

35 WATTS

NO MINIMUM ORDER REQUIRED

SRP-30/35 SERIES

OUTPUT SPECIFICATIONS

Features

- RoHS Compliant
- Universal 85-264 VAC Input
- Advanced SMT Design
- Compact 3.0" X 6.0" X 2.0" Size
- Class B Emissions Per EN 55011/22
- EMC to EN 61000-6-2 & EN 60601-1-2
- 2 Year Warranty
- UL Listed
- One to Four Outputs
- EN 60950 ITE Certification
- EN 60601-1 Medical Certification



Total Output Power at 28-35 W Model Dependent 50c

Output Voltage Centering Output 1: +/-0.25%  
Output 2: +/-5.0%  
Output 3: +/-3.0%  
Output 4: +/-3.0%  
(All outputs at 50% load)

Source Regulation Outputs 1-4: 0.5%

Load Regulation (Local Sense)  
Output 1: 7.0% (0-100% Load Change)  
(1001) 10.0% (0-100% Load Change)  
(4001) 12.0% (0-100% Load Change)  
(Remote Sense) 0.5% (0-100% Load Change)  
Output 2: 5.0% (30-100% Load Change)  
(4001,3 & 4) 10.0% (30-100% Load Change)  
(2003, 4002) 12.0% (30-100% Load Change)  
Output 3: 1.0% (0-100% Load Change)  
Output 4: 1.0% (0-100% Load Change)

Cross Regulation Output 2: 5.0%  
Output 3: 0.5%  
Output 4: 0.5%  
(Output 1 load varied 50-100%)

Output Voltage Adjust Range Output 1: 95% to 105%

Output Noise Outputs 1-4: 1.0%

Turn On Overshoot None

Transient Response Outputs 1-4:

Volt. Deviation 5.0%

Recovery Time 2 mS

Load Change 50% To 100%

Output Overvoltage Protection Output 1: 110% to 150%

Output Overpower Protection Output 1&2: 110% Min.  
Outputs cycle on/off, auto recovery

Output Overcurrent Protection Output 3&4: 110% Min.

Hold Up Time 12 mS Min, 28-35 W Output  
120 V Input

Start Up Time 1 Second







INPUT SPECIFICATIONS

Source Voltage	85-264 Voltage AC
Frequency Range	47-63 Hz
Source Current	
True RMS	1A At 85V Input
Peak Inrush	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

## SAFETY SPECIFICATIONS

General	Protection Class: I Overvoltage Category: I Pollution Degree: 2 Ingress Protection IP30
 Underwriters Laboratories File E137708/ E140259	UL 60950-1 First Edition UL 60601-1 First Edition
	CB Report Per IEC 60950-1 (2001) First Edition All National Deviations CB Report Per IEC 60601-1 (1988) Second Edition A1,A2
	UL 60950-1 First Edition
 UL Recognition Mark for Canada File E137708/ E40259	CAN/CSA-C22.2 No.60950-1-03 CAN/CSA-C22.2 No.601-1-M90 with updates 1 and 2
 TUV 	EN 60950-1:2001 EN 60601-1/A2:1995 Low Voltage Directive EMC Directive

## GENERAL SPECIFICATIONS

Dielectric Strength	Reinforced	5656 VDC, Primary to Secondary, 1 Sec.
	Insulation	2121 VDC, Primary to Ground, 1 Sec.
	Basic Insulation	707 VDC, Secondary to Ground, 1 Sec.
Operational Insulation		<300 ÅµA Earth Leakage Current
Leakage Current		100,000 Hours min., MIL-HDBK-217F, 25°C, GB
Mean Time Between Failures		1.60 Lbs.
Weight		

## ELECTROMAGNETIC COMPATIBILITY SPECIFICATIONS

Electrostatic Discharge	EN 61000-4-2	+/-8kV Contact Discharge +/-8kV Air Discharge
Radiated Electro-magnetic Field	EN 61000-4-3	80MHz-2.5GHz, 10V/m, 80% AM
EFT/Bursts	EN 61000-4-4	+/-2kV
Surges	EN 61000-4-5	+/-1 kV Differential Mode +/-2 kV Common Mode
Conducted Immunity	EN 61000-4-6	.15-80MHz., 10V, 80% AM
Voltage Dips and Interruptions	EN 61000-4-11	30% Reduction, 500ms 95% Reduction, 10ms 60% Reduction, 1s (criteria B) 95% Reduction, 500ms
Radiated Emissions	EN 55011/22	Class B
Conducted Emissions	EN 55011/22	Class B

## Notes

Consult factory for alternate output configuration.  
Consult factory for positive, negative or floating output 2.  
Refer to Application Information for complete output power ratings.  
All specifications are maximum at 25C unless otherwise stated and are subjected to change without notice.

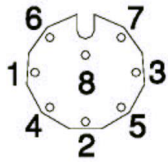
## MODEL LISTING

Model	Output 1	Output 2	Output 3	Output 4	Output 5
SRP-30A-4001	+3.3V/3A	+5V/2A	+12V/.35A	-12V/.35A	28W
SRP-30A-4002	+5V/3A	+3.3V/2A	+12V/.35A	-12V/.35A	30W
SRP-30A-4003	+5V/3A	-5V/2A	+12V/.35A	-12V/.35A	30W
SRP-30A-4004	+5V/3A	-5V/2A	+15V/.35A	-15V/.35A	30W
SRP-30A-4005	+5V/3A	+24V/.75A	+12V/.35A	-12V/.35A	30W
SRP-30A-4006	+5V/3A	+24V/.75A	+15V/.35A	-15V/.35A	30W
SRP-30A-3001	+5V/3A	+12V/1.5A	-12V/.50A		30W
SRP-30A-3002	+5V/3A	+15V/1.5A	-15V/.50A		30W
SRP-30A-2001	+5V/3A	+24V/.75A			30W
SRP-30A-2002	+5V/3A	+12V/1.5A			30W
SRP-30A-2003	+5V/3A	-5V/3A			30W
SRP-30A-2004	+12V/1.5A	-12V/1.5A			30W
SRP-30A-2005	+15V/1.5A	-15V/1.5A			30W
SRP-30A-1001	3.3V/9A				30W
SRP-35A-1002	5V/7A				35W
SRP-35A-1003	12V/2.9A				35W
SRP-35A-1004	15V/2.3A				35W
SRP-35A-1005	24V/1.45A				35W



**DETAIL A**

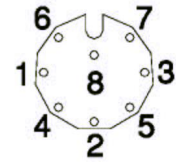
**SINGLE OUTPUT  
8 PIN DIN**



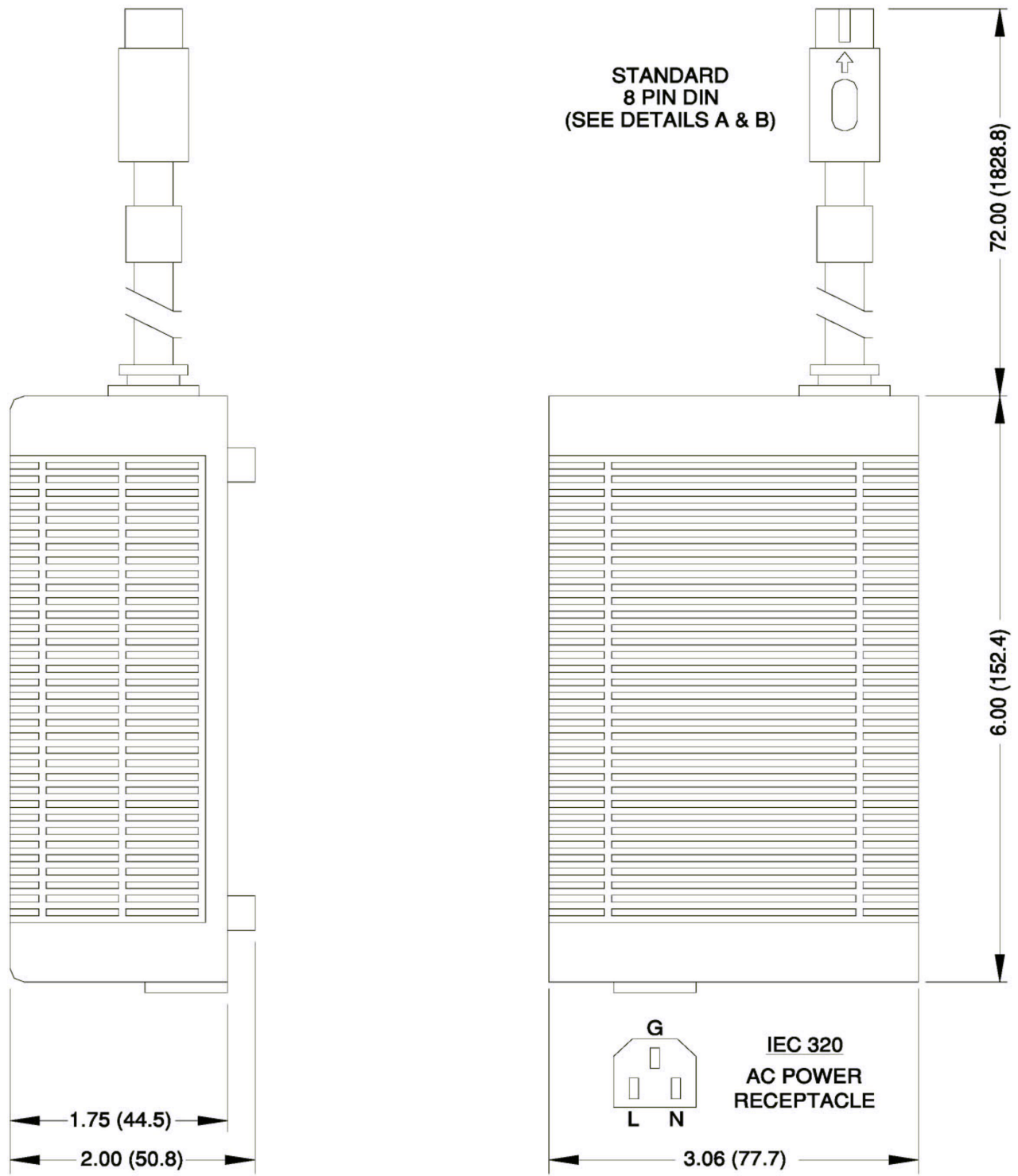
- 8 (+) SENSE
- 7 (+) OUTPUT 1
- 6 (+) OUTPUT 1
- 5 (+) OUTPUT 1
- 4 (-) OUTPUT 1
- 3 (-) OUTPUT 1
- 2 (-) OUTPUT 1
- 1 (-) SENSE

**DETAIL B**

**MULTIPLE OUTPUT  
8 PIN DIN**



- 8 (-) OUTPUT 1
- 7 (+) OUTPUT 1
- 6 (-) OUTPUT 2
- 5 (+) OUTPUT 2
- 4 (-) OUTPUT 3
- 3 (+) OUTPUT 3
- 2 (-) OUTPUT 4
- 1 (+) OUTPUT 4

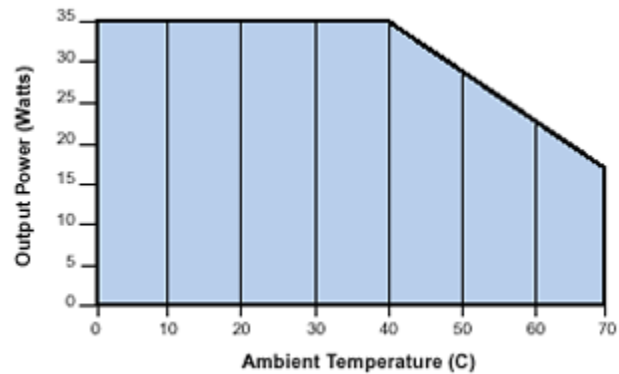


ALL DIMENSIONS: INCHES (MM)

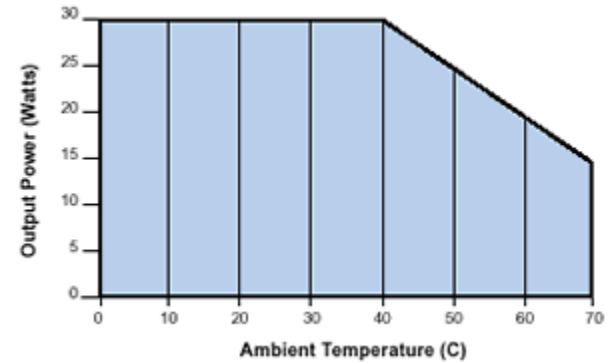
## APPLICATIONS INFORMATION

1. Each output can deliver its rated current but total output power must not exceed 28-35 watts depending on model.
2. Sufficient area must be provided around convection cooled power supplies to allow natural movement of air to develop.
3. A minimum load of 10% is required on output one to insure proper regulation of remaining outputs.
4. Remote sense terminals may be used to compensate for cable losses up to 250mV. The use of a twisted pair is recommended as well as a decoupling capacitor (0.1 0 10 $\mu$ F) and a capacitor of 100 $\mu$ F/amp connected across the load.
5. Peak to peak output ripple and noise is measured directly across a 1 $\mu$ F ceramic capacitor at the output terminals of the power supply cord, without the use of the probe ground lead or retractable tip, 20 MHz bandwidth.
6. This product was type tested and safety certificated using the the dielectric strength test voltages listed in Table V of UL 60601-1. In consideration of clause 20.4g, care must be taken to insure the voltage applied to a reinforced insulation does not over stress basic insulation. Secondary to ground capacitors may need to be removed prior to performing a dielectric strength type test on the end product. It is highly recommended that the DC test voltages listed in DVB.1. Annex DVB are not exceeded during a production-line dielectric strength test of the assembled end product. Please consult factory for further information.
7. 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.

## Maximum Output Power vs. Ambient Temperature(35W)



## Maximum Output Power vs. Ambient Temperature(30W)



## CONNECTOR SPECIFICATION

AC Input IEC 320 AC Power Receptacle  
DC 8 pin connector mates with Power  
Output Dynamics 8 pin din socket #DS-048