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Selection List:

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SP40VDC1000W	40V	40A	1000W	P02
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SP200VDC1000W	200V	8A	1000W	P02
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SPS32VDC1000W	32V	200A	1000W	P06
SPS40VDC1000W	40V	120A	1000W	P06
SPS80VDC1000W	80V	60A	1000W	P06
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SP40VDC2000W	40V	120A	2000W	P08
SP80VDC2000W	80V	60A	2000W	P08
SP120VDC2000W	120V	40A	2000W	P08
SP150VDC2000W	150V	30A	2000W	P09
SP200VDC2000W	200V	24A	2000W	P09
SP600VDC2000W	600V	10A	2000W	P09
SP800VDC2000W	800V	7.5A	2000W	P09
SP32VDC3000W	32V	200A	3000W	P10
SP40VDC3000W	40V	120A	3000W	P10
SP80VDC3000W	80V	60A	3000W	P10
SP120VDC3000W	120V	40A	3000W	P10
SP150VDC3000W	150V	30A	3000W	P11
SP200VDC3000W	200V	24A	3000W	P11
SP600VDC3000W	600V	10A	3000W	P11
SP800VDC3000W	800V	7.5A	3000W	P11
SP32VDC4000W	32V	200A	4000W	P12
SP40VDC4000W	40V	120A	4000W	P12
SP75VDC4000W	75V	60A	4000W	P12
SP120VDC4000W	120V	40A	4000W	P12
SP120VDC4000W SP150VDC4000W	150V	30A	4000W 4000W	
				P13
SP200VDC4000W	200V	24A	4000W	P13
SP600VDC4000W	600V	10A	4000W	P13

■ 600W in 1U

Model	SP20VDC600W	SP32VDC600W	SP40VDC600W	SP75VDC600W	SP150VDC600W	SP200VDC600W
			INPUT			
Input Voltage	90~265VAC					
nput Frequency	47~63Hz					
Power Factor	>0.98					
nput Power	750VA(MAX)					
			OUTPUT			
Output Voltage Range	0~20V	0~32V	0~40V	0~75V	0~150V	0~200V
Output Current Range	0~60A	0~50A	0~40A	0~25A	0~10A	0~8A
Output Power Range	0~600W					
Voltage Load Regulation	10mV	10mV	10mV	10mV	15mV	15mV
Current Load Regulation	60mA	50mA	40mA	25mA	10mA	8mA
Voltage Display Resolution	0.1mV	0.1mV	0.1mV	0.1mV	1mV	1mV
Current Display Resolution	0.2mA	0.2mA	0.2mA	0.2mA	0.2mA	0.1mA
/oltage Programmable Resolution	1.5mV	1.5mV	1.5mV	1.5mV	3mV	3mV
Current Programmable Resolution	2mA	2mA	2mA	1mA	1mA	1mA
	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Setting Accuracy	0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
Voltage Measurement Accuracy [1]		0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Measurement Accuracy	0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
Voltage Ripple [2]	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	120mVp-p 40mVrms	120mVp-p 40mVrms
Current Ripple [8]	60mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	40mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)
ine Regulation(Voltage)	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.02%+8mV	0.02%+8mV
ine Regulation(Current)	4mA	4mA	4mA	4mA	10mA	30mA
/oltage Temperature Coefficient [4]	100ppm/°C					
Current Temperature Coefficient [4]	150ppm/°C					
DVM Resolution	0.1mV	0.1mV	0.1mV	0.1mV	4mV	1mV
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+30mV	0.1%+15mV
Operating Mode	Constant voltage (CV)	/ Constant current (CC)				
Remote Compensation	4V MAX					
Master-slave Control	Yes					
Response (Voltage Increase)	≤10ms	≤12ms	≤10ms	≤10ms	≤25ms	≤30ms
Response (Voltage Drop)	≤150ms (no load) ≤20ms (full load)	≤150ms (no load) ≤20ms (full load)	≤150ms (no load) ≤20ms (full load)	≤160ms (no load) ≤20ms (full load)	≤400ms (no load) ≤32ms (full load)	≤600ms (no load) ≤30ms (full load)
Load Transient Recovery Time (5)	≤2ms	≤2ms	≤2ms	≤2ms	≤3ms	≤3ms
Command Response Time	50ms					
Series Capability [6]	Up to 10 units	Up to 10 units	Up to 10 units	Up to 10 units	Up to 8 units	Up to 6 units
Parallel Capability	Up to 10 units					
Current Sharing [7]	9V	9V	12V	20V	40V	50V
Efficiency (full load)	85%	86%	87%	88%	88%	87%
			OTHER			3.70
Protection Function	OVP/OCP/OTP/OPP/S	CP				
Fold Back Function	Yes					
nput Fuse	20A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	10A, 125VAC/250VAC, fast-acting type	10A, 125VAC/250VA(fast-acting type
Net Weight	9.2kg	9.2kg	9.2kg	8.9kg	9.3kg	9.3kg
Accessories Weight	1.0kg					
Dimensions(WxHxD)	483.0x44.0x531.0 mm					
Communication Modes	1. RS232/RS485/USB/L	LAN; 2. RS232/RS485/	/USB/LAN/GPIB			
				llution degree 2 Installation	on category II Indoor use	
Operating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.					
Operating Environment Cooling Mode	Forced air-cooling		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	nation dogree 2, metallati		

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 1000W in 1U

Model	SP20VDC1000W	SP32VDC1000W	SP40VDC1000W	SP75VDC1000W	SP150VDC1000W	SP200VDC1000W
			INPUT			
nput Voltage	90~265VAC					
nput Frequency	47~63Hz					
Power Factor	>0.98					
nput Power	1300VA(MAX)					
			OUTPUT			
Output Voltage Range	0~20V	0~32V	0~40V	0~75V	0~150V	0~200V
Output Current Range	0~60A	0~50A	0~40A	0~25A	0~10A	0~8A
Output Power Range	0~1000W					
/oltage Load Regulation	10mV	10mV	10mV	10mV	15mV	15mV
Current Load Regulation	60mA	50mA	40mA	25mA	10mA	8mA
/oltage Display Resolution	0.1mV	0.1mV	0.1mV	0.1mV	1mV	1mV
Current Display Resolution	0.2mA	0.2mA	0.2mA	0.2mA	0.2mA	0.1mA
/oltage Programmable Resolution	1.5mV	1.5mV	1.5mV	1.5mV	3mV	3mV
Current Programmable Resolution	2mA	2mA	2mA	1mA	1mA	1mA
/oltage Setting Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Setting Accuracy	0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
oltage Measurement Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Measurement Accuracy	0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
/oltage Ripple [2]	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	120mVp-p 40mVrms	120mVp-p 40mVrms
Current Ripple [3]	60mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	40mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)
ine Regulation(Voltage)	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.02%+8mV	0.02%+8mV
ine Regulation(Current)	4mA	4mA	4mA	4mA	10mA	30mA
/oltage Temperature Coefficient [4]	100ppm/°C					
Current Temperature Coefficient [4]	150ppm/°C					
DVM Resolution	0.1mV	0.1mV	0.1mV	0.1mV	4mV	1mV
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+30mV	0.1%+15mV
Operating Mode	Constant voltage (CV)				0.170 00	0.170 10.111
Remote Compensation	4V MAX					
Master-slave Control	Yes					
Response (Voltage Increase)		≤12ms	≤10ms	≤10ms	≤25ms	≤30ms
Response (Voltage Drop)	≤150ms (no load) ≤20ms (full load)	≤150ms (no load) ≤15ms (full load)	≤150ms (no load) ≤15ms (full load)	≤160ms (no load) ≤15ms (full load)	≤400ms (no load) ≤25ms (full load)	≤600ms (no load) ≤40ms (full load)
oad Transient Recovery Time [5]	≤2ms	≤2ms	≤2ms	≤2ms	≤3ms	≤3ms
Command Response Time	50ms					
Series Capability [6]	Up to 10 units	Up to 10 units	Up to 10 units	Up to 10 units	Up to 8 units	Up to 6 units
Parallel Capability	Up to 10 units					
Current Sharing [7]	9V	9V	12V	20V	40V	50V
Efficiency (full load)	85%	89%	89%			87%
indicitely (run load)	05%	09%	OTHER	89%	89%	0170
Protection Function	OVP/OCP/OTP/OPP/S	CP	OTHER			
Fold Back Function	Yes					
nput Fuse	20A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VA fast-acting type
Net Weight	9.2kg	9.2kg	9.2kg	8.9kg	9.3kg	9.3kg
Accessories Weight	1.0kg					
Dimensions(WxHxD)	483.0x44.0x531.0 mm					
Communication Modes	1. RS232/RS485/USB/L	_AN; 2. RS232/RS485/	USB/LAN/GPIB			
Operating Environment		•		lution degree 2, Installation	on category II Indoor use	
Cooling Mode	Forced air-cooling	Column To	,o oondonoddon,, i ol	.aon dogroo z, modilatio	s sategory II, Illuoor use	
Altitude	2000m					

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

1200W in 1U

			INPUT			
nput Voltage	90~265VAC					
	47~63Hz					
Power Factor	>0.98					
nput Power 1	1500VA(MAX)					
			OUTPUT			
, ,	0~20V	0~32V	0~40V	0~75V	0~150V	0~200V
	0~60A	0~50A	0~40A	0~25A	0~10A	0~8A
- a-p-a-r - c-r-a-r-g-	0~1200W					
Trings Louis Fragment	10mV	10mV	10mV	10mV	15mV	15mV
Current Load Regulation 6	60mA	50mA	40mA	25mA	10mA	8mA
/oltage Display Resolution (0.1mV	0.1mV	0.1mV	0.1mV	1mV	1mV
Current Display Resolution (0.2mA	0.2mA	0.2mA	0.2mA	0.2mA	0.1mA
/oltage Programmable Resolution 1	1.5mV	1.5mV	1.5mV	1.5mV	3mV	3mV
Current Programmable Resolution 2	2mA	2mA	2mA	1mA	1mA	1mA
/oltage Setting Accuracy [1] (0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
3	0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
/oltage Measurement Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Measurement Accuracy (0.1%+60mA	0.1%+50mA	0.1%+40mA	0.1%+25mA	0.1%+10mA	0.1%+8mA
	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	120mVp-p 40mVrms	120mVp-p 40mVrms
2	60mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	40mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)
ine Regulation(Voltage)	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.005%+1mV	0.02%+8mV	0.02%+8mV
ine Regulation(Current)	4mA	4mA	4mA	4mA	10mA	30mA
/oltage Temperature Coefficient [4] 1	100ppm/°C					
Current Temperature Coefficient [4] 1	150ppm/°C					
DVM Resolution (0.1mV	0.1mV	0.1mV	0.1mV	4mV	1mV
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+30mV	0.1%+15mV
Operating Mode (Constant voltage (CV) /	Constant current (CC)				
Remote Compensation 4	4V MAX					
Master-slave Control	Yes					
Response (Voltage Increase) s	≤10ms	≤10ms	≤10ms	≤10ms	≤25ms	≤30ms
	≤150ms (no load) ≤12ms (full load)	≤150ms (no load) ≤12ms (full load)	≤150ms (no load) ≤12ms (full load)	≤160ms (no load) ≤12ms (full load)	≤400ms (no load) ≤21ms (full load)	≤600ms (no load) ≤36ms (full load)
Load Transient Recovery Time [5]	≤2ms	≤2ms	≤2ms	≤2ms	≤3ms	≤3ms
	50ms	1				
Series Capability (6)	Up to 10 units	Up to 8 units	Up to 6 units			
	Up to 10 units					
Current Sharing [7]	9V	9V	12V	20V	40V	50V
Efficiency (full load) 8	84%	84%	89%	90%	89%	90%
(0470	0470	OTHER	3070	0070	3070
Protection Function (OVP/OCP/OTP/OPP/S0	CP				
Fold Back Function	Yes					
	20A, 125VAC/250VAC, fast-acting type	20A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VA fast-acting type			
Net Weight	9.2kg	9.2kg	9.2kg	8.9kg	9.3kg	9.3kg
Accessories Weight 1	1.0kg					
	483.0x44.0x531.0 mm					
Communication Modes 1	1. RS232/RS485/USB/L	.AN; 2. RS232/RS485/	USB/LAN/GPIB			
			%(no condensation); Pol	lution degree 2, Installation	on category II, Indoor use	
	Forced air-cooling					
Journal Mode						

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 1500W in 1U

Model	SP75VDC1500W	SP150VDC1500W	SP200VDC1500W
		INPUT	
nput Voltage	90~265VAC		
nput Frequency	47~63Hz		
Power Factor	>0.98		
nput Power	1900VA(MAX)		
		OUTPUT	
Output Voltage Range	0~75V	0~150V	0~200V
Output Current Range	0~25A	0~10A	0~8A
Output Power Range	0~1500W		
Voltage Load Regulation	10mV	15mV	15mV
Current Load Regulation	25mA	10mA	8mA
Voltage Display Resolution	0.1mV	1mV	1mV
Current Display Resolution	1. 5mA	0.2mA	0.1mA
Voltage Programmable Resolution	3mV	3mV	3mV
Current Programmable Resolution	1mA	1mA	1mA
Voltage Setting Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV
Current Setting Accuracy	0.1%+25mA	0.1%+10mA	0.1%+8mA
Voltage Measurement Accuracy [1]	0.05%+15mV	0.1%+15mV	0.1%+15mV
Current Measurement Accuracy	0.1%+25mA	0.1%+10mA	0.1%+8mA
Voltage Ripple [2]	40mVp-p	120mVp-p	120mVp-p
voltage rappie	6mVrms	40mVrms	40mVrms
Current Ripple [3]	25mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)	40mA (Full Range) 10mA (TYP Value)
Line Regulation(Voltage)	0.005%+2mV	0.02%+8mV	0.02%+8mV
Line Regulation(Current)	4mA	10mA	30mA
Voltage Temperature Coefficient [4]	100ppm/°C		
Current Temperature Coefficient [4]	150ppm/°C		
DVM Resolution	0.1mV	4mV	1mV
DVM Precision [1]	0.05%+15mV	0.1%+30mV	0.1%+15mV
Operating Mode	Constant voltage (CV) / Constant current (CC)		
Remote Compensation	4V MAX		
Master-slave Control	Yes		
Response (Voltage Increase)	≤10ms	≤25ms	≤30ms
Response (Voltage Drop)	≤160ms (no load) ≤10ms (full load)	≤400ms (no load) ≤18ms (full load)	≤600ms (no load) ≤30ms (full load)
Load Transient Recovery Time [5]	≤2ms	≤3ms	≤3ms
Command Response Time	50ms	20113	20113
Series Capability ^[6]	Up to 10 units	Up to 8 units	Up to 6 units
Parallel Capability	Up to 10 units	1.1	1.4
Current Sharing [7]	20V	40V	50V
Efficiency (full load)	91%	90%	91%
Liliciency (Idii load)	3170	OTHER	3170
Protection Function	OVP/OCP/OTP/OPP/SCP	OTHER	
Fold Back Function	Yes		
Input Fuse	30A, 125VAC/250VAC, fast-acting type		
Net Weight	8.9kg	9.3kg	9.3kg
Accessories Weight	1.0kg		
Dimensions(WxHxD)	483.0x44.0x531.0 mm		
Communication Modes		5/USB/LAN/GPIB	
Operating Environment	· ·		ion category II. Indoor use
-		0%(no condensation); Pollution degree 2, Installat	ion category II, muoor use.
Cooling Mode	Forced air-cooling		
Altitude	2000m ut voltage less than 5V offset voltage is 30mV		

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 1600W in 1U

Model	SP32VDC1600W		SP40VDC1600W
	IN	IPUT	
Input Voltage	90~265VAC		
Input Frequency	47~63Hz		
Power Factor	>0.98		
Input Power	2000VA(MAX)		
,	,	TPUT	
Output Voltage Range	0~32V		0~40V
Output Current Range	0~50A		0~40A
Output Power Range	0~1600W		<u> </u>
Voltage Load Regulation	10mV		
Current Load Regulation	50mA		40mA
Voltage Display Resolution	0.1mV		
Current Display Resolution	0.2mA		
Voltage Programmable Resolution			
Current Programmable Resolution			
Voltage Setting Accuracy [1]	0.05%+15mV		
Current Setting Accuracy	0.1%+50mA		0.1%+40mA
Voltage Measurement Accuracy (1)			0.05%+15mV
Current Measurement Accuracy	0.1%+50mA		0.1%+40mA
Current Measurement Accuracy	40mVp-p		0.1%=40IIIA
Voltage Ripple [2]	6mVrms		
Current Ripple [3]	50mA (Full Range) 20mA (TYP Value)		40mA (Full Range) 20mA (TYP Value)
Line Regulation(Voltage)	0.005%+1mV		
Line Regulation(Current)	4mA		
Voltage Temperature Coefficient 14	100ppm/°C		
Current Temperature Coefficient [4]	150ppm/°C		
DVM Resolution	0.1mV		
DVM Precision [1]	0.05%+15mV		
Operating Mode	Constant voltage (CV) / Constant current (CC)		
Remote Compensation	4V MAX		
Master-slave Control	Yes		
Response (Voltage Increase)	≤12ms		≤10ms
Response (Voltage Drop)	≤150ms (no load) ≤10ms (full load)		
Load Transient Recovery Time [5]	≤2ms		
Command Response Time	50ms		
Series Capability [6]	Up to 10 units		
Parallel Capability	Up to 10 units		
Current Sharing [7]	9V		12V
Efficiency (full load)	89%		90%
		THER	
Protection Function	OVP/OCP/OTP/OPP/SCP		
Fold Back Function	Yes		
Input Fuse	30A, 125VAC/250VAC, fast-acting type		
Net Weight	9.2kg		
Accessories Weight	1.0kg		
Dimensions(WxHxD)	483.0x44.0x531.0 mm		
Communication Modes	1. RS232/RS485/USB/LAN; 2. RS232/RS485/USB/LAN	I/GPIB	
Operating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no cor		ution degree 2, Installation category II, Indoor use.
Cooling Mode	Forced air-cooling	,,	
Altitude	2000m		
	ut voltage less than 5V offset voltage is 30mV		

- [1] %output+offset, when output voltage less than 5V, offset voltage is 30mV.

- [2] Vp-p@20MHz, Vrms@1.25MHz.

 The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

 [3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.
- [4] 0~40°C.
- [5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%
- [6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.
- [7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 1000W in 2U(1)

Model	SPS32VDC1000W	SPS40VDC1000W	SPS80VDC1000W	SPS120VDC1000W
		INPUT		
nput Voltage	90~265VAC			
nput Frequency	47~63Hz			
Power Factor	>0.98	>0.98	>0.97	>0.98
Input Power	1500VA(MAX)	1300VA(MAX)	1200VA(MAX)	1300VA(MAX)
		OUTPUT		
Output Voltage Range	0~32V	0~40V	0~80V	0~120V
Output Current Range	0~200A	0~120A	0~60A	0~40A
Output Power Range	0~1000W			
Voltage Load Regulation	30mV	15mV	15mV	15mV
Current Load Regulation	200mA	120mA	60mA	40mA
Voltage Display Resolution	0.1mV	0.1mV	0.1mV	1mV
Current Display Resolution	1mA	1mA	0.2mA	0.1mA
Voltage Programmable Resolution	1mV	1mV	1.5mV	3mV
Current Programmable Resolution	6mA	3mA	2mA	1mA
Voltage Setting Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV
Current Setting Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA
Voltage Measurement Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV
Current Measurement Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA
Voltage Ripple [2]	60mVp-p 10mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	80mVp-p 15mVrms
Current Ripple [3]	400mA (Full Range) 200mA (TYP Value)	150mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 10mA (TYP Value)	60mA (Full Range) 10mA (TYP Value)
Line Regulation(Voltage)	0.01%+8mV	0.02%+8mV	0.01%+8mV	0.02%+8mV
ine Regulation(Current)	200mA	30mA	30mA	40mA
Voltage Temperature Coefficient [4]	100ppm/°C			
Current Temperature Coefficient [4]	150ppm/°C			
DVM Resolution	0.1mV	0.1mV	0.1mV	1mV
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV
Operating Mode	Constant voltage (CV) / Constant cu	rrent (CC)		
Remote Compensation	4V MAX	4V MAX	4V MAX	5V MAX
Master-slave Control	Yes			
Response (Voltage Increase)	≤20ms (no load) ≤40ms (full load)	≤10ms	≤15ms	≤20ms
Response (Voltage Drop)	≤500ms (no load) ≤45ms (full load)	≤350ms (no load) ≤10ms (full load)	≤450ms (no load) ≤30ms (full load)	≤350ms (no load) ≤21ms (full load)
Load Transient Recovery Time [5]	≤2ms			
Command Response Time	50ms			
Series Capability [6]	Up to 10 units			
Parallel Capability	Up to 10 units			
Current Sharing [7]	12V	12V	20V	30V
Efficiency (full load)	85%	87%	89%	88%
		OTHER	0070	
Protection Function	OVP/OCP/OTP/OPP/SCP	- THER		
	No(customers can purchase other accessories	3		
Fold Back Function	to achieve this function, please consult the salesrepresentative for details)	Yes	Yes 20A 135\\AC(250\\AC	Yes
nput Fuse	fast-acting type	fast-acting type	30A, 125VAC/250VAC, fast-acting type	fast-acting type
Net Weight	14.7kg	14.7kg	13.2kg	13.2kg
Accessories Weight	1.0kg			
Dimensions(WxHxD)	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm
Communication Modes	1. RS232/RS485/USB/LAN; 2. RS	232/RS485/USB/LAN/GPIB		
Operating Environment	Temperature 0~40°C, Relative Humi	dity 10%~90%(no condensation);	Pollution degree 2, Installation cate	gory II, Indoor use.
Cooling Mode	Forced air-cooling			
Altitude	2000m			
nput Fuse let Weight Accessories Weight Dimensions(WxHxD) Communication Modes Operating Environment Cooling Mode	salesrepresentative for details) 20A, 125VAC/250VAC, fast-acting type 14.7kg 1.0kg 483.0x87.0x626.0 mm 1. RS232/RS485/USB/LAN; 2. RS Temperature 0~40°C, Relative Humile Forced air-cooling	30A, 125VAC/250VAC, fast-acting type 14.7kg 483.0x87.0x626.0 mm 232/RS485/USB/LAN/GPIB	30A, 125VAC/250VAC, fast-acting type 13.2kg 483.0x87.0x581.0 mm	30A, 125VAC/250VA fast-acting type 13.2kg 483.0x87.0x581.0 n

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 1000W in 2U(2)

Model	SPS150VDC1000W	SPS200VDC1000W	SPS600VDC1000W	SPS800VDC1000W
		INPUT		
nput Voltage	90~265VAC			
nput Frequency	47~63Hz			
Power Factor	>0.98			
nput Power	1300VA(MAX)			
		OUTPUT		
Output Voltage Range	0~150V	0~200V	0~600V	0~800V
Output Current Range	0~30A	0~24A	0~10A	0~7.5A
Output Power Range	0~1000W			
Voltage Load Regulation	15mV	15mV	30mV	200mV
Current Load Regulation	30mA	24mA	10mA	20mA
Voltage Display Resolution	1mV			<u> </u>
Current Display Resolution	0.1mA			
/oltage Programmable Resolution	3mV	4mV	12mV	24mV
Current Programmable Resolution				
Voltage Setting Accuracy [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV
Current Setting Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA
/oltage Measurement Accuracy [1]		0.1%+15mV	0.05%+150mV	0.05%+200mV
Current Measurement Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA
	80mVp-p	150mVp-p	350mVp-p	800mVp-p
Voltage Ripple [2]	15mVrms	30mVrms	40mVrms	200mVrms
Current Ripple [3]	60mA (Full Range) 10mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)
ine Regulation(Voltage)	0.02%+8mV	0.02%+8mV	0.01%+308mV	0.01%+40mV
ine Regulation(Current)	30mA	30mA	15mA	15mA
Voltage Temperature Coefficient [4]	100ppm/°C			
Current Temperature Coefficient [4]				
DVM Resolution	1mV	1mV	12mV	12mV
DVM Precision [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV
Operating Mode	Constant voltage (CV) / Consta		0.0070 1.00	613670 2661111
Remote Compensation	5V MAX			
Master-slave Control	Yes			
Response (Voltage Increase)		≤30ms	≤60ms	≤60ms
Response (Voltage Drop)	≤500ms (no load) ≤25ms (full load)	≤500ms (no load) ≤35ms (full load)	≤800ms (no load) ≤110ms (full load)	≤800ms (no load) ≤60ms (full load)
oad Transient Recovery Time [5]	≤2ms	≤2ms	≤3ms	≤3ms
Command Response Time	50ms		_0110	_0110
Series Capability [6]	Up to 8 units	Up to 6 units	Up to 2 units	Not Recommended
Parallel Capability	Up to 10 units	,		
Current Sharing [7]	40V	50V	200V	250V
Efficiency (full load)				
indicticy (tull load)	88%	88% OTHER	86%	85%
Protection Function	OVP/OCP/OTP/OPP/SCP	OTHER		
Fold Back Function	Yes			
nput Fuse	30A, 125VAC/250VAC, fast-acting type			
Net Weight	13.2kg	14.7kg	13.2kg	13.2kg
Accessories Weight	1.0kg			
Dimensions(WxHxD)	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm
Communication Modes		2. RS232/RS485/USB/LAN/GPIB		
Operating Environment	· ·	Humidity 10%~90%(no condensation): Pollution degree 2 Installation cate	egory II Indoor use
Cooling Mode	Forced air-cooling	Trainially 1070 0070(110 condensation	,, r onduon dogree 2, mstanauon cate	2901y 11, 1110001 030.
Altitude				
nitiude	2000m			

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

2000W in 2U(1)

Model	SP32VDC2000W	SP40VDC2000W	SP80VDC2000W	SP120VDC2000W
		INPUT		
nput Voltage	190~265VAC			
nput Frequency	47~63Hz			
Power Factor	>0.98			
nput Power	2600VA(MAX)	2400VA(MAX)	2400VA(MAX)	2400VA(MAX)
		OUTPUT		
Output Voltage Range	0~32V	0~40V	0~80V	0~120V
Output Current Range	0~200A	0~120A	0~60A	0~40A
Output Power Range	0~2000W			
/oltage Load Regulation	30mV	15mV	15mV	15mV
Current Load Regulation	200mA	120mA	60mA	40mA
/oltage Display Resolution	0.1mV	0.1mV	0.1mV	1mV
Current Display Resolution	1mA		0.2mA	0.1mA
/oltage Programmable Resolution	1mV	1mV	1.5mV	3mV
Current Programmable Resolution	6mA	3mA	2mA	1mA
	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV
	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA
/oltage Measurement Accuracy [1]		0.05%+15mV	0.05%+15mV	0.1%+15mV
	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA
/oltage Ripple [2]	60mVp-p 10mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	80mVp-p 15mVrms
Current Ripple (3)	400mA (Full Range) 200mA (TYP Value)	150mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 10mA (TYP Value)	60mA (Full Range) 10mA (TYP Value)
ine Regulation(Voltage)	0.01%+8mV	0.01%+8mV	0.01%+8mV	0.02%+8mV
ine Regulation(Current)	200mA	30mA	30mA	30mA
/oltage Temperature Coefficient [4]	100ppm/°C			
Current Temperature Coefficient (4)				
DVM Resolution	0.1mV	0.1mV	0.1mV	1mV
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV
Operating Mode	Constant voltage (CV) / Constant cu			
Remote Compensation	4V MAX	4V MAX	4V MAX	5V MAX
Master-slave Control	Yes	17 100 07	17 177 07	5 V 10 II C
Response (Voltage Increase)	≤20ms (no load) ≤30ms (full load)	≤10ms	≤15ms	≤20ms
	≤500ms (no load) ≤30ms (full load)	≤350ms (no load) ≤10ms (full load)	≤450ms (no load) ≤30ms (full load)	≤350ms (no load) ≤21ms (full load)
oad Transient Recovery Time [5]	≤2ms		≤2ms	≤3ms
	50ms			
•	Up to 10 units	Up to 10 units	Up to 10 units	Up to 8 units
	Up to 10 units	Op to 10 units	Op to 10 units	Op to o units
Current Sharing [7]	12V	12V	20V	30V
Efficiency (full load)	91%	88%	89%	89%
indicticy (tuil loau)	J 1 /0	OTHER	03 /0	03/0
Protection Function	OVP/OCP/OTP/OPP/SCP			
TOLOGUOTT UTICUOTT	No(customers can purchase other accessories	3		
Fold Back Function	to achieve this function, please consult the salesrepresentative for details)	Yes	Yes	Yes
nput Fuse	20A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type
let Weight	14.7kg	14.7kg	13.2kg	13.2kg
Accessories Weight	1.0kg			
Dimensions(WxHxD)	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm
Communication Modes	1. RS232/RS485/USB/LAN; 2. RS	232/RS485/USB/LAN/GPIB		
Operating Environment	Temperature 0~40°C, Relative Humi	dity 10%~90%(no condensation);	Pollution degree 2, Installation cate	gory II, Indoor use.
Cooling Mode	Forced air-cooling			
Altitude	2000m			

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

2000W in 2U(2)

Model	SP150VDC2000W	SP200VDC2000W	SP600VDC2000W	SP800VDC2000W	
		INPUT			
nput Voltage	190~265VAC				
nput Frequency	47~63Hz				
Power Factor	>0.98				
nput Power	2400VA(MAX)				
		OUTPUT			
Output Voltage Range	0~150V	0~200V	0~600V	0~800V	
Output Current Range	0~30A	0~24A	0~10A	0~7.5A	
Output Power Range	0~2000W				
Voltage Load Regulation	15mV	15mV	30mV	200mV	
Current Load Regulation	30mA	24mA	10mA	20mA	
Voltage Display Resolution	1mV				
Current Display Resolution	0.1mA				
/oltage Programmable Resolution	3mV	4mV	12mV	24mV	
Current Programmable Resolution	1mA				
Voltage Setting Accuracy [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV	
Current Setting Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA	
Voltage Measurement Accuracy [1]		0.1%+15mV	0.05%+150mV	0.05%+200mV	
Current Measurement Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA	
Voltage Ripple [2]	40mVp-p 6mVrms	150mVp-p 30mVrms	350mVp-p 40mVrms	800mVp-p 200mVrms	
Current Ripple [3]	60mA (Full Range) 10mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	
Line Regulation(Voltage)	0.02%+8mV	0.02%+8mV	0.01%+30mV	0.01%+40mV	
_ine Regulation(Current)	30mA	30mA	15mA	20mA	
Voltage Temperature Coefficient [4]	100ppm/°C				
Current Temperature Coefficient [4]	150ppm/°C				
DVM Resolution	1mV	1mV	12mV	12mV	
DVM Precision [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV	
Operating Mode	Constant voltage (CV) / Consta	ant current (CC)			
Remote Compensation	5V MAX				
Master-slave Control	Yes				
Response (Voltage Increase)		≤30ms	≤60ms	≤60ms	
Response (Voltage Drop)	≤500ms (no load) ≤25ms (full load)	≤500ms (no load) ≤20ms (full load)	≤800ms (no load) ≤90ms (full load)	≤800ms (no load) ≤60ms (full load)	
Load Transient Recovery Time [5]	≤3ms				
Command Response Time	50ms				
Series Capability ^[6]	Up to 8 units	Up to 6 units	Up to 2 units	Not Recommended	
Parallel Capability	Up to 10 units	Op to o unito	Op to 2 units		
Current Sharing [7]	40V	50V	200V	250V	
Efficiency (full load)					
_molerity (full load)	90%	90% OTHER	90%	91%	
Protection Function	OVP/OCP/OTP/OPP/SCP				
Fold Back Function	Yes				
nput Fuse	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	20A, 125VAC/250VAC, fast-acting type	20A, 125VAC/250VAC, fast-acting type	
Net Weight	13.2kg	13.2kg	14.7kg	14.7kg	
Accessories Weight	1.0kg				
Dimensions(WxHxD)	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	
Communication Modes	1. RS232/RS485/USB/LAN;	2. RS232/RS485/USB/LAN/GPIB			
Operating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.				
Cooling Mode	Forced air-cooling				
Altitude	2000m				

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 3000W in 2U(1)

Model	SP32VDC3000W	SP40VDC3000W	SP80VDC3000W	SP120VDC3000W	
		INPUT			
Input Voltage	190~265VAC				
Input Frequency	47~63Hz				
Power Factor	>0.98				
Input Power	3700VA(MAX)	3400VA(MAX)	3400VA(MAX)	3400VA(MAX)	
		OUTPUT			
Output Voltage Range	0~32V	0~40V	0~80V	0~120V	
Output Current Range	0~200A	0~120A	0~60A	0~40A	
Output Power Range	0~3000W				
Voltage Load Regulation	30mV	15mV	15mV	15mV	
Current Load Regulation	200mA	120mA	60mA	40mA	
Voltage Display Resolution	0.1mV	0.1mV	0.1mV	1mV	
Current Display Resolution	1mA	1mA	0.2mA	0.1mA	
Voltage Programmable Resolution	1mV	1mV	1.5mV	3mV	
Current Programmable Resolution	6mA	2mA	2mA	1mA	
Voltage Setting Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	
Current Setting Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA	
Voltage Measurement Accuracy [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	
Current Measurement Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA	
Voltage Ripple [2]	60mVp-p 10mVrms	40mVp-p 6mVrms	40mVp-p 6mVrms	80mVp-p 15mVrms	
Current Ripple [3]	400mA (Full Range) 200mA (TYP Value)	150mA (Full Range) 20mA (TYP Value)	50mA (Full Range) 10mA (TYP Value)	60mA (Full Range) 10mA (TYP Value)	
Line Regulation(Voltage)	0.01%+8mV	0.01%+8mV	0.01%+8mV	0.02%+8mV	
Line Regulation(Current)	200mA	30mA	30mA	30mA	
Voltage Temperature Coefficient [4]	100ppm/°C				
Current Temperature Coefficient [4]	150ppm/°C				
DVM Resolution	0.1mV	0.1mV	0.1mV	1mV	
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	
Operating Mode	Constant voltage (CV) / Constant co	urrent (CC)			
Remote Compensation	4V MAX	4V MAX	4V MAX	5V MAX	
Master-slave Control	Yes				
Response (Voltage Increase)	≤20ms (no load) ≤20ms (full load)	≤10ms	≤15ms	≤20ms	
Response (Voltage Drop)	≤500ms (no load) ≤25ms (full load)	≤350ms (no load) ≤10ms (full load)	≤450ms (no load) ≤30ms (full load)	≤350ms (no load) ≤21ms (full load)	
Load Transient Recovery Time (5)	≤2ms				
Command Response Time	50ms				
Series Capability ^[6]	Up to 10 units				
Parallel Capability	Up to 10 units				
Current Sharing [7]	12V	12V	20V	30V	
Efficiency (full load)	91%	88%	91%	91%	
		OTHER			
Protection Function	OVP/OCP/OTP/OPP/SCP				
Fold Back Function	No(customers can purchase other accessorie to achieve this function, please consult the salesrepresentative for details)	es Yes	Yes	Yes	
Input Fuse	30A, 125VAC/250VAC, fast-acting type	40A, 125VAC/250VAC, fast-acting type	40A, 125VAC/250VAC, fast-acting type	40A, 125VAC/250VAC, fast-acting type	
Net Weight	14.7kg	14.7kg	13.2kg	13.2kg	
Accessories Weight	1.0kg				
Dimensions(WxHxD)	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	
Communication Modes		\$232/RS485/USB/LAN/GPIB	100.0707.07001.0 111111	100.0007.00001.0111111	
Operating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.				
	Forced air-cooling				
Cooling Mode Altitude	·				
Tilliude	2000m				

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 3000W in 2U(2)

Model	SP150VDC3000W	SP200VDC3000W	SP600VDC3000W	SP800VDC3000W	
		INPUT			
nput Voltage	190~265VAC				
nput Frequency	47~63Hz				
Power Factor	>0.98				
nput Power	3400VA(MAX)				
		OUTPUT			
Output Voltage Range	0~150V	0~200V	0~600V	0~800V	
Output Current Range	0~30A	0~24A	0~10A	0~7.5A	
Output Power Range	0~3000W				
/oltage Load Regulation	15mV	15mV	30mV	200mV	
Current Load Regulation	30mA	24mA	10mA	20mA	
/oltage Display Resolution	1mV				
Current Display Resolution	0.1mA				
/oltage Programmable Resolution	3mV	4mV	12mV	24mV	
Current Programmable Resolution					
/oltage Setting Accuracy [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV	
Current Setting Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA	
	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV	
	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA	
/oltage Ripple [2]	80mVp-p 15mVrms	150mVp-p 30mVrms	350mVp-p 40mVrms	800mVp-p 200mVrms	
Current Ripple [3]	60mA (Full Range) 10mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	
ine Regulation(Voltage)	0.02%+8mV	0.02%+8mV	0.01%+30mV	0.01%+40mV	
ine Regulation(Current)	30mA	30mA	15mA	20mA	
/oltage Temperature Coefficient [4]	100ppm/°C				
Current Temperature Coefficient [4]	150ppm/°C				
DVM Resolution	1mV	1mV	12mV	12mV	
DVM Precision [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV	
Operating Mode	Constant voltage (CV) / Const	ant current (CC)			
Remote Compensation	5V MAX				
Master-slave Control	Yes		<u> </u>		
Response (Voltage Increase)	≤25ms	≤30ms	≤60ms	≤60ms	
Response (Voltage Drop)	≤500ms (no load) ≤25ms (full load)	≤500ms (no load) ≤20ms (full load)	≤800ms (no load) ≤75ms (full load)	≤800ms (no load) ≤60ms (full load)	
oad Transient Recovery Time [5]	≤2.5ms	≤3ms	≤3ms	≤3ms	
Command Response Time	50ms				
Series Capability [6]	Up to 8 units	Up to 6 units	Up to 2 units	Not Recommended	
Parallel Capability	Up to 10 units				
Current Sharing [7]	40V	50V	200V	250V	
Efficiency (full load)	92%	91%	91%	91%	
		OTHER			
rotection Function	OVP/OCP/OTP/OPP/SCP				
Fold Back Function	Yes				
nput Fuse	40A, 125VAC/250VAC, fast-acting type	40A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	30A, 125VAC/250VAC, fast-acting type	
let Weight	13.2kg	13.2kg	14.7kg	14.7kg	
Accessories Weight	1.0kg				
Dimensions(WxHxD)	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	
Communication Modes	1. RS232/RS485/USB/LAN;	2. RS232/RS485/USB/LAN/GPIB			
Operating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.				
1					

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

■ 4000W in 2U(1)

Model	SP32VDC4000W	SP40VDC4000W	SP75VDC4000W	SP120VDC4000W	
		INPUT			
Input Voltage	190~265VAC				
Input Frequency	47~63Hz				
Power Factor	>0.98				
Input Power	4800VA(MAX)	4500VA(MAX)	4500VA(MAX)	4500VA(MAX)	
		OUTPUT			
Output Voltage Range	0~32V	0~40V	0~75V	0~120V	
Output Current Range	0~200A	0~120A	0~60A	0~40A	
Output Power Range	0~4000W				
Voltage Load Regulation	30mV	15mV	15mV	15mV	
Current Load Regulation	200mA	120mA	60mA	40mA	
Voltage Display Resolution	0.1mV	0.1mV	0.1mV	1mV	
Current Display Resolution	1mA	1mA	0.1mA	0.1mA	
Voltage Programmable Resolution	1mV	1mV	2mV	3mV	
Current Programmable Resolution	6mA	3mA	2mA	1mA	
Voltage Setting Accuracy [1]	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV	
Current Setting Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA	
Voltage Measurement Accuracy [1]	0.05%+15mV	0.05%+15mV	0.1%+15mV	0.1%+15mV	
Current Measurement Accuracy	0.1%+200mA	0.1%+120mA	0.1%+60mA	0.1%+40mA	
Voltage Ripple [2]	60mVp-p	40mVp-p	40mVp-p	80mVp-p	
	10mVrms	6mVrms	8mVrms	15mVrms	
Current Ripple [3]	400mA (Full Range) 200mA (TYP Value)	150mA (Full Range) 20mA (TYP Value)	60mA (Full Range) 10mA (TYP Value)	60mA (Full Range) 10mA (TYP Value)	
Line Regulation(Voltage)	0.01%+8mV	0.01%+8mV	0.01%+8mV	0.02%+8mV	
Line Regulation(Current)	200mA	30mA	30mA	30mA	
Voltage Temperature Coefficient [4]	100ppm/°C				
Current Temperature Coefficient [4]	150ppm/°C				
DVM Resolution	0.1mV	0.1mV	0.1mV	1mV	
DVM Precision [1]	0.05%+15mV	0.05%+15mV	0.05%+15mV	0.1%+15mV	
Operating Mode	Constant voltage (CV) / Constant co	urrent (CC)			
Remote Compensation	4V MAX	4V MAX	5V MAX	5V MAX	
Master-slave Control	Yes				
Response (Voltage Increase)	≤20ms (no load) ≤20ms (full load)	≤10ms	≤15ms	≤20ms	
Response (Voltage Drop)	≤500ms (no load) ≤20ms (full load)	≤350ms (no load) ≤10ms (full load)	≤450ms (no load) ≤20ms (full load)	≤350ms (no load) ≤21ms (full load)	
Load Transient Recovery Time [5]	, ,	2 Torris (Iuli Ioau)	szonis (iuli loau)	32 mis (iuii ioau)	
·	≤2ms				
Command Response Time	50ms Up to 10 units				
Series Capability ^[6] Parallel Capability	Up to 10 units				
Current Sharing [7]	12V	12V	20V	30V	
Efficiency (full load)	91%	91% OTHER	91%	92%	
D. 1	OVID/OOD/OTD/OSS/OOS	OTHER			
Protection Function	OVP/OCP/OTP/OPP/SCP No(customers can purchase other accessories)	as a second			
Fold Back Function	to achieve this function, please consult the salesrepresentative for details)	Yes	Yes	Yes	
Input Fuse	40A, 125VAC/250VAC, fast-acting type				
Net Weight	14.7kg	14.7kg	13.2kg	13.2kg	
Accessories Weight	1.0kg				
Dimensions(WxHxD)	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	
Communication Modes		S232/RS485/USB/LAN/GPIB			
	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.				
Operating Environment					
Operating Environment Cooling Mode	Forced air-cooling	many 1070 0070(no contachedae.			

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.

4000W in 2U(2)

Model	SP150VDC4000W	SP200VDC4000W	SP600VDC4000W	SP800VDC4000W		
		INPUT				
Input Voltage	190~265VAC					
nput Frequency	47~63Hz					
Power Factor	>0.98					
nput Power	4500VA(MAX)					
		OUTPUT				
Output Voltage Range	0~150V	0~200V	0~600V	0~800V		
Output Current Range	0~30A	0~24A	0~10A	0~7.5A		
Output Power Range	0~4000W					
/oltage Load Regulation	15mV	25mV	30mV	200mV		
Current Load Regulation	30mA	24mA	10mA	20mA		
/oltage Display Resolution	1mV					
Current Display Resolution	0.1mA					
oltage Programmable Resolution	3mV	4mV	12mV	24mV		
Current Programmable Resolution	1mA					
/oltage Setting Accuracy [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV		
Current Setting Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA		
oltage Measurement Accuracy [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV		
Current Measurement Accuracy	0.1%+30mA	0.1%+24mA	0.1%+10mA	0.1%+7.5mA		
/oltage Ripple [2]	80mVp-p 15mVrms	150mVp-p 30mVrms	350mVp-p 40mVrms	800mVp-p 200mVrms		
Current Ripple [3]	60mA (Full Range) 10mA (TYP Value)	50mA (Full Range) 20mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)	25mA (Full Range) 10mA (TYP Value)		
ine Regulation(Voltage)	0.02%+8mV	0.02%+8mV	0.01%+30mV	0.01%+40mV		
ine Regulation(Current)	30mA	30mA	15mA	20mA		
oltage Temperature Coefficient [4]	100ppm/°C					
Current Temperature Coefficient [4]	150ppm/°C					
OVM Resolution	1mV	1mV	12mV	12mV		
OVM Precision [1]	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV		
Operating Mode	Constant voltage (CV) / Constant of	current (CC)				
temote Compensation	5V MAX					
laster-slave Control	Yes					
Response (Voltage Increase)	≤25ms	≤30ms	≤60ms	≤60ms		
Response (Voltage Drop)	≤500ms (no load) ≤25ms (full load)	≤500ms (no load) ≤20ms (full load)	≤800ms (no load) ≤60ms (full load)	≤800ms (no load) ≤60ms (full load)		
oad Transient Recovery Time (5)	≤2.5ms	≤3ms	≤3ms	≤3ms		
Command Response Time	50ms					
Series Capability [6]	Up to 8 units	Up to 6 units	Up to 2 units	Not Recommended		
arallel Capability	Up to 10 units					
Current Sharing [7]	40V	50V	200V	250V		
Efficiency (full load)	93%	92%	92%	92%		
		OTHER				
rotection Function	OVP/OCP/OTP/OPP/SCP					
Fold Back Function	Yes					
nput Fuse	40A, 125VAC/250VAC, fast-acting type					
let Weight	13.2kg	13.2kg	14.7kg	14.7kg		
Accessories Weight	1.0kg					
Dimensions(WxHxD)	483.0x87.0x581.0 mm	483.0x87.0x581.0 mm	483.0x87.0x626.0 mm	483.0x87.0x626.0 mm		
Communication Modes	1. RS232/RS485/USB/LAN; 2. RS232/RS485/USB/LAN/GPIB					
perating Environment	Temperature 0~40°C, Relative Humidity 10%~90%(no condensation); Pollution degree 2, Installation category II, Indoor use.					
Cooling Mode	Forced air-cooling					
Altitude	2000m					

^{[1] %}output+offset, when output voltage less than 5V, offset voltage is 30mV.

^[2] Vp-p@20MHz, Vrms@1.25MHz.

The 20V/32V/40V/75V models voltage ripple is 50mVp-p/6mVrms @ 1V. For the 600V and 800V models, the voltage ripple from 0~5V is out of the range show above.

[3] Arms@1.25MHz, the TYP Value is measured at the rated output voltage with 100% resistive load, and the measured value at full range of output voltage with 100% resistive load. is less than the Full Range value.

^{[4] 0~40°}C.

^[5] Time for output voltage to recover within 0.5%(0.75% @800V models) of its rated output for a load change from 10% to 90% of its rated output current. Voltage set point from 10%

^[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.

^[7] Current Share error le<(lav*2.5% + 5% F.S) A, F.S is the full scale of the current. lav=lsum/n, where lav is average current, Isum is total current and n is number of parallel units. Note: Output voltage must be higher than 30% of maximum output voltage when Current Share function properly. All specifications are subject to change without notice.