



Hangyu Power System (Shanghai) Co., Ltd.

HY-SSU Series

1U Ultra-Thin Programmable DC Power Supply

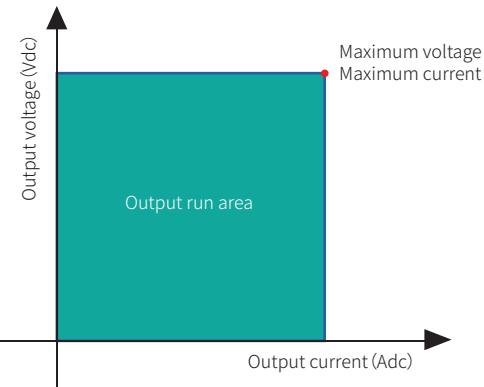
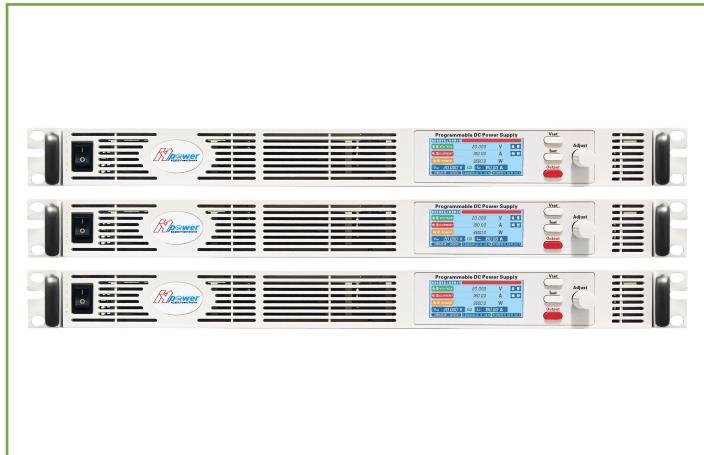


Military quality power supply expert
To provide customers with accurate, intelligent and convenient test
power supply solutions



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

High performance, High precision, High power density



This power supply is small in size, light in weight, the size is only: 430(W) * 513(D) * 43.7(H) mm, very lightweight, easy to move, often used for system integration power supply.

Product Features

- Maximum output voltage 600V
- Maximum output current 360A
- High power density: 3.6kW
- Input the standard configuration PFC, power factor was as high as 0.99
- 16-bit D/A high precision converter, accurate output
- 20-bit A/D high precision converter, more accurate read back

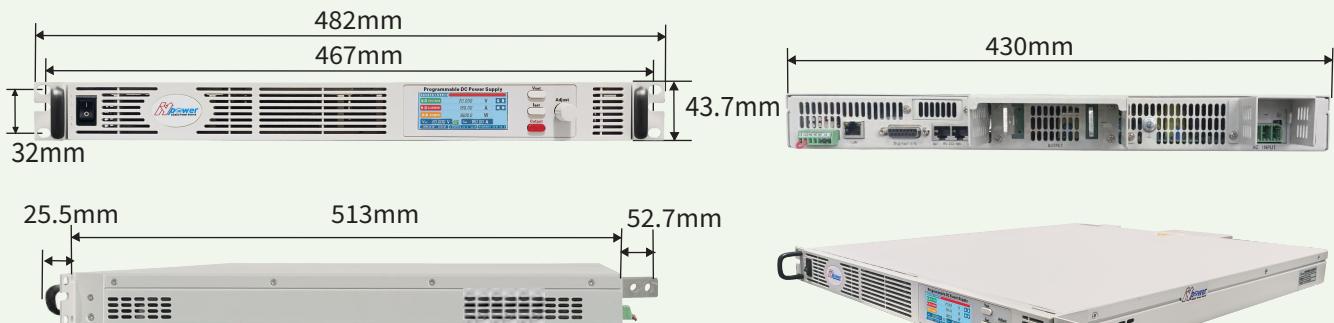
Application Field

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.

<ul style="list-style-type: none"> ■ Low voltage electrical apparatus test ■ Power semiconductor test ■ Power electronics testing ■ Scientific research testing ■ Aerospace 	<ul style="list-style-type: none"> ■ Defense military industry ■ Automotive electronic testing ■ Smart grid
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Product Display

1U 430(W) * 513(D) * 43.7(H) mm



HY-SSU Series Product Selection Table

Product Model Naming Rules

Product Series	Output Voltage	Output Current	Communication Protocol	Standard Communication Interface	Optional Communication Interface
HY-SSU	20	- 180	Modbus SCPI	RS-485 RS-232 Digital I/O	- LAN :Ethernet communication interface - CAN :CAN communication interface - IA :Analog quantity programming and monitoring interface (isolated type)

Product model: HY-SSU 20-180
The model information is: Output voltage 0-20V
Output current 0-180A

* 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 Product Selection Table

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 Voltage Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated output value							
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)							
Load Regulation 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 (3Hz - 300kHz)	mVrms	6	7.5	6	7	7	7	8	8
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	50	60	50	60	60	75	75	75
Output Voltage Rise Time 10-90%	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							
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)							
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%-100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)								
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)								
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage								
Current Output Read-Back Accuracy (10%-100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)								
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)								
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)								

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameter

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 Voltage Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated output value						
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)						
Load Regulation 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 (3Hz - 300kHz)	mVrms	12	16	20	30	30	45	60
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	90	110	130	180	180	250	300
Output Voltage Rise Time 10-90%	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						
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)						
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%~100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)							
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)							
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage							
Current Output Read-Back Accuracy (10%~100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)							
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)							
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)							

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

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 Voltage Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated output value							
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)							
Load Regulation 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 (3Hz - 300kHz)	mVrms	6	7.5	6	7	7	7	8	8
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	50	60	50	60	60	75	75	75
Output Voltage Rise Time 10-90%	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							
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)							
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%~100%)	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)								
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)								
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage								
Current Output Read-Back Accuracy (10%~100%)	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)								
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)								
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)							

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameter

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 Voltage Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated output value						
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V + 15%, constant load)						
Load Regulation 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 (3Hz - 300kHz)	mVrms	12	16	20	30	30	45	60
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	90	110	130	190	190	250	300
Output Voltage Rise Time 10-90%	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						
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)						
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%-100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)							
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)							
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage							
Current Output Read-Back Accuracy (10%-100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)							
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)							
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)							

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

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 Voltage Mode (CV Mode)									
Output Range Can Be Set	V	0-Rated output value							
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)							
Load Regulation 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 (3Hz - 300kHz)	mVrms	8	6	6	6	6	7	10	20
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	75	50	55	55	60	60	70	90
Output Voltage Rise Time 10-90%	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							
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)							
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)							
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%~100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)								
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)								
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage								
Current Output Read-Back Accuracy (10%~100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)								
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)								
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)								

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameter

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 Voltage Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated output value						
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)						
Load Regulation 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 (3Hz - 300kHz)	mVrms	25	35	45	50	50	55	60
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	110	130	150	180	180	210	240
Output Voltage Rise Time 10-90%	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						
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)						
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%-100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)							
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)							
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage							
Current Output Read-Back Accuracy (10%-100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)							
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)							
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)						

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameter

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 Voltage Mode (CV Mode)										
Output Range Can Be Set	V	0-Rated output value								
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)								
Load Regulation 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 (3Hz - 300kHz)	mVrms	8	7	7	7	7	20	25	20	
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	55	55	55	55	60	70	100	100	
Output Voltage Rise Time 10-90%	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								
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)								
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)								
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%-100%) ^①	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)									
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)									
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage									
Current Output Read-Back Accuracy (10%-100%) ^①	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)									
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)									
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)							

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameter

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 Voltage Mode (CV Mode)								
Output Range Can Be Set	V	0-Rated output value						
Line Regulation Rate	mV	0.01% +2mV of rated output voltage (AC input 220V ± 15%, constant load)						
Load Regulation 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 (3Hz - 300kHz)	mVrms	70	75	80	80	80	80	80
Noise Peak-To-Peak Value p-p (20Hz - 20MHz)	mVpp	275	280	300	220	220	330	350
Output Voltage Rise Time 10-90%	ms	200	200	200	200	200	250	250
Output Voltage Drop Time (Full Load) 90-10%	ms	300	300	300	400	400	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						
Line Regulation Rate	mA	0.01% +2mA of rated output current (AC input 220V ± 15%, constant load)						
Load Regulation Rate	mA	0.02% +5mA of rated output current (no-load to full load, constant input voltage)						
Ripple Effective Value rms (3Hz - 300kHz)	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 (10%~100%)	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 (≤60V), 0.01V (≤600V), 0.1V (>600V)							
Current Setting Resolution	0.001A (≤60A), 0.01A (≤600A), 0.1A (>600A)							
Voltage Output Read-Back Accuracy	0.05% of the rated output voltage							
Current Output Read-Back Accuracy (10%~100%)	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	0.00001V (≤10V), 0.0001V (≤100V), 0.001V (100V < U ≤ 1000V), 0.01V (>1000V)							
Current Read Back Resolution	0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A < I ≤ 1000A)							
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)							

Note:

① When the current output is within the range of 1% to 10%, the accuracy is 0.1% RD + 0.1% RG.

HY-SSU Series Technical Parameters

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
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	LCD display
Control Function	Adjustment knob, Output ON/OFF switch Vset, Iset, Output keys
Programming Function	Step, Ladder, Gradient

Input Power Supply

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

Size And Weight

Dimensions	1U model: 430(W) * 513(D) * 43.7(H)mm
Weight	About 8kg
Colour	RAL 7035

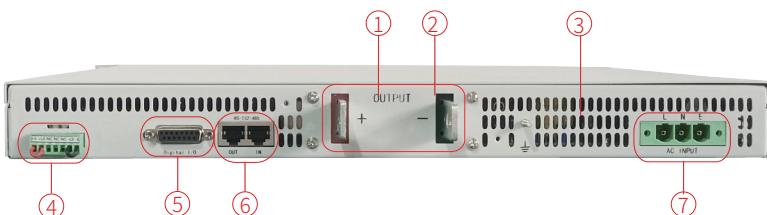
Appearance & Size

Control Panel



- ① Power input circuit breaker
- ② Vents
- ③ LCD Display (touch screen)
- ④ Voltage/current setting key
- ⑤ 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 Digital I/O communication interface
- ⑥ RS-485 & RS-232 communication interface
- ⑦ AC input terminal

Display Interface



- ① Voltage/current/power read back display area
- ② Voltage/current setting value
- ③ Current time/Accumulated running time/This run time
- ④ CV/CC state
- ⑤ Setting function
- ⑥ Programming function



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HY-SSU Series Product Manual, Version 08.15, August 2025

All technical data and instructions are based on the actual product

If there is any change, Hangyu Power has the final interpretation right

Authorized distributor:

