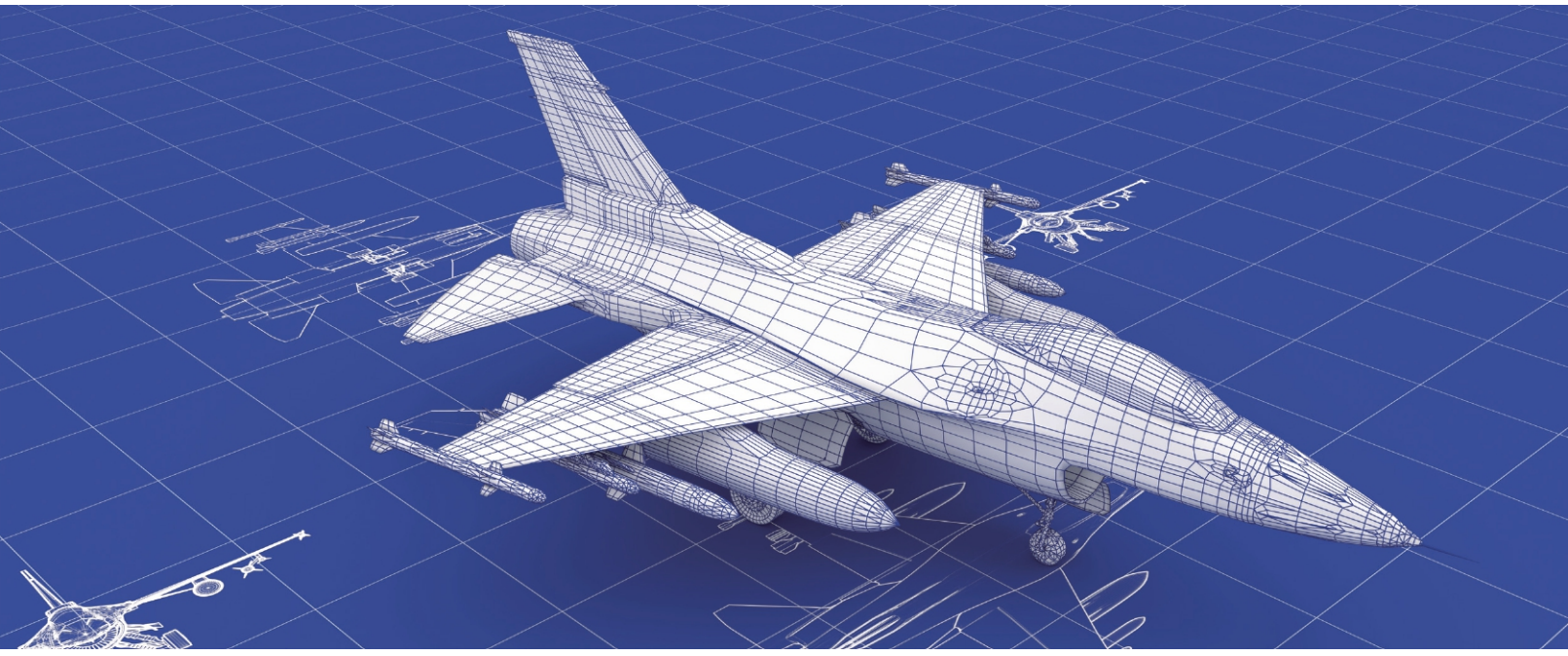
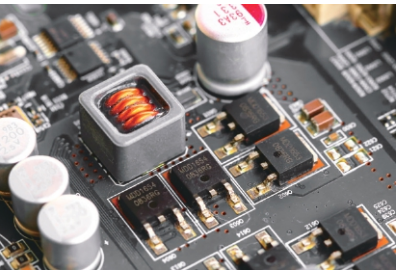
AC&DC Power Source

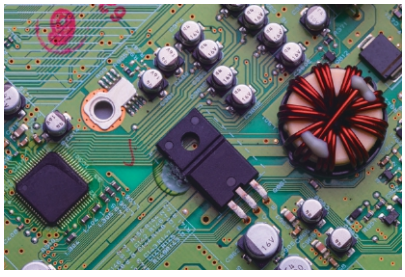
HY-S Series

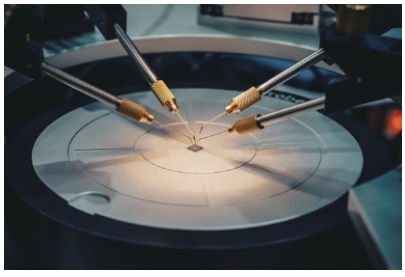
1U Ultra-thin Programmable DC Power Supply

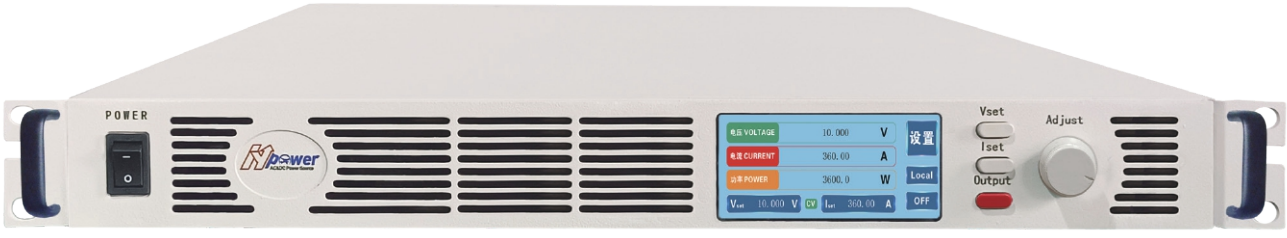
Military Quality Power Supply Expert









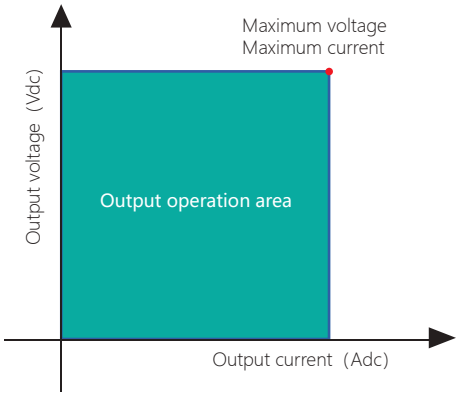


www.hypower.cn

HY-S Series

1U Ultra-thin Programmable DC Power Supply

High performance, precision, and power density



This power supply uses a new type of silicon carbide material with extremely high power density, Size only: 483(W) * 445.5(D) * 44.5(H) mm, Very lightweight, Easy to move, commonly used for system integration power supply.

Product Features

- Maximum output voltage of 600V, maximum output current of 180A
- High power density: 3.6kW
- Anti seismic, military grade three proofing (anti mold, anti moisture, and anti salt spray)
- Input standard PFC, with a power factor of 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

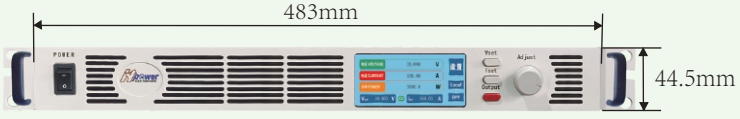
Application Area

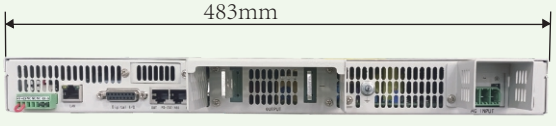
Commonly used for dynamic and static testing in the following application areas, such as power supply, aging Conduction, etc. Standard machine width, ultra-thin volume, very convenient for various testing ' systems Integration.

- Low voltage electrical testing
- Power semiconductor testing
- Power Electronics Testing
- Scientific research testing
- AEROSPACE
- National Defense and Military Industry
- Automotive Electronic Testing
- smart grid

Product Display

1U 483(W) * 445.5(D) * 44.5(H) mm





Product Selection Instructions

Product Model Naming Rules

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

Model: HY-S 20-180-CF
The model information is: Output voltage 0-20V, Output current 0-180A
Choose User Defined Features

Communication protocol

Modbus
SCPI

Standard communication interface

RS-485
RS-232
Digital I/O

Optional communication interface (Users can install it themselves)

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

Purchasing function

- HR : High resolution/precision
- TP : Three phase input, AC 380 V
- 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)

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

Product Selection Table

If there is no model in the selection table that meets your needs, it can be proposed separately for special customization.

HY-S Series 1kW series Power selection

Models	Output voltage	Output current	Output power
HY-S 20-50	20V	50A	1kW
HY-S 30-33	30V	33A	1kW
HY-S 40-25	40V	25A	1kW
HY-S 60-16.7	60V	16.7A	1kW
HY-S 80-12.5	80V	12.5A	1kW
HY-S 100-10	100V	10A	1kW
HY-S 150-6.7	150V	6.7A	1kW

Models	Output voltage	Output current	Output power
HY-S 200-5	200V	5A	1kW
HY-S 250-4	250V	4A	1kW
HY-S 300-3.3	300V	3.3A	1kW
HY-S 350-3	350V	3A	1kW
HY-S 400-2.5	400V	2.5A	1kW
HY-S 500-2	500V	2A	1kW
HY-S 600-1.7	600V	1.7A	1kW

HY-S Series Product Selection Table

HY-S Series 1.6kW series Power selection

Models	Output voltage	Output current	Output power
HY-S 20-80	20V	80A	1.6kW
HY-S 30-53	30V	53A	1.6kW
HY-S 40-40	40V	40A	1.6kW
HY-S 60-26.7	60V	26.7A	1.6kW
HY-S 80-20	80V	20A	1.6kW
HY-S 100-16	100V	16A	1.6kW
HY-S 150-10.7	150V	10.7A	1.6kW

Models	Output voltage	Output current	Output power
HY-S 200-8	200V	8A	1.6kW
HY-S 250-6.4	250V	6.4A	1.6kW
HY-S 300-5.3	300V	5.3A	1.6kW
HY-S 350-4.6	350V	4.6A	1.6kW
HY-S 400-4	400V	4A	1.6kW
HY-S 500-3.2	500V	3.2A	1.6kW
HY-S 600-2.7	600V	2.7A	1.6kW

HY-S Series 2.5kW series Power selection

Models	Output voltage	Output current	Output power
HY-S 20-125	20V	125A	2.5kW
HY-S 30-83	30V	83A	2.5kW
HY-S 40-62.5	40V	62.5A	2.5kW
HY-S 60-41.7	60V	41.7A	2.5kW
HY-S 80-31	80V	31A	2.5kW
HY-S 100-25	100V	25A	2.5kW
HY-S 150-16.7	150V	16.7A	2.5kW

Models	Output voltage	Output current	Output power
HY-S 200-12.5	200V	12.5A	2.5kW
HY-S 250-10	250V	10A	2.5kW
HY-S 300-8.3	300V	8.3A	2.5kW
HY-S 350-7	350V	7A	2.5kW
HY-S 400-6.3	400V	6.3A	2.5kW
HY-S 500-5	500V	5A	2.5kW
HY-S 600-4.2	600V	4.2A	2.5kW

HY-S Series 3.6kW series Power selection

Models	Output voltage	Output current	Output power
HY-S 20-180	20V	180A	3.6kW
HY-S 30-120	30V	120A	3.6kW
HY-S 40-90	40V	90A	3.6kW
HY-S 60-60	60V	60A	3.6kW
HY-S 80-45	80V	45A	3.6kW
HY-S 100-36	100V	36A	3.6kW
HY-S 150-24	150V	24A	3.6kW

Models	Output voltage	Output current	Output power
HY-S 200-18	200V	18A	3.6kW
HY-S 250-14.4	250V	14.4A	3.6kW
HY-S 300-12	300V	12A	3.6kW
HY-S 350-10.3	350V	10.3A	3.6kW
HY-S 400-9	400V	9A	3.6kW
HY-S 500-7.2	500V	7.2A	3.6kW
HY-S 600-6	600V	6A	3.6kW

Product Parameters

DC 1000W (20V-150V)

Models		HY-S 20-50	HY-S 30-33	HY-S 40-25	HY-S 60-16.7	HY-S 80-12.5	HY-S 100-10	HY-S 150-6.7
Rated output voltage	V	20V	30V	40V	60V	80V	100V	150V
output current	A	50A	33A	25A	16.7A	12.5A	10A	6.7A
Rated output power	W	1kW	1kW	1kW	1kW	1kW	1kW	1kW
Efficiency	%	85%	85%	87%	87%	87%	87%	87%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.01% +2mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	<30V时 2V; ≥30V时 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	7.5	6	7	7	7	8	8
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	60	50	60	60	75	75	75
Output voltage rise time	ms	80	80	80	80	150	150	150
Output voltage drop time (full load)	ms	50	80	80	80	150	150	150
Output voltage drop time (no-load)	ms	800	900	1000	1100	1200	1500	2000
Transient response time	ms	The time for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V:<1ms, output models above 100V:<2ms.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (No load to full load, constant input voltage)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	50	45	30	15	10	10	8
Programming and read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		Rated output current 0.1%+Rated output current 0.1% (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃	I: 70ppm/℃ (After 30 minutes of power on)						

HY-S Series Technical Parameter

DC 1000W (200V-600V)

Models		HY-S 200-5	HY-S 250-4	HY-S 300-3.3	HY-S 350-3	HY-S 400-2.5	HY-S 500-2	HY-S 600-1.7
Rated output voltage	V	200V	250V	300V	350V	400V	500V	600V
output current	A	5A	4A	3.3A	3A	2.5A	2A	1.7A
Rated output power	W	1kW	1kW	1kW	1kW	1kW	1kW	1kW
Efficiency	%	87%	87%	87%	87%	87%	87%	87%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.01% +2mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	8V (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	12	16	20	30	30	45	60
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	90	110	130	180	180	250	300
Output voltage rise time	ms	150	150	150	150	150	200	250
Output voltage drop time (full load)	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 for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load Regulation	mA	Rated output current 0.02% +5mA (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 read back accuracy&resolution								
Voltage output programming accuracy	Rated output voltage 0.05%, Measurement at telemetry points							
Current output programming accuracy	Rated output current 0.1%+Rated output current 0.1% (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy	Rated output voltage 0.05%							
Current output readback accuracy	Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)							

DC 1600W (20V-150V)

Models		HY-S 20-80	HY-S 30-53	HY-S 40-40	HY-S 60-26.7	HY-S 80-20	HY-S 100-16	HY-S 150-10.7
Rated output voltage	V	20V	30V	40V	60V	80V	100V	150V
output current	A	80A	53A	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
Efficiency	%	86%	86%	88%	88%	88%	88%	88%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.01% +2mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	<30V时 2V; ≥30V时 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	7.5	6	7	7	7	8	8
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	60	50	60	60	75	75	75
Output voltage rise time	ms	80	80	80	80	150	150	150
Output voltage drop time (full load)	ms	50	80	80	80	150	150	150
Output voltage drop time (no-load)	ms	800	900	1000	1100	1200	1500	2000
Transient response time	ms	The time for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V:<1ms, output models above 100V:<2ms.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (No load to full load, constant input voltage)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	120	60	65	60	40	20	15
Programming and read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

DC 1600W (200V-600V)

Models		HY-S 200-8	HY-S 250-6.4	HY-S 300-5.3	HY-S 350-4.6	HY-S 400-4	HY-S 500-3.2	HY-S 600-2.7
Rated output voltage	V	200V	250V	300V	350V	400V	500V	600V
output current	A	8A	6.4A	5.3A	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%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.01% +2mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	8V (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	12	16	20	30	30	45	60
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	90	110	130	190	190	250	300
Output voltage rise time	ms	150	150	150	180	180	210	250
Output voltage drop time (full load)	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 for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (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 read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

DC 2500W (20V-150V)

Models		HY-S 20-125	HY-S 30-83	HY-S 40-62.5	HY-S 60-41.7	HY-S 80-31	HY-S 100-25	HY-S 150-16.7
Rated output voltage	V	20V	30V	40V	60V	80V	100V	150V
Output current	A	125A	83A	62.5A	41.7A	31A	25A	16.7A
Rated output power	W	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW	2.5kW
Efficiency	%	87%	87%	88%	88%	88%	88%	88%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.015% +5mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	<30V时 2V; ≥30V时 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	6	6	6	6	7	10	20
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	50	55	55	60	60	70	90
Output voltage rise time	ms	15	15	20	30	40	40	60
Output voltage drop time (full load)	ms	20	20	20	30	50	50	80
Output voltage drop time (no-load)	ms	500	600	700	1100	1200	1500	2500
Transient response time	ms	The time for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling. Output models below 100V:<1ms, output models above 100V:<2ms.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (No load to full load, constant input voltage)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	250	150	90	60	40	30	12
Programming and read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

HY-S Series Technical Parameter

DC 2500W (200V-600V)

Models		HY-S 200-12.5	HY-S 250-10	HY-S 300-8.3	HY-S 350-7	HY-S 400-6.3	HY-S 500-5	HY-S 600-4.2
Rated output voltage	V	200V	250V	300V	350V	400V	500V	600V
Output current	A	12.5	10A	8.3A	7A	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%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.015% +5mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	8V (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	25	35	45	50	50	55	60
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	110	130	150	180	180	210	240
Output voltage rise time	ms	65	70	80	85	85	90	100
Output voltage drop time (full load)	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 for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (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 read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

DC 3600W (20V-150V)

Models		HY-S 20-180	HY-S 30-120	HY-S 40-90	HY-S 60-60	HY-S 80-45	HY-S 100-36	HY-S 150-24
Rated output voltage	V	20	30	40	60	80	100	150
Output current	A	180	120	90	60	45	36	24
Rated output power	W	3600	3600	3600	3600	3600	3600	3600
Efficiency	%	83	86	86	88	88	88	87
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.015% +5mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	<30V时 2V; ≥30V时 8V; (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	7	7	7	7	20	25	20
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	55	55	55	60	70	100	100
Output voltage rise time	ms	80	80	80	150	150	150	150
Output voltage drop time (full load)	ms	100	160	160	160	300	300	300
Output voltage drop time (no-load)	ms	800	900	1000	1100	1200	1500	2000
Transient response time	ms	The time for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value.Output voltage setting range: 10-100%, local sampling. Output models below 100V:<1ms, output models above 100V:<2ms.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (No load to full load, constant input voltage)						
Ripple effective value rms (3 Hz - 300 kHz)	mArms	300	250	150	70	60	50	40
Programming and read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

DC 3600W (200V-600V)

Models		HY-S 200-18	HY-S 250-14.4	HY-S 300-12	HY-S 350-10.3	HY-S 400-9	HY-S 500-7.2	HY-S 600-6
Rated output voltage	V	200V	250V	300V	350V	400V	500V	600V
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%
CV Mode								
Settable output range	V	0-Rated output value						
Input adjustment rate	mV	Rated output voltage 0.01% +2mV (AC input 220 V ± 15%, constant load)						
Load regulation	mV	Rated output voltage 0.015% +5mV (No load to full load, constant input voltage, measurement at remote compensation point)						
Telemetry maximum compensation voltage	V	8V (Customizable according to demand)						
Ripple effective value rms (3 Hz - 300 kHz)	mVrms	70	75	80	80	80	80	80
Noise peak to peak p-p (20 Hz - 20 MHz)	mVpp	275	280	300	220	220	330	350
Output voltage rise time	ms	200	200	200	200	200	250	250
Output voltage drop time (full load)	ms	300	300	300	400	400	450	500
Output voltage drop time (no-load)	ms	3000	3300	3500	3600	3600	3800	4000
Transient response time	ms	< 2ms 。The time for the output voltage to recover to within 0.5% of the rated voltage. The variation value of the output current is between 10% and 90% of the rated value. Output voltage setting range: 10-100%, local sampling.						
CC Mode								
Settable output range	A	0-Rated output value						
Input adjustment rate	mA	Rated output current 0.01% +2mA (AC input 220 V ± 15%, constant load)						
Load regulation	mA	Rated output current 0.02% +5mA (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 read back accuracy&resolution								
Voltage output programming accuracy		Rated output voltage 0.05%, Measurement at telemetry points						
Current output programming accuracy		0.1% of output current+0.1% of rated output current (When in constant current programming mode, the accuracy of reading back and monitoring does 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 readback accuracy		Rated output voltage 0.05%						
Current output readback accuracy		Rated output current 0.2% (When in constant current programming mode, the accuracy of reading back and monitoring does 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/℃ I: 70ppm/℃ (After 30 minutes of power on)						

Protection Function

OVP Overvoltage protection setting range	10 - 110%，Immediate shutdown of output beyond limit
OCP Overcurrent 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

Control Panel

Monitor	Display
Control function	Shuttle knob adjustment, output ON/OFF switch Vset, Iset, Output buttons

Input Power Supply

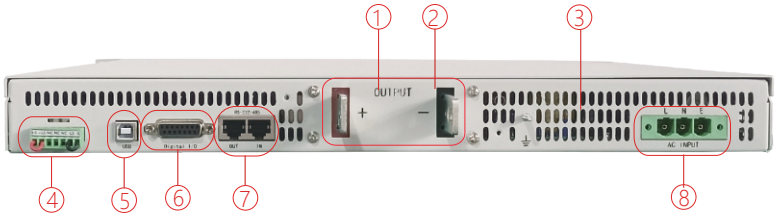
Frequency	47 Hz - 63 Hz
Connection	Single phase two wire+ground wire，220 V ± 15%
Power factor (typical value)	0.99

Appearance&Size Outline Dimension

Control Panel

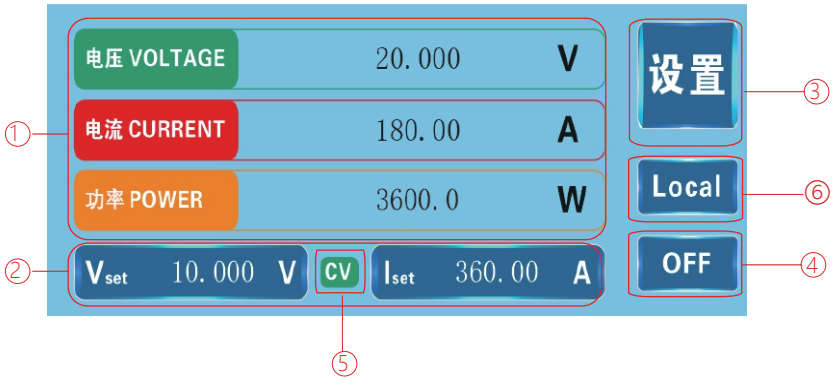
① Power input circuit breaker
② Vents
③ LCD Display (touch screen)
④ Voltage/current setting key
⑤ Shuttle adjustment knob
⑥ Chassis handle
⑦ CC/CVPriority can be set
⑧ Output key
⑨ 19 inch standard rack mounting holes

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

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 上海電器科学研究所(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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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