



Efficiency, Stability, Reliable, Precision



## High Power DC Power Supply

» Product specification sheet



Kindly follow our WeChat official account for more information



# High Power DC Power Supply

---

## Contents

SP80VDC6000W -----	01	SP750VDC6000W -----	13
SP80VDC12000W -----	01	SP750VDC12000W -----	13
SP80VDC18000W -----	01	SP750VDC18000W -----	14
SP80VDC24000W -----	03	SP750VDC24000W -----	15
SP80VDC30000W -----	03	SP750VDC30000W -----	15
SP80VDC36000W -----	03	SP750VDC36000W -----	15
SP165VDC12000W -----	05	SP1000VDC12000W -----	17
SP165VDC24000W -----	05	SP1000VDC24000W -----	17
SP165VDC36000W -----	05	SP1000VDC36000W -----	17
SP250VDC18000W -----	07	SP1500VDC12000W -----	19
		SP1500VDC18000W -----	19
SP500VDC6000W -----	09	SP1500VDC24000W -----	21
SP500VDC12000W -----	09	SP1500VDC36000W -----	21
SP500VDC18000W -----	09		
SP500VDC24000W -----	11	SP2250VDC18000W -----	23
SP500VDC30000W -----	11		
SP500VDC36000W -----	11		

# High Power DC Power Supply

---

## Selection List:

Model	Voltage	Current	Power	Corresponding page
SP80VDC6000W	80V	200A	6000W	P01
SP80VDC12000W	80V	400A	12000W	P01
SP80VDC18000W	80V	600A	18000W	P01
SP80VDC24000W	80V	800A	24000W	P03
SP80VDC30000W	80V	1000A	30000W	P03
SP80VDC36000W	80V	1200A	36000W	P03
SP165VDC12000W	165V	180A	12000W	P05
SP165VDC24000W	165V	360A	24000W	P05
SP165VDC36000W	165V	540A	36000W	P05
SP250VDC18000W	250V	180A	18000W	P07
SP500VDC6000W	500V	32A	6000W	P09
SP500VDC12000W	500V	64A	12000W	P09
SP500VDC18000W	500V	96A	18000W	P09
SP500VDC24000W	500V	128A	24000W	P11
SP500VDC30000W	500V	160A	30000W	P11
SP500VDC36000W	500V	192A	36000W	P11
SP750VDC6000W	750V	21A	6000W	P13
SP750VDC12000W	750V	42A	12000W	P13
SP750VDC18000W	750V	63A	18000W	P13
SP750VDC24000W	750V	84A	24000W	P15
SP750VDC30000W	750V	105A	30000W	P15
SP750VDC36000W	750V	126A	36000W	P15
SP1000VDC12000W	1000V	32A	12000W	P17
SP1000VDC24000W	1000V	64A	24000W	P17
SP1000VDC36000W	1000V	96A	36000W	P17
SP1500VDC12000W	1500V	21A	12000W	P19
SP1500VDC18000W	1500V	32A	18000W	P19
SP1500VDC24000W	1500V	42A	24000W	P21
SP1500VDC36000W	1500V	63A	36000W	P21
SP2250VDC18000W	2250V	21A	18000W	P23

# High Power DC Power Supply

MODEL	SP80VDC6000W	SP80VDC12000W	SP80VDC18000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L3-0, L1, L2-38A 3P400 L3-0, L1,L2-19A				
Frequency	45~65Hz				
Connection	2ph, PE	3ph, PE	3ph, PE		
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 7.1kVAmax, 3P400 6.9kVAmax	3P208 14.2kVAmax ,3P400 13.8kVAmax	3P208 21.3kVAmax ,3P400 20.7kVAmax		
Efficiency <sup>[1]</sup>	3P208 ~90.5%@80V, 3P208 ~86.5%@200A 3P400 ~92.2%@80V, 3P400 ~87.8%@200A				
<b>Output</b>					
Voltage Range	0~80V				
Current Range <sup>[2]</sup>	0~200A	0~400A	0~600A		
Power Range	0~6000W	0~12000W	0~18000W		
Max. Setup Range	Voltage	0~84V(0~105%)			
	Current	0~204.75A(0~102%)	0~409.5A(0~102%)		
	Power	0~6300W(0~105%)	0~12600W(0~105%)		
	Internal Resistance	0~12Ω	0~6Ω		
Accuracy	Voltage	<0.1% Umax(80mV)			
	Current	<0.2% Imax(400mA)	<0.2% Imax(800mA)		
	Power	<0.5%+30W	<0.5%+60W		
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(16mV)			
	Current	<0.05% Imax(100mA)	<0.05% Imax(200mA)		
	Power	<0.05% Pmax			
Load Regulation <sup>[3]</sup>	Voltage	<0.05%Umax(40mV) @Rated Voltage, <0.1%Umax(80mV) @Rated Current			
	Current	<0.15% Imax(300mA)	<0.15% Imax(600mA)		
	Power	<0.75% Pmax			
Rise Time	Voltage	<15ms (No Load) <55ms (Full Load)			
Drop Time	Voltage	<850ms (No Load) <15ms (Full Load)			
Transient Response Time <sup>[4]</sup>	Voltage	≤1.5ms/0.8V			
Display Resolution	Voltage	0.001V			
	Current	0.001A			
	Power	0.1W			
	Internal Resistance	0.0001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(80mV)			
	Current	<0.2% Imax(400mA)	<0.2% Imax(800mA)		
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[5]</sup>	Voltage	<180mVpp, <15mVrms	<288mVpp, <23mVrms		
	Current	<100mA rms	<200mA rms		
Remote Compensation	Voltage	5%Umax(4V)			
<b>Sink Function</b>					
Input Voltage	0~80V				
Input Current	0~100A	0~200A	0~300A		
Input Power	0~335W	0~660W	0~1000W		
Min. Operating Voltage	3V@100A	3V@200A	3V@300A		
CC Resolution	10mA	20mA	30mA		

# High Power DC Power Supply

MODEL	SP80VDC6000W	SP80VDC12000W	SP80VDC18000W
CC Accuracy	<0.2% Imax(200mA)	<0.2% Imax(400mA)	<0.2% Imax(600mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% Umax(80mV)		
CP Resolution	0.5W	1W	1.5W
CP Accuracy	<0.5% Pmax(1675mW)	<0.5% Pmax(3300mW)	<0.5% Pmax(5000mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	2121VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature [2]	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	45dB Idle; 71dB Max;	45dB Idle; 73dB Max;	45dB Idle; 75dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x133.0x718.0 mm		
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm		
Unit Weight	27kg	38kg	50kg
Shipping Weight	37kg	48kg	60kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <>DC output, 4242VDC, AC input <> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] It is recommended that the output current is derated by 10% when the operation environment is higher than 30°C.

[3] Load transient from 0% to 100% of rated output.

[4] Test value at 100% voltage and 100% power.

[5] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP80VDC24000W	SP80VDC30000W	SP80VDC36000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	200~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L3-60A , L1, L2-103A 3P400 L3-30A, L1,L2-49A				
Frequency	45~65Hz				
Connection	3ph, PE				
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 28.4kVAmix, 3P400 27.6kVAmix	3P208 35.5kVAmix, 3P400 34.5kVAmix	3P208 42.6kVAmix, 3P400 41.4kVAmix		
Efficiency <sup>[1]</sup>	3P208 ~90.5%@80V, 3P208 ~86.5%@800A 3P400 ~92.2%@80V, 3P400 ~87.8%@800A				
<b>Output</b>					
Voltage Range	0~80V				
Current Range <sup>[2]</sup>	0~800A	0~1000A	0~1200A		
Power Range	0~24000W	0~30000W	0~36000W		
Max. Setup Range	Voltage	0~84V(0~105%)			
	Current	0~819A(0~102%)	0~1023.75A(0~102%)		
	Power	0~26400W(0~105%)	0~31500W(0~105%)		
	Internal Resistance	0~3.0Ω	0~2.4Ω		
Accuracy	Voltage	<0.1% Umax(80mV)			
	Current	<0.2% Imax(1600mA)	<0.2% Imax(2000mA)		
	Power	<1%+120W	<1%+150W		
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(16mV)			
	Current	<0.05% Imax(400mA)	<0.05% Imax(500mA)		
	Power	<0.05% Pmax			
Load Regulation <sup>[3]</sup>	Voltage	<0.05%Umax(40mV) @Rated Voltage, <0.1%Umax(80mV) @Rated Current			
	Current	<0.15% Imax(1200mA)	<0.15% Imax(1500mA)		
	Power	<0.75% Pmax			
Rise Time	Voltage	<15ms (No Load) <30ms (Full Load)			
Drop Time	Voltage	<850ms (No Load) <15ms (Full Load)			
Transient Response Time <sup>[4]</sup>	Voltage	≤1.5ms/0.8V			
Display Resolution	Voltage	0.001V			
	Current	0.001A	0.01A		
	Power	0.1W			
	Internal Resistance	0.0001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(80mV)			
	Current	<0.2% Imax(1600mA)	<0.2% Imax(2000mA)		
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[5]</sup>	Voltage	<320mVpp, <25mVrms			
	Current	<360mA rms	<450mA rms		
Remote Compensation	Voltage	5% Umax(4V)			
<b>Sink Function</b>					
Input Voltage	0~80V				
Input Current	0~400A	0~500A	0~600A		
Input Power	0~1300W	0~1600W	0~2000W		
Min. Operating Voltage	3V@400A	3V@500A	3V@600A		
CC Resolution	40mA	50mA	60mA		

# High Power DC Power Supply

MODEL	SP80VDC24000W	SP80VDC30000W	SP80VDC36000W
CC Accuracy	<0.2% Imax(800mA)	<0.2% Imax(1000mA)	<0.2% Imax(1200mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% Umax(80mV)		
CP Resolution	2W	2.5W	3W
CP Accuracy	<0.5% Pmax(6500mW)	<0.5% Pmax(8000mW)	<0.5% Pmax(10000mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	2121VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature [2]	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	48dB Idle; 77dB Max;	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x265.0x745.0 mm		
Package Dimensions(WxHxD)	549.0x531.0x946.0 mm		
Unit Weight	75kg	86kg	97kg
Shipping Weight	101kg	112kg	123kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <>DC output, 4242VDC, AC input <> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] It is recommended that the output current is derated by 10% when the operation environment is higher than 30°C.

[3] Load transient from 0% to 100% of rated output.

[4] Test value at 100% voltage and 100% power.

[5] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP165VDC12000W	SP165VDC24000W	SP165VDC36000W
<b>Input</b>			
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC	200~253VAC	200~253VAC
Current <sup>[1]</sup>	3P208 L1-60A, L2,L3-38A 3P400 L1-30A, L2,L3-19A	3P208 L3-60A,L1,L2-103A 3P400 L3-30A,L1,L2-49A	3P208 L1,L2,L3-125A 3P400 L1,L2,L3-63A
Frequency	45~65Hz		
Connection	3ph, PE		
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs		
Power Factor	>0.99		
Input Power	3P208 14.4kVAmix, 3P400 14.0kVAmix	3P208 28.8kVAmix, 3P400 28.0kVAmix	3P208 42.6kVAmix, 3P400 41.4kVAmix
Efficiency <sup>[1]</sup>	3P208 ~90.5%@165V, 3P208 ~85%@180A 3P400 ~91.5%@165V, 3P400 ~85.5%@180A	3P208 ~90.5%@165V, 3P208 ~85%@360A 3P400 ~91.5%@165V, 3P400 ~85.5%@360A	3P208 ~90.5%@165V, 3P208 ~85%@540A 3P400 ~91.5%@165V, 3P400 ~85.5%@540A
<b>Output</b>			
Voltage Range	0~165V		
Current Range <sup>[2]</sup>	0~180A	0~360A	0~540A
Power Range	0~12000W	0~24000W	0~36000W
Max. Setup Range	Voltage	0~173.25V(0~105%)	
	Current	0~189A(0~105%)	0~378A(0~105%)
	Power	0~12600W(0~105%)	0~25200W(0~105%)
	Internal Resistance	0~27.5Ω	0~13.75Ω
Accuracy	Voltage	<0.1% Umax(165mV)	
	Current	<0.2% Imax(360mA)	<0.2% Imax(720mA)
	Power	<0.5%+60W	<1%+120W
	Internal Resistance	R<2% Rmax, I<0.3% Imax	<1%+180W
Line Regulation	Voltage	<0.02% Umax(33mV)	
	Current	<0.05% Imax(90mA)	<0.05% Imax(180mA)
	Power	<0.05% Pmax	<0.05% Imax(270mA)
Load Regulation <sup>[3]</sup>	Voltage	<0.05% Umax(82.5mV) @Rated Voltage, <0.1% Umax(165mV) @Rated Current	
	Current	<0.15% Imax(270mA)	<0.15% Imax(540mA)
	Power	<0.75% Pmax	<0.15% Imax(810mA)
Rise Time	Voltage	<15ms (No Load) <30ms (Full Load)	
Drop Time	Voltage	<900ms (No Load) <15ms (Full Load)	
Transient Response Time <sup>[4]</sup>	Voltage	≤1.5ms/1.65V	
Display Resolution	Voltage	0.001V	
	Current	0.001A	
	Power	0.1W	
	Internal Resistance	0.0001Ω	
Measurement Accuracy	Voltage	<0.1% Umax(165mV)	
	Current	<0.2% Imax(360mA)	<0.2% Imax(720mA)
	Power	<0.5% Pmax	<0.2% Imax(1080mA)
	Internal Resistance	<0.4% Rmax	
Ripple <sup>[5]</sup>	Voltage	<540mVpp, <50mVrms	
	Current	<100mA rms	<200mA rms
Remote Compensation	Voltage	2%Umax(3.3V)	
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		

MODEL	SP165VDC12000W	SP165VDC24000W	SP165VDC36000W
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	2121VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature [2]	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	45dB Idle; 73dB Max;	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x133.0x718.0 mm	423.0x265.0x745.0 mm	423.0x265.0x745.0 mm
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm	549.0x531.0x946.0 mm	549.0x531.0x946.0 mm
Unit Weight	38kg	75kg	97kg
Shipping Weight	48kg	101kg	123kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] It is recommended that the output current is derated by 10% when the operation environment is higher than 30°C.

[3] Load transient from 0% to 100% of rated output.

[4] Test value at 100% voltage and 100% power.

[5] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP250VDC1800W	
<b>Input</b>		
Voltage <sup>[1]</sup>	190~253VAC	
	340~460VAC	
Current <sup>[1]</sup>	3P208 L1,L2,L3-60A	
	3P400 L1,L2,L3-30A	
Frequency	45~65Hz	
Connection	3ph, PE	
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs	
	T30A*2pcs	
Power Factor	>0.99	
Input Power	3P208 21.5KVAmax, 3P400 20.9KVAmax	
Efficiency <sup>[1]</sup>	3P208 ~90.5%@250V, 3P208 ~85%@180A	
	3P400 ~91.5%@250V, 3P400 ~85.5%@180A	
<b>Output</b>		
Voltage Range	0~250V	
Current Range <sup>[2]</sup>	0~180A	
Power Range	0~18000W	
Max. Setup Range	Voltage	0~262.5V(0~105%)
	Current	0~189A(0~105%)
	Power	0~18900W(0~105%)
	Internal Resistance	0~41.6667Ω
Accuracy	Voltage	<0.1% Umax(250mV)
	Current	<0.2% Imax(360mA)
	Power	<0.5%+90W
	Internal Resistance	R<2% Rmax, I<0.3% Imax
Line Regulation	Voltage	<0.02% Umax(50mV)
	Current	<0.05% Imax(90mA)
	Power	<0.05% Pmax
Load Regulation <sup>[3]</sup>	Voltage	<0.05% Umax(125mV) @Rated Voltage, <0.1% Umax(250mV) @Rated Current
	Current	<0.15% Imax(270mA)
	Power	<0.75% Pmax
Rise Time	Voltage	<15ms (No Load) <30ms (Full Load)
Drop Time	Voltage	<950ms (No Load) <15ms (Full Load)
Transient Response Time <sup>[4]</sup>	Voltage	≤1.5ms/2.5V
Display Resolution	Voltage	0.001V
	Current	0.001A
	Power	0.1W
	Internal Resistance	0.0001Ω
Measurement Accuracy	Voltage	<0.1% Umax(250mV)
	Current	<0.2% Imax(360mA)
	Power	<0.5% Pmax
	Internal Resistance	<0.4% Rmax
Ripple <sup>[5]</sup>	Voltage	<850mVpp, <75mVrms
	Current	<100mA rms
Remote Compensation	Voltage	1%Umax(2.5V)
<b>General</b>		
Graphic Display	4.3" Color touch LCD	
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware	
Rack Mount Handles	Yes	
FAN	Temperature control	
Protection	OCP, OVP, OPP, OTP, HARD FAIL	

MODEL	SP250VDC18000W
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)
Command Response Time	<3ms
<b>Analog Interface(Optional)</b>	
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.
Accuracy U/I/P/R	<0.2% F.S
Actual Output U/I	<0.2%
Control Signals	DC ON/OFF, External control Enable/Disable
Status Signals	CV, OVP, OT
Sampling Rate of Input & Output	45Hz
Galvanic Isolation to the Device	2121VDC
<b>Master/Slave Control</b>	
Series Output	MAX 2 units
Parallel Output	MAX 16 units
<b>Environmental</b>	
Operating Temperature [2]	0~40°C
Storage Temperature	-20~70°C
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C
Altitude	<2000m@40°C
Fan Noise	45dB Idle; 75dB Max;
<b>Mechanical</b>	
Dimensions(WxHxD)	423.0x133.0x718.0 mm
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm
Unit Weight	50kg
Shipping Weight	60kg
<b>Miscellaneous</b>	
Over Voltage Category	II
Protection Class	I
Pollution Degree	2
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] It is recommended that the output current is derated by 10% when the operation environment is higher than 30°C.

[3] Load transient from 0% to 100% of rated output.

[4] Test value at 100% voltage and 100% power.

[5] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP500VDC6000W	SP500VDC12000W	SP500VDC18000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L3-0, L1,L2-38A 3P400 L3-0, L1,L2-19A				
Frequency	45~65Hz				
Connection	2ph, PE				
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 6.7kVAmax, 3P400 6.5kVAmax	3P208 13.4kVAmax, 3P400 13.0kVAmax	3P208 20.1kVAmax, 3P400 19.5kVAmax		
Efficiency <sup>[1]</sup>	3P208 ~92.5%@500V, 3P208 ~91%@32A 3P400 ~94%@500V, 3P400 ~92.5%@32A				
<b>Output</b>					
Voltage Range	0~500V				
Current Range	0~32A	0~64A	0~96A		
Power Range	0~6000W	0~12000W	0~18000W		
Max. Setup Range	Voltage	0~525V(0~105%)			
	Current	0~33.6A(0~105%)	0~67.2A(0~105%)		
	Power	0~6300W(0~105%)	0~12600W(0~105%)		
	Internal Resistance	0~469Ω	0~235Ω		
Accuracy	Voltage	<0.1% Umax(500mV)			
	Current	<0.2% Imax(64mA)	<0.2% Imax(128mA)		
	Power	<1%+60W	<1%+90W		
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(100mV)			
	Current	<0.05% Imax(16mA)	<0.05% Imax(32mA)		
	Power	<0.05% Pmax			
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(250mV) @Rated Voltage, <0.1% Umax(500mV) @Rated Current			
	Current	<0.15% Imax(48mA)	<0.15% Imax(96mA)		
	Power	<0.75% Pmax			
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)			
Drop Time	Voltage	<1500ms (No Load) <15ms (Full Load)			
Transient Response Time <sup>[3]</sup>	Voltage	≤1.5ms/5V			
Display Resolution	Voltage	0.01V			
	Current	0.001A			
	Power	1W			
	Internal Resistance	0.001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(500mV)			
	Current	<0.2% Imax(64mA)	<0.2% Imax(128mA)		
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[4]</sup>	Voltage	<600mVpp, <150mVrms	<650mVpp, <160mVrms		
	Current	<16mA rms	<32mA rms		
Remote Compensation	Voltage	3%Umax(15V)			
<b>Sink Function</b>					
Input Voltage	0~500V				
Input Current	0~16A	0~24A	0~40A		
Input Power	0~325W	0~650W	0~975W		
Min. Operating Voltage	8V@16A	8V@24A	8V@40A		
CC Resolution	1mA	2mA	3mA		

# High Power DC Power Supply

MODEL	SP500VDC6000W	SP500VDC12000W	SP500VDC18000W
CC Accuracy	<0.2% Imax(32mA)	<0.2% Imax(48mA)	<0.2% Imax(80mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% Umax(500mV)		
CP Resolution	0.5W	1.0W	1.5W
CP Accuracy	<0.5% Pmax(1625mW)	<0.5% Pmax(3250mW)	<0.5% Pmax(4875mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	2818VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	45dB Idle; 71dB Max;	45dB Idle; 73dB Max;	45dB Idle; 75dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x133.0x718.0 mm		
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm		
Unit Weight	27kg	38kg	50kg
Shipping Weight	37kg	48kg	60kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP500VDC24000W	SP500VDC30000W	SP500VDC36000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	200~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L1-60A, L2,L3-103A 3P400 L1-30A, L2,L3-49A				
Frequency	45~65Hz				
Connection	3ph, PE				
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 26.8kVAmix, 3P400 26.0kVAmix	3P208 33.5kVAmix, 3P400 32.5kVAmix	3P208 40.2kVAmix, 3P400 39.0kVAmix		
Efficiency <sup>[1]</sup>	3P208 ~92.5%@500V, 3P208 ~91%@128A 3P400 ~94%@500V, 3P400 ~92.5%@128A				
<b>Output</b>					
Voltage Range	0~500V				
Current Range	0~128A	0~160A	0~192A		
Power Range	0~24000W	0~30000W	0~36000W		
Max. Setup Range	Voltage	0~525V(0~105%)			
	Current	0~134.4A(0~105%)	0~168A(0~105%)		
	Power	0~26400W(0~105%)	0~31500W(0~105%)		
	Internal Resistance	0~118Ω	0~94Ω		
Accuracy	Voltage	<0.1% Umax(500mV)			
	Current	<0.2% Imax(256mA)	<0.2% Imax(320mA)		
	Power	<1%+180W	<1%+240W		
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(100mV)			
	Current	<0.05% Imax(64mA)	<0.05% Imax(80mA)		
	Power	<0.05% Pmax			
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(250mV) @Rated Voltage, <0.1% Umax(500mV) @Rated Current			
	Current	<0.15% Imax(192mA)	<0.15% Imax(240mA)		
	Power	<0.75% Pmax			
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)			
Drop Time	Voltage	<1500ms (No Load) <15ms (Full Load)			
Transient Response Time <sup>[3]</sup>	Voltage	≤1.5ms/5V			
Display Resolution	Voltage	0.01V			
	Current	0.001A			
	Power	1W			
	Internal Resistance	0.001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(500mV)			
	Current	<0.2% Imax(256mA)	<0.2% Imax(320mA)		
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[4]</sup>	Voltage	<650mVpp, <160mVrms			
	Current	<64mA rms	<80mA rms		
Remote Compensation	Voltage	3% Umax(15V)			
<b>Sink Function</b>					
Input Voltage	0~500V				
Input Current	0~56A	0~64A	0~80A		
Input Power	0~1300W	0~1625W	0~1950W		
Min. Operating Voltage	8V@56A	8V@64A	8V@80A		
CC Resolution	4mA	5mA	6mA		

# High Power DC Power Supply

MODEL	SP500VDC24000W	SP500VDC30000W	SP500VDC36000W
CC Accuracy	<0.2% I <sub>max</sub> (112mA)	<0.2% I <sub>max</sub> (128mA)	<0.2% I <sub>max</sub> (160mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% U <sub>max</sub> (500mV)		
CP Resolution	2W	2.5W	3W
CP Accuracy	<0.5% P <sub>max</sub> (6500mW)	<0.5% P <sub>max</sub> (8125mW)	<0.5% P <sub>max</sub> (9750mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analogue input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analogue output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	2818VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	48dB Idle; 77dB Max;	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x265.0x745.0 mm		
Package Dimensions(WxHxD)	549.0x531.0x946.0 mm		
Unit Weight	75kg	86kg	97kg
Shipping Weight	101kg	112kg	123kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP750VDC6000W	SP750VDC12000W	SP750VDC18000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L3-0, L1,L2-38A 3P400 L3-0, L1,L2-19A				
Frequency	45~65Hz				
Connection	2ph, PE				
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 6.7KVAmax, 3P400 6.5KVAmax				
Efficiency <sup>[1]</sup>	3P208 ~92.5%@750V, 3P208 ~91%@21A 3P400 ~92.7%@750V, 3P400 ~92%@21A				
<b>Output</b>					
Voltage Range	0~750V				
Current Range	0~21A		0~63A		
Power Range	0~6000W		0~18000W		
Max. Setup Range	Voltage	0~787.5V(0~105%)			
	Current	0~22.05A(0~105%)			
	Power	0~6300W(0~105%)			
	Internal Resistance	0~1072Ω			
Accuracy	Voltage	<0.1% Umax(750mV)			
	Current	<0.2% Imax(42mA)			
	Power	<1%+60W			
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(150mV)			
	Current	<0.05% Imax(10.5mA)			
	Power	<0.05% Pmax			
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(375mV) @Rated Voltage, <0.1% Umax(750mV) @Rated Current			
	Current	<0.15% Imax(31.5mA)			
	Power	<0.75% Pmax			
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)			
Drop Time	Voltage	<600ms (No Load) <20ms (Full Load)			
Transient Response Time <sup>[3]</sup>	Voltage	≤2ms/7.5V			
Display Resolution	Voltage	0.01V			
	Current	0.001A			
	Power	1W			
	Internal Resistance	0.001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(750mV)			
	Current	<0.2% Imax(42mA)			
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[4]</sup>	Voltage	<900mVpp, <225mVrms			
	Current	<11mA rms			
Remote Compensation	Voltage	3% Umax(22.5V)			
<b>Sink Function</b>					
Input Voltage	0~750V				
Input Current	0~10A		0~25A		
Input Power	0~325W		0~975W		
Min. Operating Voltage	5V@10A		5V@25A		
CC Resolution	1mA		3mA		

# High Power DC Power Supply

MODEL	SP750VDC6000W	SP750VDC12000W	SP750VDC18000W
CC Accuracy	<0.2% Imax(20mA)	<0.2% Imax(30mA)	<0.2% Imax(50mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% Umax(750mV)		
CP Resolution	0.5W	1.0W	1.5W
CP Accuracy	<0.5% Pmax(1625mW)	<0.5% Pmax(3250mW)	<0.5% Pmax(4875mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analogue input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analogue output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	4242VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	45dB Idle; 71dB Max;	45dB Idle; 73dB Max;	45dB Idle; 75dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x133.0x718.0 mm		
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm		
Unit Weight	27kg	38kg	50kg
Shipping Weight	37kg	48kg	60kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP750VDC24000W	SP750VDC30000W	SP750VDC36000W		
<b>Input</b>					
Voltage <sup>[1]</sup>	200~253VAC 340~460VAC				
Current <sup>[1]</sup>	3P208 L3-60A, L1,L2-103A 3P400 L3-30A, L1,L2-49A				
Frequency	45~65Hz				
Connection	3ph, PE				
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs				
Power Factor	>0.99				
Input Power	3P208 26.8KVAmix, 3P400 26.0KVAmix	3P208 33.5KVAmix, 3P400 32.5KVAmix	3P208 40.2KVAmix, 3P400 39.0KVAmix		
Efficiency <sup>[1]</sup>	3P208 ~92.5%@750V, 3P208 ~91%@84A 3P400 ~92.7%@750V, 3P400 ~92%@84A				
<b>Output</b>					
Voltage Range	0~750V				
Current Range	0~84A	0~105A	0~126A		
Power Range	0~24000W	0~30000W	0~36000W		
Max. Setup Range	Voltage	0~787.5V(0~105%)			
	Current	0~88.2A(0~105%)	0~110.25A(0~105%)		
	Power	0~26400W(0~105%)	0~31500W(0~105%)		
	Internal Resistance	0~268Ω	0~215Ω		
Accuracy	Voltage	<0.1% Umax(750mV)			
	Current	<0.2% Imax(168mA)	<0.2% Imax(210mA)		
	Power	<1%+180W	<1%+240W		
	Internal Resistance	R<2% Rmax, I<0.3% Imax			
Line Regulation	Voltage	<0.02% Umax(150mV)			
	Current	<0.05% Imax(42mA)	<0.05% Imax(52.5mA)		
	Power	<0.05% Pmax			
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(375mV) @Rated Voltage, <0.1% Umax(750mV) @Rated Current			
	Current	<0.15% Imax(126mA)	<0.15% Imax(157.5mA)		
	Power	<0.75%Pmax			
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)			
Drop Time	Voltage	<600ms (No Load) <20ms (Full Load)			
Transient Response Time <sup>[3]</sup>	Voltage	≤2ms/7.5V			
Display Resolution	Voltage	0.01V			
	Current	0.001A			
	Power	1W			
	Internal Resistance	0.001Ω			
Measurement Accuracy	Voltage	<0.1% Umax(750mV)			
	Current	<0.2% Imax(168mA)	<0.2% Imax(210mA)		
	Power	<0.5% Pmax			
	Internal Resistance	<0.4% Rmax			
Ripple <sup>[4]</sup>	Voltage	<1000mVpp, <250mVrms			
	Current	<44mA rms	<55mA rms		
Remote Compensation	Voltage	3% Umax(22.5V)			
<b>Sink Function</b>					
Input Voltage	0~750V				
Input Current	0~35A	0~40A	0~45A		
Input Power	0~1200W	0~1500W	0~1800W		
Min. Operating Voltage	5V@35A	5V@40A	5V@45A		
CC Resolution	4mA	5mA	6mA		

# High Power DC Power Supply

MODEL	SP750VDC24000W	SP750VDC30000W	SP750VDC36000W
CC Accuracy	<0.2% Imax(70mA)	<0.2% Imax(80mA)	<0.2% Imax(90mA)
CV Resolution	<4mV		
CV Accuracy	<0.1% Umax(750mV)		
CP Resolution	2W	2.5W	3W
CP Accuracy	<0.5% Pmax(6000mW)	<0.5% Pmax(7500mW)	<0.5% Pmax(9000mW)
Slew Rate	0.01~2.5A/us		
Dynamic Mode	20ms~50s		
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	4242VDC		
<b>Master/Slave Control</b>			
Series Output	MAX 2 units		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	48dB Idle; 77dB Max;	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x265.0x745.0 mm		
Package Dimensions(WxHxD)	549.0x531.0x946.0 mm		
Unit Weight	75kg	86kg	97kg
Shipping Weight	101kg	112kg	123kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP1000VDC12000W	SP1000VDC24000W	SP1000VDC36000W
<b>Input</b>			
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC	200~253VAC	200~253VAC
Current <sup>[1]</sup>	3P208 L1-60A, L2,L3-38A 3P400 L1-30A, L2,L3-19A	3P208 L3-60A, L1,L2-103A 3P400 L3-30A, L1,L2-49A	3P208 L1, L2,L3-103A 3P400 L1, L2,L3-63A
Frequency	45~65Hz		
Connection	3ph, PE		
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T30A*2pcs		
Power Factor	>0.99		
Input Power	3P208 13.8kVAmax, 3P400 13.4KVAmax	3P208 27.6kVAmax, 3P400 26.8KVAmax	3P208 40.2kVAmax, 3P400 39.0KVAmax
Efficiency <sup>[1]</sup>	3P208 ~92%@1000V, 3P208 ~90%@32A 3P400 ~93.5%@1000V, 3P400 ~92%@32A	3P208 ~92%@1000V, 3P208 ~90%@64A 3P400 ~93.5%@1000V, 3P400 ~92%@64A	3P208 ~92%@1000V, 3P208 ~90%@96A 3P400 ~93.5%@1000V, 3P400 ~92%@96A
<b>Output</b>			
Voltage Range	0~1000V		
Current Range	0~32A	0~64A	0~96A
Power Range	0~12000W	0~24000W	0~36000W
Max. Setup Range	Voltage	0~1050V(0~105%)	
	Current	0~33.6A(0~105%)	0~67.2A(0~105%)
	Power	0~12600W(0~105%)	0~26400W(0~105%)
	Internal Resistance	0~937.5Ω	0~468.75Ω
Accuracy	Voltage	<0.1% Umax(1000mV)	
	Current	<0.2% Imax(64mA)	<0.2% Imax(128mA)
	Power	<1%+90W	<1%+180W
	Internal Resistance	R<2% Rmax, I<0.3% Imax	
Line Regulation	Voltage	<0.02% Umax(200mV)	
	Current	<0.05% Imax(16mA)	<0.05% Imax(32mA)
	Power	<0.05% Pmax	
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(500mV) @Rated Voltage, <0.08% Umax(800mV) @Rated Current	
	Current	<0.15% Imax(48mA)	<0.15% Imax(96mA)
	Power	<0.75%Pmax	<0.15% Imax(144mA)
Rise Time	Voltage	<15ms (No Load) <85ms (Full Load)	<15ms (No Load) <85ms (Full Load)
Drop Time	Voltage	<1700ms (No Load) <15ms (Full Load)	
Transient Response Time <sup>[3]</sup>	Voltage	≤2ms/10V	≤2ms/10V
Display Resolution	Voltage	0.01V	
	Current	0.001A	
	Power	1W	
	Internal Resistance	0.001Ω	
Measurement Accuracy	Voltage	<0.1% Umax(1V)	
	Current	<0.2% Imax(64mA)	<0.2% Imax(128mA)
	Power	<0.5% Pmax	<0.2% Imax(192mA)
	Internal Resistance	<0.4% Rmax	
Ripple <sup>[4]</sup>	Voltage	<1500mVpp, <320mVrms	
	Current	<22mA rms	<26mA rms
Remote Compensation	Voltage	3% Umax(30V)	
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		

# High Power DC Power Supply

MODEL	SP1000VDC12000W	SP1000VDC24000W	SP1000VDC36000W
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)		
Command Response Time	<3ms		
<b>Analog Interface(Optional)</b>			
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power		
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.		
Accuracy U/I/P/R	<0.2% F.S		
Actual Output U/I	<0.2%		
Control Signals	DC ON/OFF, External control Enable/Disable		
Status Signals	CV, OVP, OT		
Sampling Rate of Input & Output	45Hz		
Galvanic Isolation to the Device	4242VDC		
<b>Master/Slave Control</b>			
Series Output	Not supported		
Parallel Output	MAX 16 units		
<b>Environmental</b>			
Operating Temperature	0~40°C		
Storage Temperature	-20~70°C		
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)		
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C		
Altitude	<2000m@40°C		
Fan Noise	45dB Idle; 73dB Max;	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>			
Dimensions(WxHxD)	423.0x133.0x718.0 mm	423.0x265.0x745.0 mm	423.0x265.0x745.0 mm
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm	549.0x531.0x946.0 mm	549.0x531.0x946.0 mm
Unit Weight	38kg	75kg	97kg
Shipping Weight	48kg	101kg	123kg
<b>Miscellaneous</b>			
Over Voltage Category	II		
Protection Class	I		
Pollution Degree	2		
Insulation	AC input <->DC output, 4242VDC, AC input <-> PE, 2818VDC		

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP1500VDC12000W	SP1500VDC18000W	
<b>Input</b>			
Voltage <sup>[1]</sup>	187~253VAC 340~460VAC		
Current <sup>[1]</sup>	3P208 L1-60A, L2,L3-38A 3P400 L1-30A, L2,L3-19A	3P208 L1,L2,L3-60A 3P400 L1,L2,L3-30A	
Frequency	45~65Hz		
Connection	3ph, PE		
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T25A*2pcs	T30A*2pcs	
Power Factor	>0.99		
Input Power	3P208 13.8KVAmax, 3P400 13.4KVAmax	3P208 20.5KVAmax, 3P400 19.9KVAmax	
Efficiency <sup>[1]</sup>	3P208 ~92%@1500V, 3P208 ~90.5%@21A 3P400 ~92.5%@1500V, 3P400 ~91.5%@21A	3P208 ~92%@1500V, 3P208 ~90%@32A 3P400 ~93.5%@1500V, 3P400 ~92%@32A	
<b>Output</b>			
Voltage Range	0~1500V		
Current Range	0~21A	0~32A	
Power Range	0~12000W	0~18000W	
Max. Setup Range	Voltage	0~1575V(0~105%)	
	Current	0~22.05A(0~105%)	
	Power	0~12600W(0~105%)	
	Internal Resistance	0~2142Ω	
Accuracy	Voltage	<0.1% Umax(1.5V)	
	Current	<0.2% Imax(42mA)	<0.2% Imax(64mA)
	Power	<1%+90W	<0.5%+90W
	Internal Resistance	R<2% Rmax, I<0.3% Imax	
Line Regulation	Voltage	<0.02% Umax(300mV)	
	Current	<0.05% Imax(10.5mA)	<0.05% Imax(16mA)
	Power	<0.05% Pmax	
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(750mV) @Rated Voltage, <0.08% Umax(1200mV) @Rated Current	
	Current	<0.15% Imax(31.5mA)	<0.15% Imax(48mA)
	Power	<0.75% Pmax	
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)	<15ms (No Load) <90ms (Full Load)
Drop Time	Voltage	<700ms (No Load) <20ms (Full Load)	<1800ms (No Load) <15ms (Full Load)
Transient Response Time <sup>[3]</sup>	Voltage	≤2ms/15V	
Display Resolution	Voltage	0.01V	
	Current	0.001A	
	Power	1W	0.1W
	Internal Resistance	0.001Ω	
Measurement Accuracy	Voltage	<0.1% Umax(1.5V)	
	Current	<0.2% Imax(42mA)	<0.2% Imax(64mA)
	Power	<0.5% Pmax	
	Internal Resistance	<0.4% Rmax	
Ripple <sup>[4]</sup>	Voltage	<2500mVpp, <600mVrms	<1950mVpp, <650mVrms
	Current	<11mA rms	<22mA rms
Remote Compensation	Voltage	3% Umax(45V)	
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		

# High Power DC Power Supply

MODEL	SP1500VDC12000W	SP1500VDC18000W
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)	
Command Response Time	<3ms	
<b>Analog Interface(Optional)</b>		
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power	
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.	
Accuracy U/I/P/R	<0.2% F.S	
Actual Output U/I	<0.2%	
Control Signals	DC ON/OFF, External control Enable/Disable	
Status Signals	CV, OVP, OT	
Sampling Rate of Input & Output	45Hz	
Galvanic Isolation to the Device	5250VDC	
<b>Master/Slave Control</b>		
Series Output	MAX 2 units	
Parallel Output	MAX 16 units	
<b>Environmental</b>		
Operating Temperature	0~40°C	
Storage Temperature	-20~70°C	
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)	
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C	
Altitude	<2000m@40°C	
Fan Noise	45dB Idle; 73dB Max;	45dB Idle; 75dB Max;
<b>Mechanical</b>		
Dimensions(WxHxD)	423.0x133.0x718.0 mm	
Package Dimensions(WxHxD)	665.0x347.0x1009.0 mm	
Unit Weight	38kg	50kg
Shipping Weight	48kg	60kg
<b>Miscellaneous</b>		
Over Voltage Category	II	
Protection Class	I	
Pollution Degree	2	
Insulation	AC input <->DC output, 5040VDC, AC input <-> PE, 2818VDC	

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP1500VDC24000W	SP1500VDC36000W	
<b>Input</b>			
Voltage <sup>[1]</sup>	200~253VAC 340~460VAC		
Current <sup>[1]</sup>	3P208 L1-60A, L2,L3-103A 3P400 L1-30A, L2,L3-49A	3P208 L1,L2,L3-125A 3P400 L1,L2,L3-63A	
Frequency	45~65Hz		
Connection	3ph, PE		
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs T25A*2pcs		
Power Factor	>0.99		
Input Power	3P208 27.6KVAmax, 3P400 26.8KVAmax	3P208 40.2KVAmax, 3P400 39.0KVAmax	
Efficiency <sup>[1]</sup>	3P208 ~92%@1500V, 3P208 ~90.5%@42A 3P400 ~92.5%@1500V, 3P400 ~91.5%@42A	3P208 ~92%@1500V, 3P208 ~90.5%@63A 3P400 ~92.5%@1500V, 3P400 ~91.5%@63A	
<b>Output</b>			
Voltage Range	0~1500V		
Current Range	0~42A	0~63A	
Power Range	0~24000W	0~36000W	
Max. Setup Range	Voltage	0~1575V(0~105%)	
	Current	0~44.1A(0~105%)	
	Power	0~26400W(0-105%)	
	Internal Resistance	0~1071Ω	
Accuracy	Voltage	<0.1% Umax(1.5V)	
	Current	<0.2% Imax(84mA)	<0.2% Imax(126mA)
	Power	<1%+180W	<1%+360W
	Internal Resistance	R<2% Rmax, I<0.3% Imax	
Line Regulation	Voltage	<0.02% Umax(300mV)	
	Current	<0.05% Imax(21mA)	<0.05% Imax(31.5mA)
	Power	<0.05% Pmax	
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(750mV) @Rated Voltage, <0.08% Umax(1200mV) @Rated Current	
	Current	<0.15% Imax(63mA)	<0.15% Imax(94.5mA)
	Power	<0.75% Pmax	
Rise Time	Voltage	<15ms (No Load) <80ms (Full Load)	
Drop Time	Voltage	<700ms (No Load) <20ms (Full Load)	
Transient Response Time <sup>[3]</sup>	Voltage	≤2ms/15V	
Display Resolution	Voltage	0.01V	
	Current	0.001A	
	Power	1W	
	Internal Resistance	0.001Ω	
Measurement Accuracy	Voltage	<0.1% Umax(1.5V)	
	Current	<0.2% Imax(84mA)	<0.2% Imax(126mA)
	Power	<0.5% Pmax	
	Internal Resistance	<0.4% Rmax	
Ripple <sup>[4]</sup>	Voltage	<2500mVpp, <600mVrms	
	Current	<22mA rms	<33mA rms
Remote Compensation	Voltage	3% Umax(45V)	
<b>General</b>			
Graphic Display	4.3" Color touch LCD		
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware		
Rack Mount Handles	Yes		
FAN	Temperature control		
Protection	OCP, OVP, OPP, OTP, HARD FAIL		

# High Power DC Power Supply

MODEL	SP1500VDC24000W	SP1500VDC36000W
Interface	RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)	
Command Response Time	<3ms	
<b>Analog Interface(Optional)</b>		
Set Value Inputs	Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power	
Actual Value Output	Analog output 0~5V/0~10V to monitor the voltage and current.	
Accuracy U/I/P/R	<0.2% F.S	
Actual Output U/I	<0.2%	
Control Signals	DC ON/OFF, External control Enable/Disable	
Status Signals	CV, OVP, OT	
Sampling Rate of Input & Output	45Hz	
Galvanic Isolation to the Device	5250VDC	
<b>Master/Slave Control</b>		
Series Output	Not supported	
Parallel Output	MAX 16 units	
<b>Environmental</b>		
Operating Temperature	0~40°C	
Storage Temperature	-20~70°C	
Temperature Coefficient	100ppm/°C(voltage), 150ppm/°C(current)	
Relative Humidity	<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C	
Altitude	<2000m@40°C	
Fan Noise	48dB Idle; 80dB Max;	48dB Idle; 82dB Max;
<b>Mechanical</b>		
Dimensions(WxHxD)	423.0x265.0x745.0 mm	
Package Dimensions(WxHxD)	549.0x531.0x946.0 mm	
Unit Weight	75kg	97kg
Shipping Weight	101kg	123kg
<b>Miscellaneous</b>		
Over Voltage Category	II	
Protection Class	I	
Pollution Degree	2	
Insulation	AC input <->DC output, 5040VDC, AC input <-> PE, 2818VDC	

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

# High Power DC Power Supply

MODEL	SP2250VDC18000W	
Input		
Voltage <sup>[1]</sup>	187~253VAC	
	340~460VAC	
Current <sup>[1]</sup>	3P208 L1,L2,L3-60A	
	3P400 L1,L2,L3-30A	
Frequency	45~65Hz	
Connection	3ph, PE	
Fuse (Internal) <sup>[1]</sup>	T50A*2pcs	
	T25A*2pcs	
Power Factor	>0.99	
Input Power	3P208 20.1KVAmix, 3P400 19.5KVAmix	
Efficiency <sup>[1]</sup>	3P208 ~92%@2250V, 3P208 ~90.5%@21A	
	3P400 ~92.5%@2250V, 3P400 ~91.5%@21A	
Output		
Voltage Range	2250V	
Current Range	0~21A	
Power Range	0~18000W	
Max. Setup Range	Voltage	0~2362.5V(0-105%)
	Current	0~22.05A(0-105%)
	Power	0~18900W(0~105%)
	Internal Resistance	0~3214Ω
Accuracy	Voltage	<0.1% Umax/(2.25V)
	Current	<0.2% Imax(42mA)
	Power	<0.5%+90W
	Internal Resistance	R<2% Rmax, I<0.3% Imax
Line Regulation	Voltage	<0.02% Umax(675mV)
	Current	<0.05% Imax(10.5mA)
	Power	<0.05% Pmax
Load Regulation <sup>[2]</sup>	Voltage	<0.05% Umax(1125mV) @Rated Voltage, <0.08% Umax(1800mV) @Rated Current
	Current	<0.15% Imax(31.5mA)
	Power	<0.75% Pmax
Rise Time	Voltage	<15ms (No Load) <85ms (Full Load)
Drop Time	Voltage	<800ms (No Load) <20ms (Full Load)
Transient Response Time <sup>[3]</sup>	Voltage	≤3ms/22.5V
Display Resolution	Voltage	0.01V
	Current	0.001A
	Power	0.1W
	Internal Resistance	0.001Ω
Measurement Accuracy	Voltage	<0.1% Umax(2.25V)
	Current	<0.2% Imax(42mA)
	Power	<0.5% Pmax
	Internal Resistance	<0.4% Rmax
Ripple <sup>[4]</sup>	Voltage	<3200mVpp, <750mVrms
	Current	<11mA rms
Remote Compensation	Voltage	3% Umax(67.5V)
General		
Graphic Display	4.3" Color touch LCD	
Operation Key Feature	Soft keys, Numeric keys, Rotary knob, USB port for transfer and upgrading firmware	
Rack Mount Handles	Yes	
FAN	Temperature control	
Protection	OCP, OVP, OPP, OTP, HARD FAIL	

Model		SP2250VDC18000W
Interface		RS232/RS485/USB(Standard), GPIB/LAN(Optional), CAN(Optional)
Command Response Time		<3ms
Set Value Inputs		Analog input 0~5V/0~10V or 0~5kΩ/0~10kΩ to set 0~105% voltage, current and power
Actual Value Output		Analog output 0~5V/0~10V to monitor the voltage and current.
Accuracy U/I/P/R		<0.2% F.S
Actual Output U/I		<0.2%
Control Signals		DC ON/OFF, External control Enable/Disable
Status Signals		CV, OVP, OT
Sampling Rate of Input & Output		45Hz
Galvanic Isolation to the Device		6300VDC
<b>Master/Slave Control</b>		
Series Output		Not supported
Parallel Output		MAX 16 units
<b>Environmental</b>		
Operating Temperature		0~40°C
Storage Temperature		-20~70°C
Temperature Coefficient		100ppm/°C(voltage), 150ppm/°C(current)
Relative Humidity		<95%RH(non-condensing)@35°C, <80%RH(non-condensing)@40°C
Altitude		<2000m@40°C
Fan Noise		45dB Idle; 75dB Max;
<b>Mechanical</b>		
Dimensions(WxHxD)		423.0x133.0x718.0 mm
Package Dimensions(WxHxD)		665.0x347.0x1009.0 mm
Unit Weight		50kg
Shipping Weight		60kg
<b>Miscellaneous</b>		
Over Voltage Category		II
Protection Class		I
Pollution Degree		2
Insulation		AC input <->DC output, 5040VDC, AC input <-> PE, 2818VDC

[1] For different input voltage standard option must be specified at the time of order as they are installed at the factory prior to shipment.

[2] Load transient from 0% to 100% of rated output.

[3] Test value at 100% voltage and 100% power.

[4] Vrms @ 300kHz, Vpp @ 20MHz, Arms @ 300kHz.

**APM Technologies (Dongguan) Co., Ltd**

---

Add: #7, Link Information Industry Park, Shuilianshan Road,  
Nancheng, Dongguan, Guangdong, China

Tel: +86 769-2202 8588 ext:2892 Fax: +86 769-2202 6771

E-mail: [overseas@apmtech.cn](mailto:overseas@apmtech.cn) Web: [en.apmtech.cn](http://en.apmtech.cn)