

40 Watts





SRP-40A SERIES

Features

- Universal 85-264 VAC Input
- Compact 2.50" X 4.25" X 1.2" Size
- Class B Emissions Per EN 55022, 11
- EMC Compliant to EN 61000-4-2, 3, 4, 5, 6 & 11 and EN 60601-1-2
- 2 Year Warranty
- EN 60950 ITE Certification
- EN 60601-1 Medical Certification



SAFETY SPECIFICATIONS

General	Protection Class: I Overvoltage Category: II Pollution Degree: 2
 Underwriters Laboratories File E137708	UL60950 Third Edition UL2601-1 Second Edition CB Report Per IEC 950 (1991) Second Edition A1, A2, A3, A4 All EN 60950 Deviations CB Report Per IEC 601-1 (1988) First Edition, A1, A2
 UL recognition Mark for Canada File E137708	CAN/CSA-C22.2 No. 60950-00 CAN/CSA-C22.2 No. 601-1-M90
 TUV	EN 60950:2000 EN 60601-1/A2: 1995
	Low Voltage Directive

MODEL LISTING

MODEL NO.	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	MAX POWER
SRP-40A-4001	+3.3V/5A	+5V/3A	+12V/7A	-12V/7A	40W
SRP-40A-4002	+5V/5A	+3.3V/3A	+12V/7A	-12V/7A	40W
SRP-40A-4003	+5V/5A	-5V/3A	+12V/7A	-12V/7A	40W
SRP-40A-4004	+5V/5A	-5V/3A	+15V/7A	-15V/7A	40W
SRP-40A-4005	+5V/5A	+24V/1.5A	+12V/7A	-12V/7A	40W
SRP-40A-4006	+5V/5A	+24V/1.5A	+15V/7A	-15V/7A	40W
SRP-40A-3001	+5V/5A	+12V/2A	-12V/7A		40W
SRP-40A-3002	+5V/5A	+15V/2A	-15V/7A		40W
SRP-40A-2001	+5V/5A	+24V/1.5A			40W
SRP-40A-2002	+5V/5A	+12V/3A			40W
SRP-40A-2003	+5V/5A	-5V/4A			40W
SRP-40A-2004	+12V/3A	+12V/3A			40W
SRP-40A-2005	+15V/2.5A	-15V/2A			40W
SRP-40A-1001	3.3V/10A				33W
SRP-40A-1002	5V/8A				40W
SRP-40A-1003	12V/3.33A				40W
SRP-40A-1004	15V/2.67A				40W
SRP-40A-1005	24V/1.67A				40W
SRP-40A-1006	48V/0.83A				40W

NOTES:

1. Consult factory for alternate output configurations.
2. Consult factory for positive, negative or floating output 2.

All specifications are maximum at 25°C unless otherwise stated and are subject to change without notice.

OUTPUT SPECIFICATIONS

Total Output Power	40W (33W, 1001)	
Output Voltage Centering	Output 1: ± 0.25% Output 2: ± 5.0% Output 3: ± 3.0% Output 4: ± 3.0%	(All outputs at 50% rated load)
Source Regulation	Outputs 1-4: 0.5%	
Load Regulation	Output 1: 0.5% (0-100% Load Change) Output 2: 5.0% (30-100% Load Change) Output 3: 0.5% Output 4: 0.5%	(7.0% 2003,4002)
Cross Regulation	Output 2: 5.0% Output 3: 0.5% Output 4: 0.5%	(Output 1 load varied 50-100%)
Output Voltage Adjust Span Resolution	Output 1: 95% to 105% 1%	
Output Noise Source Freq. Switching Freq. Total (20MHz)	Outputs 1-4: 0.5% Outputs 1-4: 1% Outputs 1-4: 1%	(Output under test at 100% rated load)
Turn On Overshoot	None	
Transient Response Voltage Deviation Recovery time Load change	Outputs 1-4 5% 2 mS 50% to 100%	
Output Overvoltage Protection	Output 1: 110% to 150%	
Output Overpower Protection	110% Min., Output 1&2 Outputs cycle on/off, auto recovery	
Output Overcurrent Protection	110% Min., Output 3 & 4	
Hold Up Time	10 mS Min, 40 W Output 120 V Input	
Start Up Time	1 Second	

INPUT SPECIFICATIONS

Source Voltage	85 - 264 Volts
Frequency Range	47-63 Hz.
Source Current True RMS Peak Inrush	1A At 85V Input 30A
Efficiency	.66 -.80 (Varies by model)

ENVIRONMENTAL SPECIFICATIONS

Ambient Operating Temperature Range	0° C to +70° C Derating: See Power Rating Chart
Ambient Storage Temperature Range	-40° C to +85° C
Temperature Coefficient	Outputs 1-4: 0.02%/°C
Shock	Transit Drop per MIL-STD-810E, Method 516.4 Procedure IV
Vibration	MIL-STD-810E, Method 514.4, Category 1

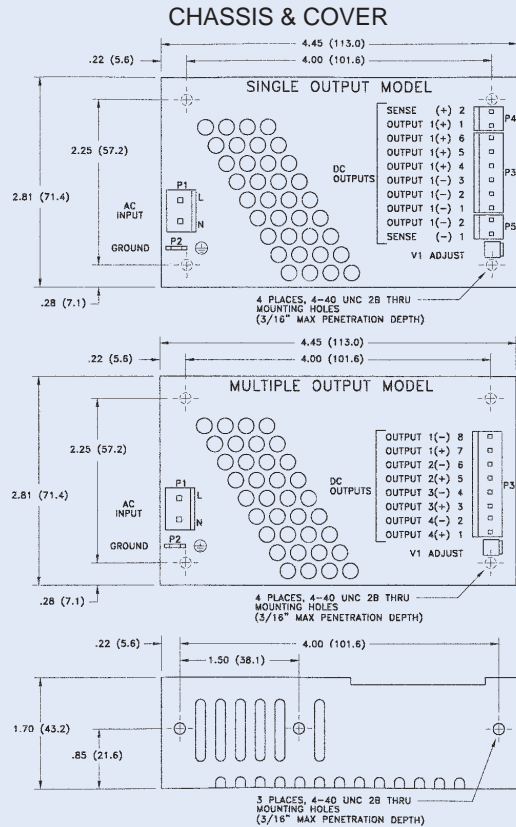
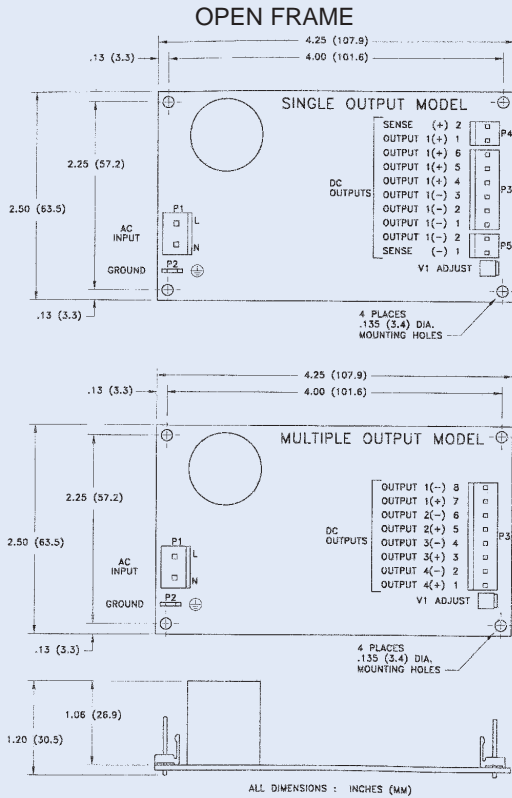
GENERAL SPECIFICATIONS

Dielectric Strength	5656 VDC, Primary to Secondary, 1 Sec. 2121 VDC, Primary to Ground, 1 Sec. 707 VDC, Secondary to Ground, 1 Sec.
Leakage Current	<300µA Earth Leakage Current <100µA Patient Leakage Current
Mean-Time Between Failures	100,000 hours, min. MIL-HDBK-217F, 25° C, GB
Weight	.85 Lbs.

ELECTROMAGNETIC COMPATIBILITY SPECIFICATIONS

Electrostatic Discharge	EN 61000-4-2 6 kV Contact Discharge 8kV Air Discharge
Radiated Electromagnetic Field	EN 61000-4-3 3V/M, 26-1000MHz.
EFT/Bursts	EN 61000-4-4 2kV
Surges	EN 61000-4-5 1kV Differential Mode 2kV Common Mode
Conducted Immunity	EN 61000-4-6 3V, 150KHz-80MHz.
Voltage Dips	EN 61000-4-11 30% Reduction, 25 periods 95% Reduction, 0.5 periods
Voltage Interruptions	EN 61000-4-11 95% Red., 250 periods
Radiated Emissions	EN 55011 EN 55022 Class B Class B
Conducted Emissions	EN 55011 EN 55022 Class B Class B

SRP-40A SERIES MECHANICAL SPECIFICATIONS



AC Input Connector P1:

- .156 inch friction lock header mates with Molex 09-50-3031 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.

DC Output Connector P3: (Single Output)

- .156 inch friction lock header mates with Molex 09-50-3061 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.

DC Output Connector P3: (Multi Output)

- .156 inch friction lock header mates with Molex 09-50-3081 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.

Remote Sense P4, P5

- .100 inch friction lock header mates with Molex 22-01-2027 or equivalent crimp terminal housing with Molex 08-50-0114 or equivalent crimp terminal.

Ground Connector \oplus :

- Ground mates with .187 inch quick disconnect terminal.

APPLICATIONS INFORMATION

- This product is intended for use as a professionally installed component within medical and information technology equipment.
- Each output can deliver its rated current but total output power must not exceed 40 watts (33w, 1001).
- A minimum load of 10% is required on output one to insure proper regulation of remaining outputs.
- 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, 20 MHz bandwidth.
- This power supply has been safety approved and final tested using a DC dielectric strength test. Please consult factory before performing AC dielectric strength test.
- The input circuit includes only one fuse in the "line" conductor. In consideration to paragraph 57.6 of UL-2601-1, when used in medical applications, a fuse should be added to the "neutral" conductor in the end product.
- To meet conducted emissions specifications, all four mounting hole ground pads must be electrically connected. Use metal standoffs attached to a common metal chassis.

Maximum Output Power vs. Ambient Temperature

