

# 25 WATTS

## SINGLE/MULTI OUTPUT AC-DC

### FEATURES:

- Compact 2.25" x 4.00" x .96" Size
- 2 Year Warranty
- Universal 85-264V Input
- Single, Dual or Triple Outputs
- 0-70°C Operating Temperature
- IEC 60601-1 3<sup>rd</sup> ed. Medical Cert.
- IEC 60950-1 2<sup>nd</sup> ed. ITE Certification
- IEC 60601-1-2 4<sup>th</sup> ed. EMC
- Class B Emissions per EN55011/32
- RoHS Compliant
- Optional Chassis/Cover



CHASSIS/COVER



OPEN FRAME

### SAFETY SPECIFICATIONS

	Underwriters Laboratories File E137708/E140259	UL 60950-1:2007, 2 <sup>nd</sup> Edition AAMI/ANSI ES60601-1:2005/(R) 2012
		CB Reports/Certificates (including all National and Group Deviations) IEC 60950-1/A2:2013, 2 <sup>nd</sup> Edition IEC 60601-1:2005/A1:2012
	UL Recognition Mark for Canada File E137708/E140259	CAN/CSA-C22.2 No. 60950-1-07, 2 <sup>nd</sup> Edition CAN/CSA-C22.2 No. 60601-1:2014
	TUV	EN 60950-1/A2:2013, 2 <sup>nd</sup> Edition EN 60601-1:2006/A1:2013
	Low Voltage Directive RoHS Directive (Recast)	(2014/35/EU of February 2014) (2011/65/EU of June 2011)

### MODEL LISTING

MODEL NO.	OUTPUT 1	OUTPUT 2	OUTPUT 3
SRP-25-3001	+5V/3A	+12V/1.5A	-12V/0.5A
SRP-25-3002	+5V/3A	+15V/1.5A	-15V/0.5A
SRP-25-3003	3.3V/2.5A	6V/2A	5V/1A
SRP-25-2001	+5V/3A	+24V/1A	
SRP-25-2002	+5V/3A	+12V/1.5A	
SRP-25-2003	+5V/3A	-5V/2A	
SRP-25-2004	+12V/1.5A	-12V/1.5A	
SRP-25-2005	+15V/1.5A	-15V/1.5A	
SRP-25-1001	3.3V/6A		
SRP-25-1002	5V/5A		
SRP-25-1003	12V/2.08A		
SRP-25-1004	15V/1.67A		
SRP-25-1005	24V/1.04A		
SRP-25-1006	48V/0.52A		

### ORDERING INFORMATION

Consult factory for alternate output configurations.  
Consult factory for positive, negative or floating outputs.  
Please specify the following optional features when ordering:

CH - Chassis  
CO - Cover  
I/O - Isolated Outputs  
TS - Terminal Strip

# SRP-25

## OUTPUT SPECIFICATIONS

Total Output Power <sup>(1)</sup> (See Derating Chart)	25W (20W, 1001)	
Output Voltage Centering	Output 1:	± 0.25% (All outputs at 50% load)
	Output 2:	± 5.0%
	Output 3:	± 2.0%
Output Voltage Adjust Range	Output 1:	95 - 105%
Load Regulation	Output 1:	0.5% (0-100% load change)
	Output 2:	5.0% (10-100% load change)
	Output 2: (2003)	6.0% (30-100% load change)
	Output 3:	1.0% (0-100% load change)
Source Regulation	Outputs 1 - 3:	0.5%
Cross Regulation	Output 2:	5.0% (Output 1 load varied 50-100%)
	Output 3:	2.0%
Output Noise	Outputs 1-3	1.0%
Turn on Overshoot	None	
Transient Response	Outputs 1 - 3	
Voltage Deviation	5.0%	
Recovery Time	1ms	
Load Change	50% to 100%	
Output Overvoltage Protection (optional)	Output 1:	110% to 150%
Output Overcurrent Protection	Output 3:	110% Min.
Output Overpower Protection	Outputs 1 & 2:	110% Min. Outputs cycle on/off, auto recovery
Hold Up Time	10ms min., 25W Output, 120V Input	
Start Up Time	1 Second	

## INPUT SPECIFICATIONS

Protection Class	I
Source Voltage	85 - 264 Volts AC
Frequency Range	47 - 63 Hz
Source Current	
True RMS	0.8A at 85V Input
Peak Inrush	30 A
Efficiency	0.66 - 0.72 (Varies by model)

## ENVIRONMENTAL SPECIFICATIONS

Ambient Operating	0°C to + 70°C
Temperature Range	Derating: See Power Rating Chart
Ambient Storage Temp. Range	- 40°C to + 85°C
Temperature Coefficient	Outputs 1 - 3: 0.02%/°C

## GENERAL SPECIFICATIONS

Means of Protection	
Primary to Secondary	2MOPP (Means of Patient Protection)
Primary to Ground	1MOPP (Means of Patient Protection) (1MOOP-Singles)
Secondary to Ground	Operational Insulation(Consult factory for 1MOOP or 1MOPP)
Dielectric Strength <sup>(8, 9)</sup>	
Reinforced Insulation	5656 VDC, Primary to Secondary
Basic Insulation	2121 VDC, Primary to Ground
Operational Insulation	707 VDC, Secondary to Ground
Leakage Current	
Earth Leakage	<300µA NC, <1000µA SFC
Touch Current	<100µA NC, <500µA SFC
Mean-Time Between Failures	100,000 Hours min., MIL-HDBK-217F, 25° C, GB
Weight	0.30 Lbs. Open Frame 0.62 Lbs. Chassis and Cover

## EMC SPECIFICATIONS (IEC 60601-1-2:2014, 4<sup>TH</sup> ed./IEC 61000-6-2:2005)

Electrostatic Discharge	EN 61000-4-2	±8kV contact / ±15kV air discharge	A
Radiated Electromagnetic Field	EN 61000-4-3	80MHz-2.7GHz, 10V/m, 80% AM	A
Electrical Fast Transients/Bursts	EN 61000-4-4	±2 KV, 5KHz/100KHz	A
Surge Immunity	EN 61000-4-5	±2 KV line to earth / ±1 KV line to line	A
Conducted Immunity	EN 61000-4-6	0.15 to 80MHz, 10V, 80% AM	A
Magnetic Field Immunity	EN 61000-4-8	30A/m, 60 Hz.	A
Voltage Dips	EN 61000-4-11	0% U <sub>r</sub> , 0.5 cycles, 0-315° 100/240V A/A 0% U <sub>r</sub> , 1 cycles, 0° 100/240V A/A 40% U <sub>r</sub> , 10/12 cycles, 0° 100/240V B/A 70% U <sub>r</sub> , 25/30 cycles, 0° 100/240V B/A	
Voltage Interruptions	EN 61000-4-11	0% U <sub>r</sub> , 300 cycles, 0° 100/240V B/B	
Radiated Emissions	EN 55011/32	Class B	
Conducted Emissions	EN 55011/32	Class B	
Harmonic Current Emissions	EN 61000-3-2	Class A	
Voltage Fluctuations/Flicker	EN 61000-3-3	Compliant	

All specifications are maximum at 25°C/25W unless otherwise stated, may vary by model and are subject to change without notice.

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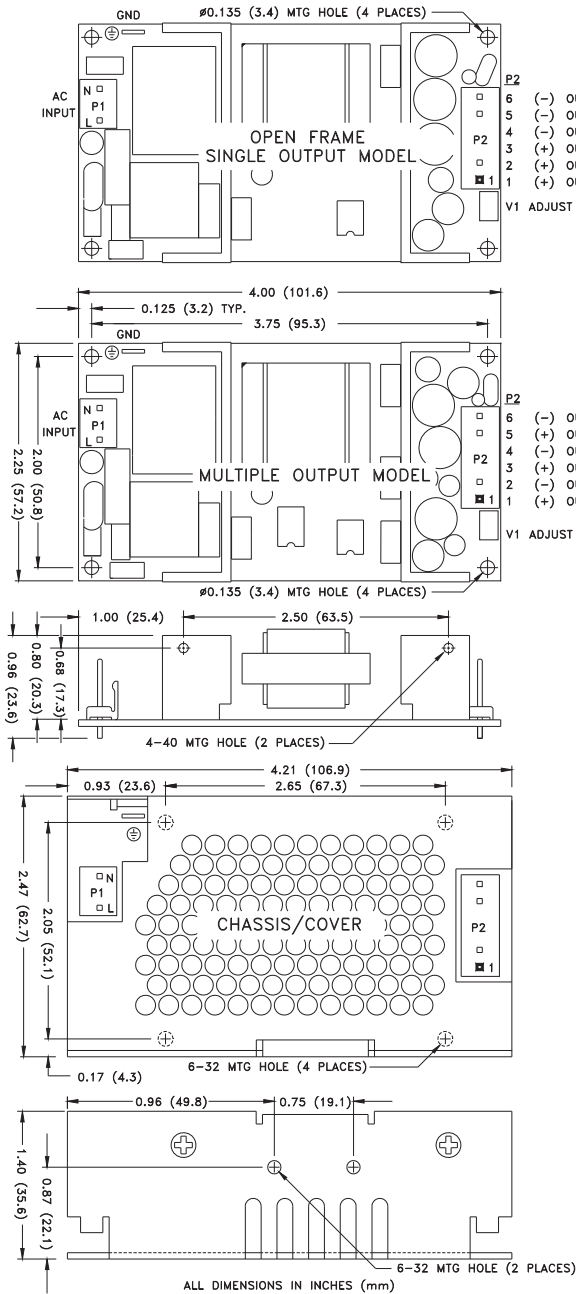
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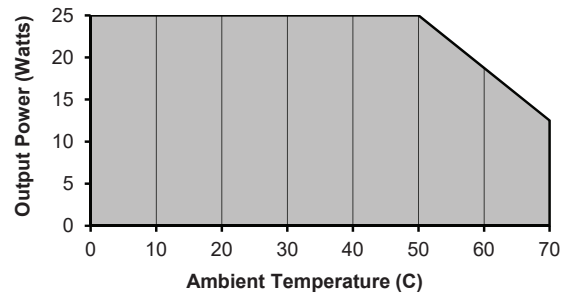
## SRP-25 SERIES MECHANICAL SPECIFICATIONS



## APPLICATIONS INFORMATION

- Each output can deliver its rated current but Total Output Power must not exceed 25W.
- Generally, adequate cooling is provided when semiconductor case temperatures do not exceed 70°C rise and transformer temperature does not exceed 60°C rise at any specified ambient temperature.
- Sufficient area must be provided around power supply to allow natural movement of air to develop in convection-cooled applications.
- This product is intended for use as a professionally-installed component within information technology, industrial, and medical equipment and is not intended for stand-alone operation.
- A minimum load of 10% is required on Output 1 to ensure proper regulation of remaining outputs.
- This product includes only one fuse in the input circuit. In consideration of Clause 8.11.5 of IEC 60601-1:2005, a second fuse may be required in neutral conductor of the end product.
- Peak-to-Peak Output Ripple and Noise is measured directly at the output terminals of the power supply, without the use of the probe ground lead or retractable tip (tip-and-barrel method), 20 MHz bandwidth.
- This product was type-tested and safety-certified using the dielectric strength test voltages listed in Table 6 of IEC 60601-1:2005. In consideration of Clause 8.8.3, care must be taken to insure the voltage applied to a reinforced insulation does not overstress different types and levels of insulation. Primary and secondary-to-ground capacitors may need to be disconnected prior to performing a dielectric strength test on the power supply or the end product. It is highly recommended that the DC test voltages listed in DVB.1, Annex DVB of UL 60601-1 1<sup>st</sup> Edition are not exceeded during a production-line dielectric strength test of the assembled end product. Please consult factory for further information.
- This power supply has been safety-approved and final-tested using a DC dielectric strength test. Please consult factory before performing an AC dielectric strength test. Maximum screw penetration into bottom chassis mounting holes is 0.100 inches. Maximum screw penetration into side chassis mounting holes is 0.250 inches.
- To comply with emissions specifications, all four mounting hole pads must be electrically connected to a common metal chassis. Chassis/Cover option is recommended. Refer to Operating Instructions for additional information.
- Common RF shielding precautions may need to be taken to assure emissions compliance. Refer to Operating Instructions for additional information.

## MAXIMUM OUTPUT POWER vs. AMBIENT TEMPERATURE



## CONNECTOR SPECIFICATIONS

P1	AC Input	0.156 friction lock header mates with Molex 09-50-3031 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.
P2	DC Output	0.156 friction lock header mates with Molex 09-50-3061 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.
G	Ground	0.187 quick disconnect terminal.

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1-800-966-PSUI (7784)  
Outside U.S. 508-384-1419  
Fax: 508-384-1896  
info@psui.com

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