

# Multifunctional Programmable DC Power

## 2000W in 2U(2)

Model	SP150VDC2000W	SP200VDC2000W	SP600VDC2000W	SP800VDC2000W
INPUT				
Input Voltage	190~265VAC			
Input Frequency	47~63Hz			
Power Factor	>0.98			
Input 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			
Voltage Programmable Resolution	3mV	4mV	12mV	24mV
Current Programmable Resolution	1mA			
Voltage Setting Accuracy <sup>[1]</sup>	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 <sup>[1]</sup>	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
Voltage Ripple <sup>[2]</sup>	40mVp-p 6mVrms	150mVp-p 30mVrms	350mVp-p 40mVrms	800mVp-p 200mVrms
Current Ripple <sup>[3]</sup>	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
Line Regulation(Current)	30mA	30mA	15mA	20mA
Voltage Temperature Coefficient <sup>[4]</sup>	100ppm/°C			
Current Temperature Coefficient <sup>[4]</sup>	150ppm/°C			
DVM Resolution	1mV	1mV	12mV	12mV
DVM Precision <sup>[1]</sup>	0.1%+15mV	0.1%+15mV	0.05%+150mV	0.05%+200mV
Operating Mode	Constant voltage (CV) / Constant current (CC)			
Remote Compensation	5V MAX			
Master-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) ≤90ms (full load)	≤8200ms (no load) ≤60ms (full load)
Load Transient Recovery Time <sup>[5]</sup>	≤3ms			
Command Response Time	50ms			
Series Capability <sup>[6]</sup>	Up to 8 units	Up to 6 units	Up to 2 units	Not Recommended
Parallel Capability	Up to 10 units			
Current Sharing <sup>[7]</sup>	40V	50V	200V	250V
Efficiency (full load)	90%	90%	90%	91%
OTHER				
Protection Function	OVP/OCP/OTP/OPP/SCP			
Fold Back Function	Yes			
Input 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.  
[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% to 90% of rated output.  
[6] The communication must insulated users from output when using remote control and the output voltage exceeds 800VDC.  
[7] Current Share error  $I_{e}<(\frac{I_{av}}{I_{sum}} \times 2.5\% + 5\% \text{ F.S})$  A, **F.S** is the full scale of the current.  $I_{av}=I_{sum}/n$ , where  $I_{av}$  is average current,  $I_{sum}$  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.