

SPS Series Single Output Power Supply Technical Specifications

The instrument must be operated continuously for more than 30 minutes at the specified operating temperature to achieve the following specifications:

Specifications	SPS3051	SPS6051	SPS3081	SPS6081	SPS8081
Input Characteristics					
Supply Voltage	110Vac±10% or 220Vac±10% (please refer the power information on the back cover)		85V-265V		
Input Frequency	50~60Hz		45~65Hz		
Full Input Current	≤3A	≤3A	≤3A	≤3A	≤3A
No-Load Input Current	≤300mA	≤300mA	≤300mA	≤300mA	≤300mA
Input Fuse	250V,F5A	250V,F5A	250V,F5A	250V,F5A	250V,F5A
Rated Output					
Voltage	0~30V	0~60V	0~30V	0~60V	0~80V
Current	0~5A	0~5A	0~8A	0~8A	0~8A
Power	150W	150W	120W	120W	120W
Efficiency(110 Vac, rated load)	82%	82%	82%	82%	82%
Efficiency(220 Vac, rated load)	88%	88%	88%	88%	88%
Regulation(CV)					
Load	≤30mV	≤30mV	≤30mV	≤30mV	≤30mV
Power	≤20mV	≤20mV	≤20mV	≤20mV	≤20mV
Regulation(CC)					
Load	≤30mV	≤30mA	≤30mA	≤30mV	≤30mV
Power	≤20mV	≤20mA	≤20mA	≤20mV	≤20mV
Ripple & Noise (Noise bandwidth 20MHz, ripple bandwidth 1MHz, connect 10uF electrolytic capacitor in parallel with 0.1uF ceramic capacitor to the output terminal for testing)					
Voltage(Vp-p)	≤30mV	≤30mV	≤30mV	≤30mV	≤30mV
Voltage(rms)	≤5mV	≤5mV	≤5mV	≤10mV	≤10mV
Current(Ap-p)	≤10mA	≤10mA	≤10mA	≤20mA	≤20mA
Setting resolution					
Voltage	10mV	10mV	10mV	10mV	10mV
Current	1mA	1mA	1mA	1mA	1mA
Readback Resolution					
Voltage	10mV	10mV	10mV	10mV	10mV
Current	1mA	1mA	1mA	1mA	1mA

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Setting resolution					
Voltage	≤0.05%+20mV	≤0.05%+20mV	≤0.1%+20mV	≤0.1%+20mV	≤0.1%+20mV
Current	≤0.05%+20mA	≤0.05%+20mA	≤0.2%+20mA	≤0.1%+20mA	≤0.1%+20mA
Readback Resolution					
Voltage	≤0.05%+20mV	≤0.05%+20mV	≤0.1%+20mV	≤0.1%+20mV	≤0.1%+20mV
Current	≤0.05%+20mA	≤0.05%+20mA	≤0.2%+20mA	≤0.1%+20mA	≤0.1%+20mA
Response time					
Transient recovery time (50%~100% rated load)	≤1.0ms				
Protection function					
OVP	0~32V	0~62V	0~32V	0~62V	0~82V
OCP	0~5.2A	0~5.2A	0~8.2A	0~8.2A	0~8.2A
OTP	85℃	85℃	85℃	85℃	85℃
Temperature coefficient of output					
Voltage	100ppm/℃				
Current	200ppm/℃				
Temperature coefficient of readback value					
Voltage	100ppm/℃				
Current	200ppm/℃				
Display					
Display Type	2.8 inches color LCD				
Resolution	240(horizontal) × 320(vertical) pixels				
Color	65536 color,TFT				
Environment					
Temperature	Working Temperature:0℃~40℃ Storage Temperature:-20℃~60℃				
Relative Humidity	≤90%RH; no condensation				
Height	2,000 meters				
Cooling	Natural cooling				
Other					
Communication Port	USB communication, compatible with SCPI communication protocol				
Dimension	82mm(Width)× 142mm(Height)×226mm(Depth)				
Weight	Approx. 1.9 kg				



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