

SPS50 Series

Single, dual and triple output 50W AC/DC Power Supplies

Red Rocket's Versatile brand SPS50 family of open-frame power supplies come in single, dual and triple DC output packages ranging from 3.3v to 48v. The SPS50 fixed frequency family ranges from 40 watts to 50 watts in total output power (50w with 6 CFM fan) and features 90-264v universal inputs and meets UL, NEMKO and CSA safety standards.

With an industry standard footprint of 4.25" x 2.5"x 1.313" and over 75% conversion efficiency, SPS50 is a workhorse power supply with high reliability, plug and play solution for wide range of products in the industrial, LAN/WAN, multimedia and general electronics marketplace. An optional cover kit is available. The SPS50 is ideal for 1U (1.75") height and smaller applications where space is a premium and thermal management is key. The SPS50 family is RoHs compliant and our factory is ISO 14001 environmentally approved. Worldwide safety standards and approvals apply to include UL, c-UL, NEMKO, IEC60950 and EN60950.



Features :

- > Low cost 50W industry standard package
- > EN55022-B. FCC Part 15 level B
- > UL, NEMKO, CSA safety approvals
- > Universal input
- > 3.3V output model
- > Fixed switching frequency

Model Number	Output	Output Voltage	Output current Max	Fan	Peak
SPS50-1001	V1	3.3V	8.0A	10.0A	10.0A
SPS50-1002	V1	5V	8.0A	10.0A	10.0A
SPS50-1003	V1	12V	3.3A	4.0A	4.0A
SPS50-1004	V1	15V	2.6A	3.3A	3.3A
SPS50-1005	V1	24V	1.6A	2.0A	2.0A
SPS50-1006	V1	48V	0.8A	1.0A	1.0A
SPS50-2001	V1 V2	5V 12V	4.0A 2.0A	5.0A 2.5A	5.0A 2.5A
SPS50-2005	V1 V2	5V 24V	4.0A 1.0A	5.0A 1.5A	5.0A 1.5A
SPS50-3001	V1 V2 V3	5V 12V -12V	4.0A 1.5A 0.5A	4.0A 1.5A 0.5A	5.0A 2.0A 1.0A
SPS50-3002	V1 V2 V3	5V 15V -15V	4.0A 1.2A 0.4A	5.0A 1.6A 1.0A	5.0A 1.6A 1.0A
SPS50-3003	V1 V2 V3	5V 12V -5V	4.0A 2.0A 0.4A	5.0A 2.5A 1.0A	5.0A 2.5A 1.0A
SPS50-3004	V1 V2 V3	5V 24V -12V	4.0A 0.8A 0.5A	5.0A 1.0A 1.0A	5.0A 1.0A 1.0A
SPS50-3005	V1 V2 V3	3.3V 5V -12V	2.8A 4.0A 0.5A	4.0A 5.0A 1.0A	4.0A 5.0A 1.0A
ACC-SPS50- 3 COVER KIT					

MECHANICAL SPECIFICATIONS	
AC Input Connector J1	Housing Molex 09-50-8031 Pins Molex 08-52-0072 Or Equivalent
DC Output connector J2	Housing Molex 09-50-8001 Pins Molex 08-52-0072 Or Equivalent
Ground Connector J3	Amp 826708-1— Or Equivalent
Weight	10 oz (200 g)

ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	Full Power ¹²³ Derate to 50% load	0 to 50° C 51 to 70° C
Storage Temperature		-40 to 85° C
Cooling	Convection Fan	40W 50W
Relative humidity	Non condensing	5% to 95%, max
MTBF	Demonstrated	> 150,000 hrs
Switching Frequency		65kHz, Fixed

1. Continuous output power I limited to 40 W w/ convention cooling
2. Continuous output power is limited to 50W w/ 6CFM fan cooling
3. Peak loading can be applied for 60 secs with <5% duty cycle

All Red Rocket, Inc. EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.redrocketpower.com and contact us at: sales@redrocketpower.com or by calling +1 805-409-0909 today. © 2008, Red Rocket, Inc. EOS brand power supplies and patents are owned exclusively by Red Rocket, Inc. All Rights Reserved.

SPS50 Series

Single, dual and triple output 50W AC/DC Power Supplies

Versatile
POWER

OUTPUT SPECIFICATIONS		
Output Power	Convection 6CFM Fan	40W 50W
Hold Up Time	115V/ 230V at 40W	10ms/20ms
Total regulation Min to full load	V1 V2, V3	±2% ±5%
Transient Response	25% step at 0.1A/μ Voltage Deviation Recovery Time	±5% <1ms
OVP	V1 only 5V	135%, ±15%
Short Circuit Protection	Auto Recovery	Short Term
Ripple and Noise ¹ Pk-pk	3.3V Output 5V, 12V, 15V, 24v	50mV 1%
Output rise time		<1.0s
Minimum Load	Main Output	10%

OUTPUT CONNECTOR J2			
	Single	Dual	Triple
Pin 1	V1	V2	V2
Pin 2	V1	V1	V1
Pin 3	V1	V1	V1
Pin 4	Return	Return	Return
Pin 5	Return	Return	Return
Pin 6	Return	NC	V3

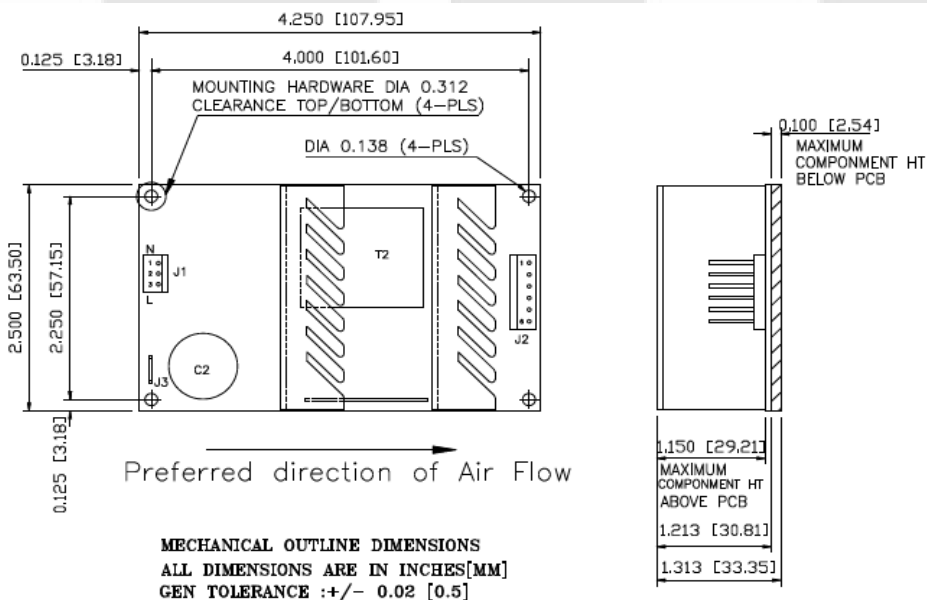
INPUT SPADE CONNECTOR J3	
GND	Ground

INPUT CONNECTOR J1	
Pin 1	Neutral
Pin 2	Line

EMC AND SAFETY SPECIFICATIONS	
CE Mark	Complies with the LVD
EMC	EN5022-B, CISPR22-B, FCC Part 15 Class B,
Agency Approvals	NEMKO , UL, c-UL
Safety Standards	IEC60950, EN60950, UL1950
Safety file numbers	NEMKO: P05204992 UL: E136019
Isolation Voltage	Input to output 3000VAC

INPUT SPECIFICATIONS		
Input Voltage	Universal	90-264 VAC 120-370 VDC
Efficiency	Typical	75%
Input Frequency		47-63 Hz
Input Current	Full Load at low line	1.0 Arms, max
Inrush Current	High Line, cold start	32A, max
Leakage Current		<0.6mA

1- Ripple and noise measured at J2 with 10μF tantalum and 0.1μ



All Red Rocket, Inc. EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.redrocketpower.com and contact us at: sales@redrocketpower.com or by calling +1 805-409-0909 today. © 2008, Red Rocket, Inc. EOS brand power supplies and patents are owned exclusively by Red Rocket, Inc. All Rights Reserved.

4EM-08-079

39-DE60-42847-002/A

red rocket
inc.