

100 WATTS

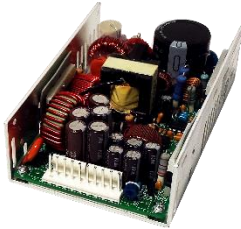
SINGLE/MULTI OUTPUT AC-DC

FEATURES:

- Compact 3.3" x 5" x 1.5" Size
- 2 Year Warranty
- Universal 85-264V Input
- 1-4 Tightly-Regulated Outputs
- 0-70°C Operating Temperature
- RoHS Compliant
- IEC 60601-1 3rd ed. Medical Cert.
- IEC 62368-1 2nd ed. Certification
- IEC 60601-1-2 4th ed. EMC
- Class B Emissions per EN55011/32
- Optional Power Fail Warning
- Optional Perforated Cover



CHASSIS/COVER



OPEN CHASSIS

SAFETY SPECIFICATIONS



Underwriters Laboratories
File E137708/E140259

UL 62368-1:2014, 2nd Edition
CAN/CSA-C22.2 No. 62368-1-14, 2nd Edition
AAMI/ANSI ES60601-1:2005/(R) 2012
CAN/CSA-C22.2 No. 60601-1:2014



CB Reports/Certificates (including all
National and Group Deviations)

IEC 62368-1:2014, 2nd Edition
IEC 60601-1:2005/A1:2012



TUV SUD America

EN 62368-1:2014, 2nd Edition
EN 60601-1:2006/A1:2013



Low Voltage Directive
RoHS Directive (Recast)

(2014/35/EU of February 2014)
(2015/863/EU of March 2015)



Electrical Equipment (Safety) Regulations 2016 SI No. 1101

Restriction of the Use of Certain Hazardous Substances in EEE Regulations
2012 SI No. 3032 + 2019 SI No.492

MODEL LISTING

MODEL NO. OUTPUT 1 OUTPUT 2 OUTPUT 3 OUTPUT 4

SRW-100-4001	+3.3V/10A(17)	+5V/4A	+12V/2A(18)	-12V/1A
SRW-100-4002	+5V/10A(17)	+24V/2A	+12V/2A(18)	-12V/1A
SRW-100-4003	+5V/10A(17)	+24V/2A	+15V/2A(18)	-15V/1A
SRW-100-4004	+5V/10A(17)	-5.2V/4A	+12V/2A(18)	-12V/1A
SRW-100-4005	+5V/10A(17)	-5.2V/4A	+15V/2A(18)	-15V/1A
SRW-100-4006	+5V/10A(17)	+3.4V/4A	+9V/1A	24V/50A
SRW-100-4007	+5V/10A(17)	+15V/3A	+12V/2A	-12V/1A
SRW-100-4008	+5V/10A(17)	+3.3V/4A	+12V/2A	-5V/1A
SRW-100-4009-IT	+3.3V/10A(17)	+5V/4A	+12V/2A	-5V/1A
SRW-100-4010	+5V/5A	+15V/4A	+12V/2A(18)	9V/2.5A
SRW-100-4011	+5V/10A(17)	-15V/2.2A	+15V/2A(18)	12V/1A
SRW-100-4012	+5V/10A(17)	+3.3V/4A	+12V/2A(18)	-12V/1A
SRW-100-3001	+5V/10A(17)	+12V/4A		-12V/1A
SRW-100-3002	+5V/10A(17)	+15V/3A		-15V/1A
SRW-100-3003	+5V/10A(17)	+3.3V/8A		12V/1A
SRW-100-3004	+3.3V/5A	+5.8V/3A		-48V/1A
SRW-100-3005	+15V/5A	-15V/3A		+5V/2A
SRW-100-2001	+12V/5A	-12V/4A		
SRW-100-2002	+15V/5A	-15V/3A		
SRW-100-2003	+12.5V/4A	+16V/2A		
SRW-100-1001	3.3V/20A(19)			
SRW-100-1002	5V/20A			
SRW-100-1003	12V/8.3A			
SRW-100-1004	15V/6.7A			
SRW-100-1005	24V/4.2A			
SRW-100-1006	28V/3.6A			
SRW-100-1007	48V/2.1A			
SRW-100-1008	40V/2.5A			
SRW-100-1009	3.0-3.3V/20A(19)			
SRW-100-1010	48V/2.1A			
SRP-100-4001	+5V/12A(17)	+24V/3A	+12V/2A(18)	-12V/1A
SRP-100-4002	+5V/12A(17)	+24V/3A	+15V/2A(18)	-15V/1A
SRP-100-4003	+5V/12A(17)	-5V/4A	+12V/2A(18)	-12V/1A
SRP-100-4004	+5V/12A(17)	-5V/4A	+15V/2A(18)	-15V/1A
SRP-100-4005	+5V/12A(17)	+12V/3A	+8V/2A	-8V/1A
SRP-100-3001	+5V/12A(17)	+12V/4A		-12V/1A
SRP-100-2001	+5V/12A(17)	+24V/3A		

SRW/SRP-100

OUTPUT SPECIFICATIONS

Total Output Power at 50°C ₍₁₎ (See Derating Chart)	70W 85W 100W	Convection Cooled Convection Cooled w/1Sq.ft baseplate ₍₁₆₎ 200LFM Forced-Air Cooled ₍₁₅₎
Output Voltage Centering	Output 1: Output 2: (SRW) (SRP) Output 3: Output 4:	± 0.25% (All outputs at 50% load) ± 0.25% ± 5.0% ± 2.0% ± 4.0%
Output Voltage Adjust Range	Output 1: Output 2:	95 - 105% 85 - 105% (1001, 4001) 95 - 105% (SRW models only)
Load Regulation	Output 1: Output 2: (SRW) (SRP) Output 3: Output 4:	0.5% (10-100% load change) 0.5% (10-100% load change) 5.0% (10-100% load change) 1.0% (10-100% load change) 1.0% (10-100% load change)
Source Regulation	Outputs 1 - 4:	0.5%
Cross Regulation	Output 2: (SRW) (SRP) Output 3: Output 4:	0.2% (Output 1 load varied 50-100%) 5.0% 0.2% 0.2%
Output Noise	Outputs 1 - 4:	1.0%
Turn on Overshoot		None
Transient Response	Outputs 1 - 4	
Voltage Deviation		5.0%
Recovery Time		2mS
Load Change		50% to 100%
Output Overvoltage Protection (optional)	Output 1:	110% to 150%
Output Overpower Protection	Outputs 1 & 2:	110W Min. Outputs cycle on/off, auto recovery
Output Overcurrent Protection	Outputs 3 & 4:	110% Min.
Hold Up Time		10ms min., 100W 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	3A at 85V Input
Peak Inrush	30A
Efficiency	0.68-0.84 (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 - 4: 0.02%/°C

GENERAL SPECIFICATIONS

Means of Protection	
Primary to Secondary	2MOPP (Means of Patient Protection)
Primary to Ground	1MOPP (Means of Patient Protection)
Secondary to Ground	Operational Insulation/Consult factory for 1MOPP)
Dielectric Strength _(8,9)	
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	<500µA NC, <1000µA SFC
Touch Current	<100µA NC, <500µA SFC
Power Fail Signal (optional) ₍₁₄₎	Logic low with input power failure 2ms minimum prior to Output 1 dropping 1%
Remote Sense(single Output Models only) ₍₁₀₎	250mV compensation of output cable losses
Mean-Time Between Failures	150,000 Hours min., MIL-HDBK-217F, 25° C, GB
Weight	1.00 Lbs. Open Frame 1.05 Lbs. w/Cover

ORDERING INFORMATION

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

CO - Cover	I/O - Isolated Outputs
PF - Power Fail	TS - Terminal Strip
OVP - Overvoltage Protection	

All specifications are maximum at 25°C/100W unless otherwise stated, may vary by model and are subject to change without notice.



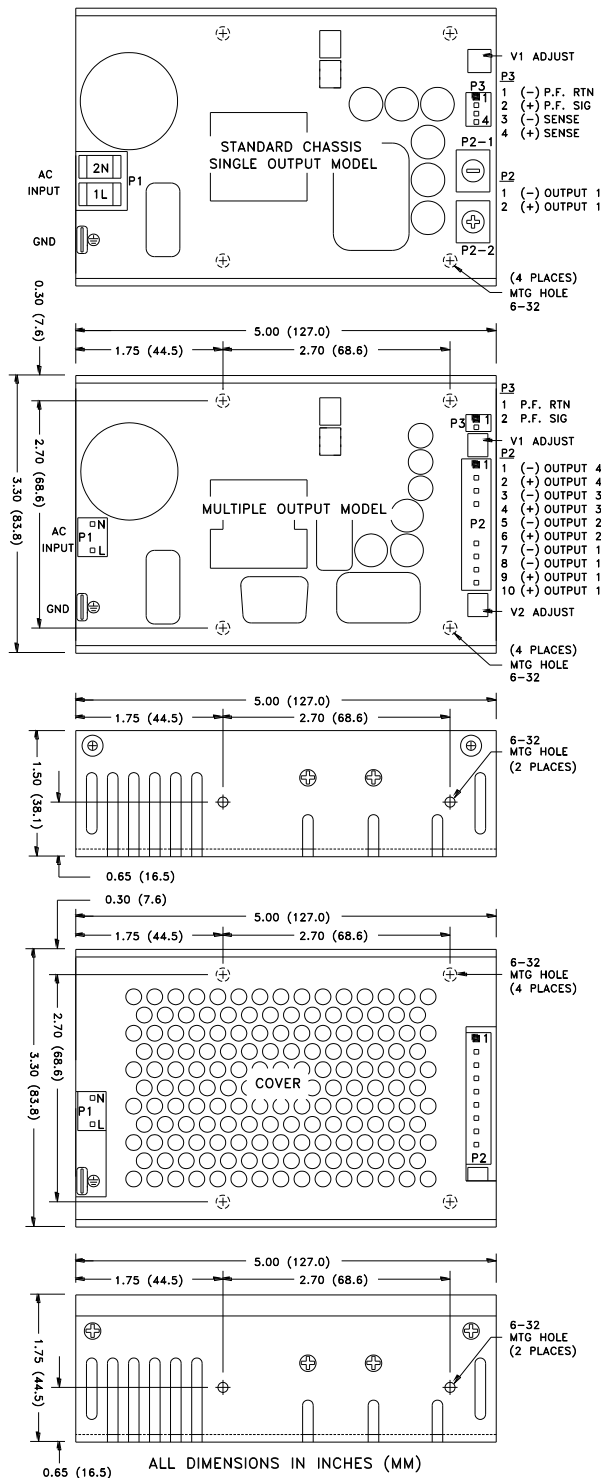
INTEGRATED
POWER DESIGNS

300 Stewart Road ■ Wilkes-Barre, PA 18706 ■ Phone: (570) 824-4666 ■ Fax: (570) 824-4843 ■ Email: sales@ipdpower.com ■ Web: www.ipdpower.com

EMC SPECIFICATIONS (IEC 60601-1-2:2014, 4TH 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 _T , 0.5 cycles, 0-315° 100/240V A/A 0% U _T , 1 cycles, 0° 100/240V A/A 40% U _T , 10/12 cycles, 0° 100/240V B/A 70% U _T , 25/30 cycles, 0° 100/240V B/A	
Voltage Interruptions	EN 61000-4-11	0% U _T , 300 cycles, 0° 100/240V B/B	
Radiated Emissions	EN 55011/32	Class B	
Conducted Emissions	EN 55011/32	Class B	
Voltage Fluctuations/Flicker	EN 61000-3-3	Compliant	

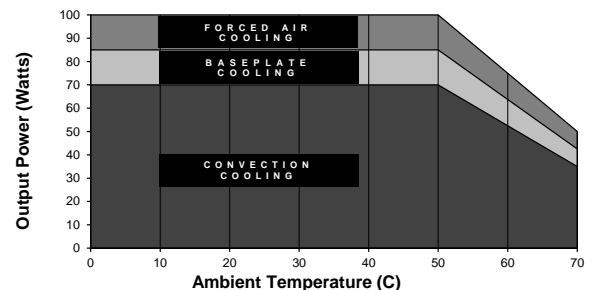
SRW/SRP-100 SERIES MECHANICAL SPECIFICATIONS



APPLICATIONS INFORMATION

- Each output can deliver its rated current but Total Output Power must not exceed 70, 85 or 100W, as determined by the cooling method.
- 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 ensure that 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 1st 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. Remote-Sense terminals may be used to compensate for cable losses up to 250mV, depending on model. The use of a twisted pair, decoupling capacitors and an appropriately-rated low-impedance capacitor connected across the load will increase noise immunity.
- Maximum screw penetration into chassis mounting holes is 0.125 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.
- Power Fail (AC-Good) feature provides a logic-low warning signal from an open collector transistor output 2ms prior to loss of output from AC failure.
- Forced-Air cooling rating of 100W requires an air speed of 200LFM flowing past a point one inch above the main isolation transformer.
- Baseplate cooling rating of 85W requires a one-square-foot 0.09"-thick aluminum area attached to bottom four mounting holes.
- Rated 8A maximum when convection cooled only.
- Rated 1A maximum when convection cooled only.
- Rated 50W maximum output power when convection cooled; 70W when baseplate or forced-air cooled (66W SRW-100-1009).

MAXIMUM OUTPUT POWER vs. AMBIENT TEMPERATURE



CONNECTOR SPECIFICATIONS

P1	AC Input (Single)	Terminal block with 4-40 inch screws on 0.325 inch centers with #4 spade terminals.
P1	AC Input (Multiple)	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 (Single)	6-32 screw down terminal mates with #6 ring tongue terminal. (10 in-lb max.)
P2	DC Output (Multiple)	0.156 friction lock header mates with Molex 09-50-3101 or equivalent crimp terminal housing with Molex 08-50-0189 or equivalent crimp terminal.
G	Ground	0.187 quick disconnect terminal.
P3	Option/Sense (Single)	0.100 friction lock header mates with Molex 22-01-2047 or equivalent crimp terminal housing with Molex 6459 or equivalent crimp terminal.
P3	Option (Multiple)	0.100 friction lock header mates with Molex 22-01-2027 or equivalent crimp terminal housing with Molex 6459 or equivalent crimp terminal.