AC&DC Power Source

Hangyu Power System (Shanghai) Co., Ltd.

HY-ZSU Series

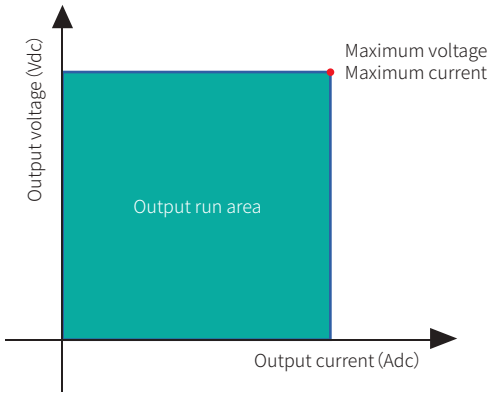
Portable Programmable DC Power Supply

Portable High Performance

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

www.hangyupower.com

HY-ZSU Series Portable Programmable DC Power Supply



Product Features

The volume of this power supply is only 2U and 1/6 wide, flexible and convenient, can be any combination, 2 sets in series, 2-6 sets of master-slave parallel, multi-channel test, intelligent and fast.

- A single machine for one channel, each channel is suitable for series or parallel
- Power density: 200W/400W/600W/800W
- Wide input voltage range: 85~265VAC
- Input standard PFC, power factor up to 0.99
- 16-bit D/A high precision converter, accurate output
- 20-bit A/D high precision converter, more accurate read back

Application Field

HY-ZSU series power supply, through the series parallel form, more free parameter choice can be obtained, a wide range of applications, very suitable for integrated systems, in the military and intelligent manufacturing field is widely popular.

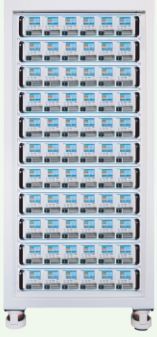
- Stable power supply integration test
- Military industry
- Medical treatment
- Power semiconductor

Product Display

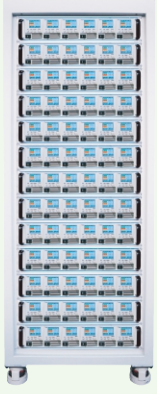
2U 1/6 wide 70(W)*349(D)*83.25(H)mm

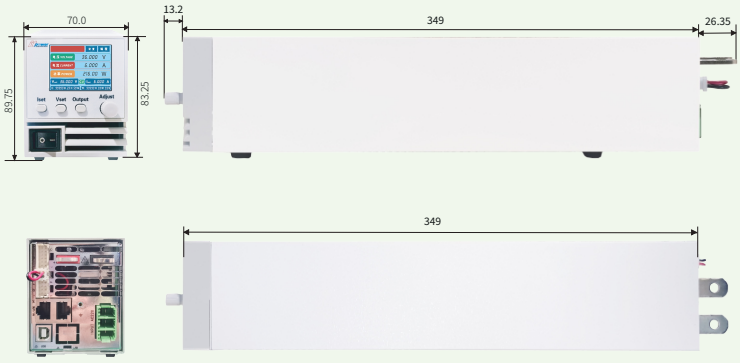
48 Passage

66 Passage



78 Passage





Product Model Naming Rules

Product Series	Output Voltage		Output Current
HY-ZSU	10	-	40

Product model: HY-ZSU 10-40
The model information is: Output voltage 0-10V, Output current 0-40A

Communication Protocol	Standard Communication Interface	Optional Communication Interface
Modbus	RS-485	- LAN :Ethernet communicationinterface
SCPI	RS-232	- CAN :CAN communication interface
	Digital I/O	- 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-ZSU Series Product Model Selection And Parameters

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

200W Series Power Supply Model Selection

Models	Output Voltage	Output Current	Output Power
HY-ZSU 10-20	10V	20A	200W
HY-ZSU 20-10	20V	10A	200W
HY-ZSU 36-6	36V	6A	216W
HY-ZSU 60-3.5	60V	3.5A	210W
HY-ZSU 100-2	100V	2A	200W
HY-ZSU 160-1.3	160V	1.3A	208W
HY-ZSU 320-0.65	320V	0.65A	208W
HY-ZSU 650-0.32	650V	0.32A	208W

400W Series Power Supply Model Selection

Models	Output Voltage	Output Current	Output Power
HY-ZSU 10-40	10V	40A	400W
HY-ZSU 20-20	20V	20A	400W
HY-ZSU 36-12	36V	12A	432W
HY-ZSU 60-7	60V	7A	420W
HY-ZSU 100-4	100V	4A	400W
HY-ZSU 160-2.6	160V	2.6A	416W
HY-ZSU 320-1.3	320V	1.3A	416W
HY-ZSU 650-0.64	650V	0.64A	416W

600W Series Power Supply Model Selection

Models	Output Voltage	Output Current	Output Power
HY-ZSU 10-60	10V	60A	600W
HY-ZSU 20-30	20V	30A	600W
HY-ZSU 36-18	36V	18A	648W
HY-ZSU 60-10	60V	10A	600W
HY-ZSU 100-6	100V	6A	600W
HY-ZSU 160-4	160V	4A	640W
HY-ZSU 320-2	320V	2A	640W
HY-ZSU 650-1	650V	1A	650W

800W Series Power Supply Model Selection

Models	Output Voltage	Output Current	Output Power
HY-ZSU 10-72	10V	72A	720W
HY-ZSU 20-40	20V	40A	800W
HY-ZSU 36-24	36V	24A	864W
HY-ZSU 60-14	60V	14A	840W
HY-ZSU 100-8	100V	8A	800W
HY-ZSU 160-5	160V	5A	800W
HY-ZSU 320-2.5	320V	2.5A	800W
HY-ZSU 375-2.2	375V	2.2A	825W
HY-ZSU 650-1.25	650V	1.25A	812.5W

HY-ZSU Series Technical Parameters

DC 200W Low Voltage Output Series Technical Parameters

Models		HY-ZSU 10-20	HY-ZSU 20-10	HY-ZSU 36-6	HY-ZSU 60-3.5	HY-ZSU 100-2
Rated Output Voltage	V	10	20	36	60	100
Rated Output Current	A	20	10	6	3.5	2
Rated Output Power	W	200W	200W	216W	210W	200W
Efficiency	%	77.5	79	80.5	80.5	81
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				
Load Regulation Rate	mV	0.01% +2mV of rated output voltage				
Maximum Compensation Voltage For Telemetry	V	1	1	2	3	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	5	6	6	7	8
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	50	50	50	50	80
Output Voltage Rise Time 10-90%	ms	15	30	35	50	50
Output Voltage Drop Time (Full Load)90-10%	ms	20	20	50	40	50
Output Voltage Drop Time (No Load)	ms	435	100	615	380	1200
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				
Constant Current Mode (CC Mode)						
Output Range Can Be Set	A	0- Rated output value				
Line Regulation Rate	mA	0.01% +2mA of the rated output current				
Load Regulation Rate	mA	0.02% +5mA of the rated output current				
Ripple Effective Value rms (5Hz -1MHz)	mArms	25	15	8	4	3
Stability And Temperature Coefficient						
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)				
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)				
Programming And Readback Accuracy & Resolution						
Voltage Output Programming Accuracy		0.05% of the rated output voltage				
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)				
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)				
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)				
Input Power Supply						
Frequency		47Hz - 63Hz				
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC				
Power Factor (Typical Value)		0.99(Single-Phase Input)				
Size And Weight						
Size		70(W)*349(D)*83.25(H)mm				
Weight		About 2kg				
Colour		RAL 7035				

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

DC 400W Low Voltage Output Series Technical Parameters

Models		HY-ZSU 10-40	HY-ZSU 20-20	HY-ZSU 36-12	HY-ZSU 60-7	HY-ZSU 100-4
Rated Output Voltage	V	10	20	36	60	100
Rated Output Current	A	40	20	12	7	4
Rated Output Power	W	400W	400W	432W	420W	400W
Efficiency	%	82	83	85	85	86
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				
Load Regulation Rate	mV	0.01% +2mV of rated output voltage				
Maximum Compensation Voltage For Telemetry	V	1	1	2	3	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	3	6	6	7	8
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	50	50	50	50	80
Output Voltage Rise Time 10-90%	ms	16	30	30	50	50
Output Voltage Drop Time (Full Load)90-10%	ms	6	10	15	30	50
Output Voltage Drop Time (No Load)	ms	415	155	320	380	1200
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				
Constant Current Mode (CC Mode)						
Output Range Can Be Set	A	0- Rated output value				
Line Regulation Rate	mA	0.01% +2mA of the rated output current				
Load Regulation Rate	mA	0.02% +5mA of the rated output current				
Ripple Effective Value rms (5Hz -1MHz)	mArms	70	40	15	8	3
Stability And Temperature Coefficient						
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)				
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)				
Programming And Readback Accuracy & Resolution						
Voltage Output Programming Accuracy		0.05% of the rated output voltage				
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)				
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)				
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)				
Input Power Supply						
Frequency		47Hz - 63Hz				
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC				
Power Factor (Typical Value)		0.99(Single-Phase Input)				
Size And Weight						
Size		70(W)*349(D)*83.25(H)mm				
Weight		About 2kg				
Colour		RAL 7035				

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

HY-ZSU Series Technical Parameters

DC 600W Low Voltage Output Series Technical Parameters

Models		HY-ZSU 10-60	HY-ZSU 20-30	HY-ZSU 36-18	HY-ZSU 60-10	HY-ZSU 100-6
Rated Output Voltage	V	10	20	36	60	100
Rated Output Current	A	60	30	18	10	6
Rated Output Power	W	600W	600W	648W	600W	600W
Efficiency	%	83	86	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				
Load Regulation Rate	mV	0.01% +2mV of rated output voltage				
Maximum Compensation Voltage For Telemetry	V	1	1	2	3	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	5	5	5	12	15
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	50	50	50	50	80
Output Voltage Rise Time 10-90%	ms	50	50	45	50	100
Output Voltage Drop Time (Full Load)90-10%	ms	25	25	20	25	80
Output Voltage Drop Time (No Load)	ms	285	425	660	610	1370
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				
Constant Current Mode (CC Mode)						
Output Range Can Be Set	A	0- Rated output value				
Line Regulation Rate	mA	0.01% +2mA of the rated output current				
Load Regulation Rate	mA	0.01% +5mA of the rated output current				
Ripple Effective Value rms (5Hz -1MHz)	mArms	150	75	25	8	5
Stability And Temperature Coefficient						
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)				
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)				
Programming And Readback Accuracy & Resolution						
Voltage Output Programming Accuracy		0.05% of the rated output voltage				
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)				
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)				
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)				
Input Power Supply						
Frequency		47Hz - 63Hz				
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC				
Power Factor (Typical Value)		0.99(Single-Phase Input)				
Size And Weight						
Size		70(W)*349(D)*83.25(H)mm				
Weight		About 2kg				
Colour		RAL 7035				

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

DC 800W Low Voltage Output Series Technical Parameters

Models		HY-ZSU 10-72	HY-ZSU 20-40	HY-ZSU 36-24	HY-ZSU 60-14	HY-ZSU 100-8
Rated Output Voltage	V	10	20	36	60	100
Rated Output Current	A	72	40	24	14	8
Rated Output Power	W	720W	800W	864W	840W	800W
Efficiency	%	83	86	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				
Load Regulation Rate	mV	0.01% +2mV of rated output voltage				
Maximum Compensation Voltage For Telemetry	V	1	1	1.2	3	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	5	5	5	12	15
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	50	50	50	60	80
Output Voltage Rise Time10-90%	ms	50	50	45	50	100
Output Voltage Drop Time (Full Load)90-10%	ms	25	25	15	25	80
Output Voltage Drop Time (No Load)	ms	285	425	625	570	1370
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				
Constant Current Mode (CC Mode)						
Output Range Can Be Set	A	0- Rated output value				
Line Regulation Rate	mA	0.01% +2mA of the rated output current				
Load Regulation Rate	mA	0.02% +5mA of the rated output current				
Ripple Effective Value rms (5Hz -1MHz)	mArms	180	100	31	28	12
Stability And Temperature Coefficient						
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)				
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)				
Programming And Readback Accuracy & Resolution						
Voltage Output Programming Accuracy		0.05% of the rated output voltage				
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)				
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)				
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)				
Input Power Supply						
Frequency		47Hz - 63Hz				
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC				
Power Factor (Typical Value)		0.99(Single-Phase Input)				
Size And Weight						
Size		70(W)*349(D)*83.25(H)mm				
Weight		About 2kg				
Colour		RAL 7035				

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

HY-ZSU Series Technical Parameters

DC 200W High Voltage Output Series Technical Parameters

Models		HY-ZSU 160-1.3	HY-ZSU 320-0.65	HY-ZSU 650-0.32
Rated Output Voltage	V	160	320	650
Rated Output Current	A	1.3	0.65	0.32
Rated Output Power	W	208W		
Efficiency	%	81	81	81
Constant Voltage Mode (CV Mode)				
Output Range Can Be Set	V	0- Rated output value		
Line Regulation Rate	mV	0.01% of the rated output voltage	0.03% of the rated output voltage	
Load Regulation Rate	mV	0.01% of the rated output voltage		
Maximum Compensation Voltage For Telemetry	V	5	5	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	10	25	60
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	100	10	250
Output Voltage Rise Time 10-90%	ms	110	185	170
Output Voltage Drop Time (Full Load)90-10%	ms	180	295	270
Output Voltage Drop Time (No Load)	ms	2	1.5	3
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. ＜2ms.		
Constant Current Mode (CC Mode)				
Output Range Can Be Set	A	0- Rated output value		
Line Regulation Rate	mA	0.02% of the rated output current		
Load Regulation Rate	mA	0.09% of the rated output current		
Ripple Effective Value rms (5Hz -1MHz)	mArms	1.2	14	0.5
Stability And Temperature Coefficient				
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)		
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/°C I: 70ppm/°C (30 minutes after power on)		
Programming And Readback Accuracy & Resolution				
Voltage Output Programming Accuracy		0.05% of the actual voltage + 0.05% of the rated voltage		
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)		
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>600A)		
Voltage Output Read-Back Accuracy		0.05% of the actual voltage + 0.05% of the rated 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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)		
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)		
Input Power Supply				
Frequency		47 Hz - 63 Hz		
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC		
Power Factor (Typical Value)		0.99(Single-Phase Input)		
Size And Weight				
Size		70(W)*349(D)*83.25(H)mm		
Weight		About 2kg		
Colour		RAL 7035		

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

DC 400W High Voltage Output Series Technical Parameters

Models		HY-ZSU 160-2.6	HY-ZSU 320-1.3	HY-ZSU 650-0.64
Rated Output Voltage	V	160	320	650
Rated Output Current	A	2.6	1.3	0.64
Rated Output Power	W	416	416	416
Efficiency	%	86	86	86
Constant Voltage Mode (CV Mode)				
Output Range Can Be Set	V	0- Rated output value		
Line Regulation Rate	mV	0.01% of the rated output voltage		
Load Regulation Rate	mV	0.01% of the rated output voltage		
Maximum Compensation Voltage For Telemetry	V	5	5	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	10	25	60
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	100	150	250
Output Voltage Rise Time 10-90%	ms	80	150	150
Output Voltage Drop Time (Full Load)90-10%	ms	100	150	150
Output Voltage Drop Time (No Load)	ms	2	2.5	3
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. ＜2ms.		
Constant Current Mode (CC Mode)				
Output Range Can Be Set	A	0- Rated output value		
Line Regulation Rate	mA	0.02% of the rated output current		
Load Regulation Rate	mA	0.09% of the rated output current		
Ripple Effective Value rms (5Hz -1MHz)	mArms	1.5	1	0.6
Stability And Temperature Coefficient				
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)		
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)		
Programming And Readback Accuracy & Resolution				
Voltage Output Programming Accuracy		0.05% of the actual voltage + 0.05% of the rated voltage		
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (＞600V)		
Voltage Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (＞600A)		
Voltage Output Read-Back Accuracy		0.05% of the actual voltage + 0.05% of the rated 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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (＞1000V)		
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)		
Input Power Supply				
Frequency		47Hz - 63Hz		
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC		
Power Factor (Typical Value)		0.99(Single-Phase Input)		
Size And Weight				
Size		70(W)*349(D)*83.25(H)mm		
Weight		About 2kg		
Colour		RAL 7035		

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

HY-ZSU Series Technical Parameters

DC 600W High Voltage Output Series Technical Parameters

Models		HY-ZSU 160-4	HY-ZSU 320-2	HY-ZSU 650-1
Rated Output Voltage	V	160	320	650
Rated Output Current	A	4	2	1
Rated Output Power	W	640	640	650
Efficiency	%	88.5	88.5	88.5
Constant Voltage Mode (CV Mode)				
Output Range Can Be Set	V	0- Rated output value		
Line Regulation Rate	mV	0.01% of the rated output voltage		
Load Regulation Rate	mV	0.01% of the rated output voltage		
Maximum Compensation Voltage For Telemetry	V	5	5	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	20	30	60
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	100	150	250
Output Voltage Rise Time 10-90%	ms	55	75	75
Output Voltage Drop Time (Full Load)90-10%	ms	65	85	85
Output Voltage Drop Time (No Load)	ms	2	2.5	3
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. ＜2ms.		
Constant Current Mode (CC Mode)				
Output Range Can Be Set	A	0- Rated output value		
Line Regulation Rate	mA	0.02% of the rated output current		
Load Regulation Rate	mA	0.09% of the rated output current		
Ripple Effective Value rms (5Hz -1MHz)	mArms	2	1.5	1
Stability And Temperature Coefficient				
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)		
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)		
Programming And Readback Accuracy & Resolution				
Voltage Output Programming Accuracy		0.05% of the actual voltage + 0.05% of the rated voltage		
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (＞600V)		
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (＞600A)		
Voltage Output Read-Back Accuracy		0.05% of the actual voltage + 0.05% of the rated 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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (＞1000V)		
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)		
Input Power Supply				
Frequency		47Hz - 63Hz		
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC		
Power Factor (Typical Value)		0.99(Single-Phase Input)		
Size And Weight				
Size		70(W)*349(D)*83.25(H)mm		
Weight		About 2kg		
Colour		RAL 7035		

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

DC 800W High Voltage Output Series Technical Parameters

Models		HY-ZSU 160-5	HY-ZSU 320-2.5	HY-ZSU 375-2.2	HY-ZSU 650-1.25
Rated Output Voltage	V	160	320	375	650
Rated Output Current	A	4.7-5	2.35-2.5	2-2.2	1.15-1.25
Rated Output Power	W	752-800	752-800	750-825	747.5-812.5
Efficiency	%	88.5	89	89.5	89
Constant Voltage Mode (CV Mode)					
Output Range Can Be Set	V	0- Rated output value			
Line Regulation Rate	mV	0.01% of the rated output voltage			
Load Regulation Rate	mV	0.01% of the rated output voltage			
Maximum Compensation Voltage For Telemetry	V	5	5	5	5
Ripple Effective Value rms (5Hz -1MHz)	mVrms	25	30	30	60
Noise Peak-To-Peak Value p-p (20MHz)	mVpp	100	150	150	250
Output Voltage Rise Time 10-90%	ms	45	55	55	55
Output Voltage Drop Time (Full Load)90-10%	ms	55	95	65	65
Output Voltage Drop Time (No Load)	ms	2	355	2.5	3
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. ＜2ms.			
Constant Current Mode (CC Mode)					
Output Range Can Be Set	A	0- Rated output value			
Line Regulation Rate	mA	0.02% of the rated output current			
Load Regulation Rate	mA	0.09% of the rated output current			
Ripple Effective Value rms (5Hz -1MHz)	mArms	2	1.5	1.5	1
Stability And Temperature Coefficient					
Temperature Drift (Rated Output Voltage/Current)		U: 0.01% I: 0.01% (After 30 minutes of power on at a certain input voltage and load ambient temperature, 8 hours)			
Temperature Coefficient (Rated Output Voltage/Current)		U: 50ppm/℃ I: 70ppm/℃ (30 minutes after power on)			
Programming And Readback Accuracy & Resolution					
Voltage Output Programming Accuracy		0.05% of the actual voltage + 0.05% of the rated voltage			
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		0.001 V (≤60V) ,0.01V (≤600V) ,0.1V (>600V)			
Current Setting Resolution		0.001A (≤60A) ,0.01A (≤600A) ,0.1 A (>600A)			
Voltage Output Read-Back Accuracy		0.05% of the actual voltage + 0.05% of the rated 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 Display		0.00001V (≤10V),0.0001V (≤100V), 0.001V (100V＜U ≤1000V), 0.01V (>1000V)			
Current Read Back Display		0.00001A (≤10A), 0.0001A (≤100A), 0.001A (100A＜ I ≤1000A)			
Input Power Supply					
Frequency		47Hz - 63Hz			
Connection Mode		Single-phase two-wire + ground wire, wide input voltage range: 85~265VAC			
Power Factor (Typical Value)		0.99(Single-Phase Input)			
Size And Weight					
Size		70(W)*349(D)*83.25(H)mm			
Weight		About 2kg			
Colour		RAL 7035			

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

HY-ZSU 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	Beyond the limit output immediately off
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 1 m to weighted measurement

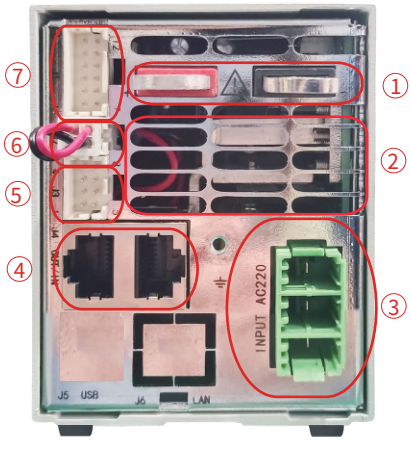
Control Panel

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

Front Panel

① Liquid crystal display screen
② Current/voltage setting key, output key
③ Adjustment knob rotate to fine-tune the number, press down is a confirmation command
④ Power switch
⑤ Air inlet

Rear Panel

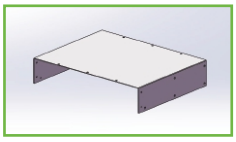


① Output connection: 6V-100V model is bus type
② Exhaust port
③ Input port
④ RS232/RS485 communication port
⑤ Isolation control and signal interface
⑥ Telemetry interface
⑦ Analog control and monitoring interface

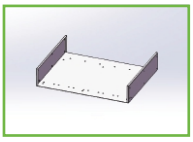
Product Rack And Select Accessories

If a parallel cabinet is required, the following accessories need to be configured:

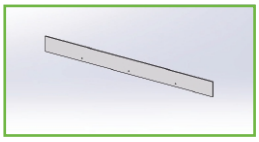
- Rack kit 1: HY-ZSU-CP 001 (including upper and lower cover plates, lining plates, handles)



Upper cover plate



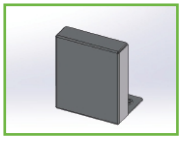
Lower cover plate



Lining plate

Handle

- Rack front baffle: HY-ZSU-CP 002



Front baffle

- Communication connection line: HY-ZSU-CL 003

RJ45 to RS232/RS485 communication interface connection line

Official wechat：hypower-cn

Contact us

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Authorized distributor：