.7A	1.6kW
HY-SSU 80-20	80V	20A	1.6kW
HY-SSU 100-16	100V	16A	1.6kW
HY-SSU 150-10.7	150V	10.7A	1.6kW
HY-SSU 200-8	200V	8A	1.6kW
HY-SSU 250-6.4	250V	6.4A	1.6kW
HY-SSU 300-5.4	300V	5.4A	1.6kW
HY-SSU 350-4.6	350V	4.6A	1.6kW
HY-SSU 400-4	400V	4A	1.6kW
HY-SSU 500-3.2	500V	3.2A	1.6kW
HY-SSU 600-2.7	600V	2.7A	1.6kW

HY-SSU Series 2.5kW Series Power supply model selection

Models	Output voltage	Output current	Output power
HY-SSU 10-250	10V	250A	2.5kW
HY-SSU 20-125	20V	125A	2.5kW
HY-SSU 30-83.4	30V	83.4A	2.5kW
HY-SSU 40-62.5	40V	62.5A	2.5kW
HY-SSU 60-41.7	60V	41.7A	2.5kW
HY-SSU 80-31.3	80V	31.3A	2.5kW
HY-SSU 100-25	100V	25A	2.5kW
HY-SSU 150-16.7	150V	16.7A	2.5kW
HY-SSU 200-12.5	200V	12.5A	2.5kW
HY-SSU 250-10	250V	10A	2.5kW
HY-SSU 300-8.4	300V	8.4A	2.5kW
HY-SSU 350-7.2	350V	7.2A	2.5kW
HY-SSU 400-6.3	400V	6.3A	2.5kW
HY-SSU 500-5	500V	5A	2.5kW
HY-SSU 600-4.2	600V	4.2A	2.5kW

HY-SSU Series 3.6kW Series Power supply model selection

Models	Output voltage	Output current	Output power
HY-SSU 10-360	10V	360A	3.6kW
HY-SSU 20-180	20V	180A	3.6kW
HY-SSU 30-120	30V	120A	3.6kW
HY-SSU 40-90	40V	90A	3.6kW
HY-SSU 60-60	60V	60A	3.6kW
HY-SSU 80-45	80V	45A	3.6kW
HY-SSU 100-36	100V	36A	3.6kW
HY-SSU 150-24	150V	24A	3.6kW
HY-SSU 200-18	200V	18A	3.6kW
HY-SSU 250-14.4	250V	14.4A	3.6kW
HY-SSU 300-12	300V	12A	3.6kW
HY-SSU 350-10.3	350V	10.3A	3.6kW
HY-SSU 400-9	400V	9A	3.6kW
HY-SSU 500-7.2	500V	7.2A	3.6kW
HY-SSU 600-6	600V	6A	3.6kW

HY-SSU Series Technical Parameter

DC 1000W (10V-150V)

Models		HY-SSU 10-100	HY-SSU 20-50	HY-SSU 30-34	HY-SSU 40-25	HY-SSU 60-17	HY-SSU 80-12.5	HY-SSU 100-10	HY-SSU 150-7
Rated Output Voltage	V	10V	20V	30V	40V	60V	80V	100V	150V
Rated Output Current	A	100A	50A	34A	25A	17A	12.5A	10A	7A
Rated Output Power	W	1kW	1kW	1kW	1kW	1kW	1kW	1kW	1kW
Efficiency	%	89%	87%	87%	87%	87%	87%	88%	88%
Constant Pressure Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated Output Value							
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)							
Load Adjustment Rate	mV	0.01% +2mV of rated output voltage (no-load to full load, constant input voltage, measured at remote compensation point)							
Maximum Compensation Voltage For Telemetry	V	<30V 2V;⩾30V 8V; (Can be customized according to demand)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	6	7.5	6	7	7	7	8	8
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	50	60	50	60	60	75	75	75
Output Voltage Rise Time10-90%	ms	35	80	80	80	80	150	150	150
Output Voltage Drop Time (Full Load)90-10%	ms	20	50	80	80	80	150	150	150
Output Voltage Drop Time (No Load)	ms	500	800	900	1000	1100	1200	1500	2000
Transient Response Time	ms	The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V: < 1ms, output models greater than 100V: < 2ms.							
Constant Current Mode (CC Mode)									
Output Range Can Be Set	A	0-Rated Output Value							
Input Adjustment Rate	mA	0.01% +2mA of rated output current(AC input 220 V ± 15%, constant load)							
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	160	50	45	30	15	10	10	8
Programming And Readback Accuracy & Resolution									
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point								
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
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	0.05% of the rated output voltage								
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
Voltage Read Back Resolution	0.00001 V (⩽ 10 V),0.0001 V (⩽ 100 V), 0.001 V (100 V< U ⩽ 1000 V), 0.01 V (>1000 V)								
Current Read Back Resolution	0.00001 A (⩽ 10 A), 0.0001 A (⩽ 100 A), 0.001 A (100 A< I ⩽ 1000 A)								
Stability And Temperature Coefficient									
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)								

DC 1000W (200V-600V)

Models		HY-SSU 200-5	HY-SSU 250-4	HY-SSU 300-3.5	HY-SSU 350-3	HY-SSU 400-2.5	HY-SSU 500-2	HY-SSU 600-1.7
Rated Output Voltage	V	200V	250V	300V	350V	400V	500V	600V
Rated Output Current	A	5A	4A	3.5A	3A	2.5A	2A	1.7A
Rated Output Power	W	1kW	1kW	1kW	1kW	1kW	1kW	1kW
Efficiency	%	88%	88%	88%	88%	88%	88%	88%
Constant Pressure Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated Output Value						
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)						
Load Adjustment Rate	mV	0.01% +2mV of rated output voltage (no-load to full load, constant input voltage, measured at remote compensation point)						
Maximum Compensation Voltage For Telemetry	V	8V (can be customized according to demand)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	12	16	20	30	30	45	60
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	90	110	130	180	180	250	300
Output Voltage Rise Time10-90%	ms	150	150	150	150	150	200	250
Output Voltage Drop Time (Full Load)90-10%	ms	150	150	150	150	150	200	250
Output Voltage Drop Time (No Load)	ms	2100	2300	2500	3000	3000	3500	4000
Transient Response Time	ms	< 2ms. The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
Constant Current Mode (CC Mode)								
Output Range Can Be Set	A	0-Rated Output Value						
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)						
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	8	7	6	6	6	5	4
Programming And Readback Accuracy & Resolution								
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point							
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
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	0.05% of the rated output voltage							
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)							
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)							
Stability And Temperature Coefficient								
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)							

HY-SSU Series Technical Parameter

DC 1600W (10V-150V)

Models		HY-SSU 10-160	HY-SSU 20-80	HY-SSU 30-54	HY-SSU 40-40	HY-SSU 60-26.7	HY-SSU 80-20	HY-SSU 100-16	HY-SSU 150-10.7
Rated Output Voltage	V	10V	20V	30V	40V	60V	80V	100V	150V
Rated Output Current	A	160A	80A	54A	40A	26.7A	20A	16A	10.7A
Rated Output Power	W	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW
Efficiency	%	89%	86%	86%	88%	88%	88%	88%	88%
Constant Pressure Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated Output Value							
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)							
Load Adjustment Rate	mV	0.01% +2mV of rated output voltage (no-load to full load, constant input voltage, measured at remote compensation point)							
Maximum Compensation Voltage For Telemetry	V	<30V 2V;≥30V 8V; (Can be customized according to demand)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	6	7.5	6	7	7	7	8	8
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	50	60	50	60	60	75	75	75
Output Voltage Rise Time10-90%	ms	20	80	80	80	80	150	150	150
Output Voltage Drop Time (Full Load)90-10%	ms	30	50	80	80	80	150	150	150
Output Voltage Drop Time (No Load)	ms	450	800	900	1000	1100	1200	1500	2000
Transient Response Time	ms	The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V: < 1ms, output models greater than 100V: < 2ms.							
Constant Current Mode (CC Mode)									
Output Range Can Be Set	A	0-Rated Output Value							
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)							
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	300	120	60	65	60	40	20	15
Programming And Readback Accuracy & Resolution									
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point								
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
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	0.05% of the rated output voltage								
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)								
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)								
Stability And Temperature Coefficient									
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)								

DC 1600W (200V-600V)

Models		HY-SSU 200-8	HY-SSU 250-6.4	HY-SSU 300-5.4	HY-SSU 350-4.6	HY-SSU 400-4	HY-SSU 500-3.2	HY-SSU 600-2.7
Rated Output Voltage	V	200V	250V	300V	350V	400V	500V	600V
Rated Output Current	A	8A	6.4A	5.4A	4.6A	4A	3.2A	2.7A
Rated Output Power	W	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW	1.6kW
Efficiency	%	88%	88%	88%	88%	88%	88%	88%
Constant Pressure Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated Output Value						
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)						
Load Adjustment Rate	mV	0.01% +2mV of rated output voltage (no-load to full load, constant input voltage, measured at remote compensation point)						
Maximum Compensation Voltage For Telemetry	V	8V (can be customized according to demand)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	12	16	20	30	30	45	60
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	90	110	130	190	190	250	300
Output Voltage Rise Time10-90%	ms	150	150	150	180	180	210	250
Output Voltage Drop Time (Full Load)90-10%	ms	150	150	150	180	180	210	250
Output Voltage Drop Time (No Load)	ms	2100	2300	2500	3000	3000	3500	4000
Transient Response Time	ms	< 2ms. The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
Constant Current Mode (CC Mode)								
Output Range Can Be Set	A	0-Rated Output Value						
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)						
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	15	15	15	10	10	8	7

Programming And Readback Accuracy & Resolution	
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)
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	0.05% of the rated output voltage
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)
Stability And Temperature Coefficient	
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)

HY-SSU Series Technical Parameter

DC 2500W (10V-150V)

Models		HY-SSU 10-250	HY-SSU 20-125	HY-SSU 30-83.4	HY-SSU 40-62.5	HY-SSU 60-41.7	HY-SSU 80-31.3	HY-SSU 100-25	HY-SSU 150-16.7
Rated Output Voltage	V	10V	20V	30V	40V	60V	80V	100V	150V
Rated Output Current	A	250A	125A	83.4A	62.5A	41.7A	31.3A	25A	16.7A
Rated Output Power	W	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW
Efficiency	%	89%	87%	87%	88%	88%	88%	88%	88%
Constant Pressure Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated Output Value							
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)							
Load Adjustment Rate	mV	0.015% +5mV of rated output voltage (no-load to full load, constant input voltage, measured at the remote compensation point)							
Maximum Compensation Voltage For Telemetry	V	<30V 2V;≥30V 8V; (Can be customized according to demand)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	8	6	6	6	6	7	10	20
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	75	50	55	55	60	60	70	90
Output Voltage Rise Time10-90%	ms	15	15	15	20	30	40	40	60
Output Voltage Drop Time (Full Load)90-10%	ms	20	20	20	20	30	50	50	80
Output Voltage Drop Time (No Load)	ms	450	500	600	700	1100	1200	1500	2500
Transient Response Time	ms	The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V: < 1ms, output models greater than 100V: < 2ms.							
Constant Current Mode (CC Mode)									
Output Range Can Be Set	A	0-Rated Output Value							
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)							
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	500	250	150	90	60	40	30	12
Programming And Readback Accuracy & Resolution									
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point								
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
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	0.05% of the rated output voltage								
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V<U ≤ 1000 V), 0.01 V (>1000 V)								
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)								
Stability And Temperature Coefficient									
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)								

DC 2500W (200V-600V)

Models		HY-SSU 200-12.5	HY-SSU 250-10	HY-SSU 300-8.4	HY-SSU 350-7.2	HY-SSU 400-6.3	HY-SSU 500-5	HY-SSU 600-4.2
Rated Output Voltage	V	200V	250V	300V	350V	400V	500V	600V
Rated Output Current	A	12.5	10A	8.4A	7.2A	6.3A	5A	4.2A
Rated Output Power	W	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW
Efficiency	%	88%	88%	88%	88%	88%	88%	88%
Constant Pressure Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated Output Value						
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)						
Load Adjustment Rate	mV	0.015% +5mV of rated output voltage (no load to full load, constant input voltage, measured at the remote compensation point)						
Maximum Compensation Voltage For Telemetry	V	8V (can be customized according to demand)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	25	35	45	50	50	55	60
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	110	130	150	180	180	210	240
Output Voltage Rise Time10-90%	ms	65	70	80	85	85	90	100
Output Voltage Drop Time (Full Load)90-10%	ms	85	90	100	100	100	100	100
Output Voltage Drop Time (No Load)	ms	2500	2500	3000	3000	3000	3000	3000
Transient Response Time	ms	< 2ms. The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
Constant Current Mode (CC Mode)								
Output Range Can Be Set	A	0-Rated Output Value						
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)						
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	11	10	10	8	8	7	5
Programming And Readback Accuracy & Resolution								
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point							
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
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	0.05% of the rated output voltage							
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)							
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)							
Stability And Temperature Coefficient								
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)							

DC 3600W (10V-150V)

Models		HY-SSU 10-360	HY-SSU 20-180	HY-SSU 30-120	HY-SSU 40-90	HY-SSU 60-60	HY-SSU 80-45	HY-SSU 100-36	HY-SSU 150-24
Rated Output Voltage	V	10	20	30	40	60	80	100	150
Rated Output Current	A	360	180	120	90	60	45	36	24
Rated Output Power	W	3600	3600	3600	3600	3600	3600	3600	3600
Efficiency	%	89	83	86	86	88	88	88	87
Constant Pressure Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated Output Value							
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)							
Load Adjustment Rate	mV	0.015% +5mV of rated output voltage (no-load to full load, constant input voltage, measured at the remote compensation point)							
Maximum Compensation Voltage For Telemetry	V	<30V 2V;≥30V 8V; (Can be customized according to demand)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	8	7	7	7	7	20	25	20
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	55	55	55	55	60	70	100	100
Output Voltage Rise Time10-90%	ms	30	80	80	80	150	150	150	150
Output Voltage Drop Time (Full Load)90-10%	ms	50	100	160	160	160	300	300	300
Output Voltage Drop Time (No Load)	ms	450	800	900	1000	1100	1200	1500	2000
Transient Response Time	ms	The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V: < 1ms, output models greater than 100V: < 2ms.							
Constant Current Mode (CC Mode)									
Output Range Can Be Set	A	0-Rated Output Value							
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)							
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	650	300	250	150	70	60	50	40
Programming And Readback Accuracy & Resolution									
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point								
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
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	0.05% of the rated output voltage								
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)								
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)								
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)								
Stability And Temperature Coefficient									
Temperature Drift	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	U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)								

DC 3600W (200V-600V)

Models		HY-SSU 200-18	HY-SSU 250-14.4	HY-SSU 300-12	HY-SSU 350-10.3	HY-SSU 400-9	HY-SSU 500-7.2	HY-SSU 600-6
Rated Output Voltage	V	200V	250V	300V	350V	400V	500V	600V
Rated Output Current	A	18A	14.4A	12A	10.3A	9A	7.2A	6A
Rated Output Power	W	3.6kW	3.6kW	3.6kW	3.6kW	3.6kW	3.6kW	3.6kW
Efficiency	%	87%	87%	87%	87%	87%	87%	87%
Constant Pressure Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated Output Value						
Input Adjustment Rate	mV	0.01% +2mV of rated output voltage (AC input 220 V + 15%, constant load)						
Load Adjustment Rate	mV	0.015% +5mV of rated output voltage (no load to full load, constant input voltage, measured at the remote compensation point)						
Maximum Compensation Voltage For Telemetry	V	8V (can be customized according to demand)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mVrms	70	75	80	80	80	80	80
Noise Peak-To-Peak Value p-p (20 Hz - 20 MHz)	mVpp	275	280	300	220	220	330	350
Output Voltage Rise Time10-90%	ms	200	182	200	200	180	250	250
Output Voltage Drop Time (Full Load)90-10%	ms	300	32	300	400	40	450	500
Output Voltage Drop Time (No Load)	ms	3000	4700	3500	3600	4900	3800	4000
Transient Response Time	ms	< 2ms. The time when the output voltage is restored to within 0.5% of the rated voltage. The variation of the output current is 10-90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
Constant Current Mode (CC Mode)								
Output Range Can Be Set	A	0-Rated Output Value						
Input Adjustment Rate	mA	0.01% +2mA of rated output current (AC input 220 V ± 15%, constant load)						
Load Adjustment Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3 Hz - 300 kHz)	mArms	30	24	15	12	12	10	8
Programming And Readback Accuracy & Resolution								
Voltage Output Programming Accuracy	0.05% of the rated output voltage, measured at the telemetry point							
Current Output Programming Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
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	0.05% of the rated output voltage							
Current Output Read-Back Accuracy	0.1% of the output current + 0.05% of the rated output current (in constant current programming mode, the readback and monitoring accuracy do not include the influence of heating drift and load temperature change rate)							
Voltage Read Back Resolution	0.00001 V (≤ 10 V),0.0001 V (≤ 100 V), 0.001 V (100 V< U ≤ 1000 V), 0.01 V (>1000 V)							
Current Read Back Resolution	0.00001 A (≤ 10 A), 0.0001 A (≤ 100 A), 0.001 A (100 A< I ≤ 1000 A)							
Stability And Temperature Coefficient								
Temperature Drift	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	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

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	LCD Display
Control Function	Flying shuttle knob adjustment,Output ON/OFF switch Vset, Iset, Output keys

Input Power Supply

Frequency	47 Hz - 63 Hz
Connection Mode	Single-phase two-wire + ground, 220 V ± 15%
Power Factor (Typical Value)	0.99(Single-phase input)

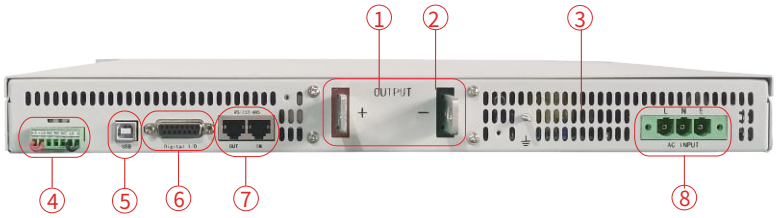
Size And Weight

Dimensions	1U model：430(W) * 513(D) * 44(H)mm
Weight	⩽5kg
Colour	RAL 7035

Control Panel

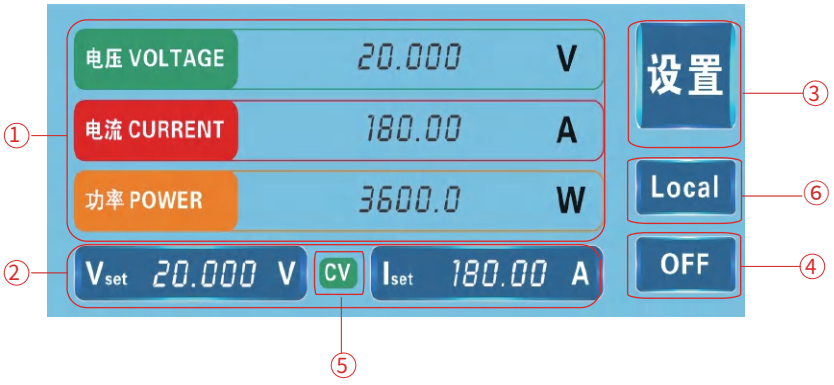
① Power input circuit breaker
② Vents
③ LCD Display (touch screen)
④ Voltage/current setting key
⑤ Flying shuttle adjustment knob
⑥ Chassis handle
⑦ CC/CV can be set preferentially
⑧ Output key
⑨ 19 inch standard rack mounting holes

Rear Panel



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

Display Interface



① Voltage/current/power read back display area
② Voltage/current setting value
③ Set up
④ Close button
⑤ CV/CC state
⑥ Local

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)

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

Commercial Aircraft Corporation of China

Rockwell Collins

Guangzhou Aircraft Maintenance Engineering Co., LTD

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：