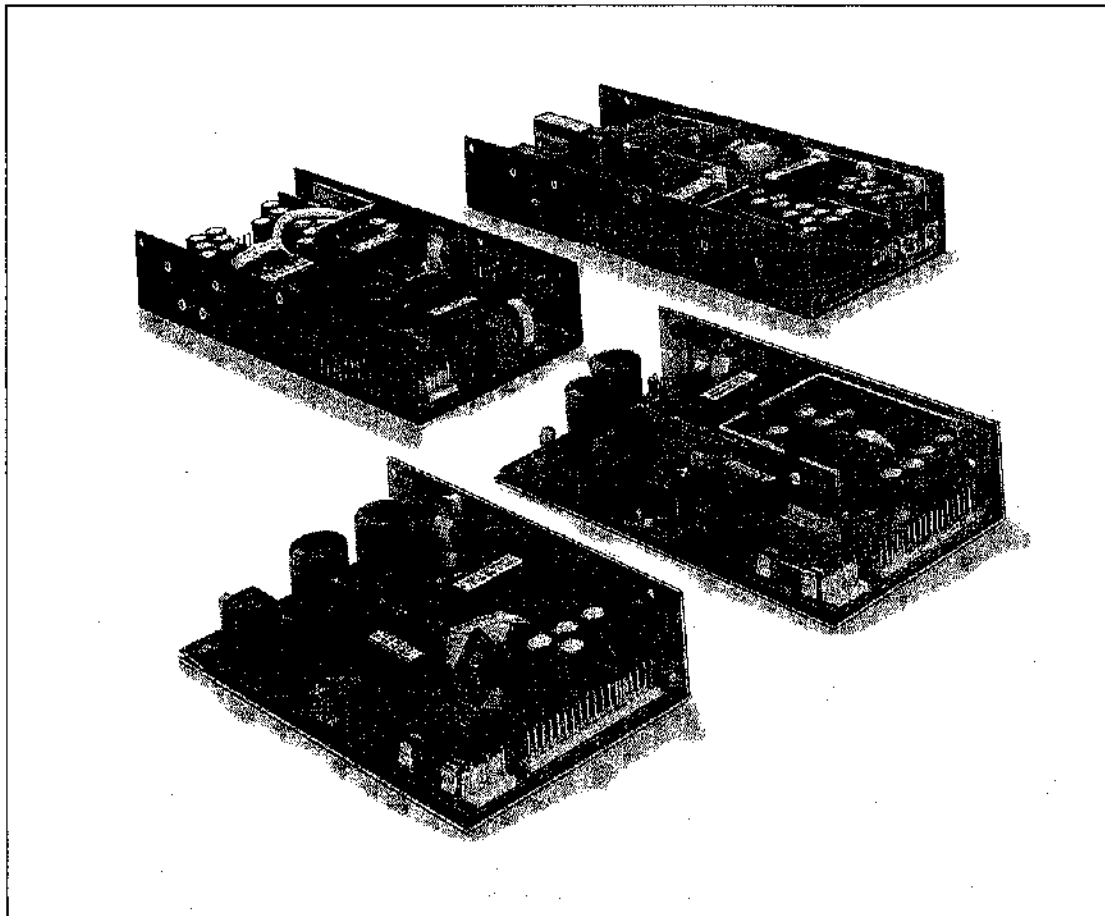


I AC-TO-DC POWER SUPPLIES

Lambda's SV Series



Low Cost Single & Multiple Output Power Supplies From 100W to 300W – With or Without PFC

Lambda's new SV Series is the first family of 100W to 300W power supplies with both auto-selecting AC input and power factor corrected AC input in the same mechanical package. This allows you to optimize system cost, features and assembly time by integrating the model that best suits your application. And because PFC and non-PFC models are form and fit compatible, the SV Series is a no-risk solution for systems that may require power factor selection in the future, but can't afford the expense of it now. In addition, superior value options give the user the opportunity to eliminate costs associated with functions that don't add value to a particular system.

The SV Series is available in 100W, 150W and 250W single output models, and 130W, 200W & 300W multiple output models, with all the standard features required for applications such as computer peripherals, point of sale equipment, and communications equipment.

SV Series Features

True Universal AC Input	Jumper-select, auto-select and power factor corrected AC input are available in one package, allowing the user to optimize system cost, features and assembly time.
Level B EMI	Conducted EMI to Level B for FCC & VDE simplifies filtering requirements on the system level.
Superior Value Options	Features such as covers and monitoring signals are optional, so you pay only for those options which add value to your system.
Low Profile	1.77" height allows optimal space allocation in systems utilizing 2" board pitch.
Worldwide Safety Agency Approvals	Safety agency approvals to UL1950, CSA234 M90, and EN60950, ensure compliance throughout the world.
System Interface Signals	AC Power Fail and DC Output Good Signals provide the capability for real time monitoring.
Rated for Convection and Fan Cooling	Dual rating system ensures reliable operation and thermal integrity of all components in any system...with or without fans.
Broad Offering	62 single, triple and quad output models from 100W to 300W allow you to choose a standard power solution that more closely matches your system requirements, driving down system cost.
Output Current Surge Capability	Ensures reliable performance with disc drives and motors.
Low Cost and Short Lead Time	Automated manufacturing techniques and domestic production allow for a competitively priced, fully featured unit with the industry's shortest lead time.

I AC-TO-DC POWER SUPPLIES

SV Series Specifications

AC Input

Line.....SV Models: 85-132VAC, 180-264VAC (auto-selecting input), 47-63 Hz. 110-220VAC jumper select input is available as an option (Option Code "A"). SVP Models: 90-132VAC, 187-264VAC (auto-selecting input), 47-63 Hz on 100-150W models. 85-265VAC, 47-63 Hz on 170-300W models.

Input Harmonic Current

All SVP models comply with IEC 555-2 and EN60555-2.

EMI

Conducted EMI conforms to FCC Part 15, Subpart J, Class B and VDE 0871, Curve B.

Input Transient Protection

IEEE C62.41-1991 location category A2 (A3 with external MOV's). IEC801, -2, -4, -5 Class 3.

DC Output Range

±5% user adjustable on single output models and on main output of multiples. Auxiliary outputs are fixed.

Regulated Voltage

line regulation.....1% from no load to full load on main output. 5% for 50% line variations on auxiliaries.
load regulation1% from no load to full load on main output. 5% for 50% load variation on auxiliaries.

Ripple and Noise

2% pk-pk typical.

Preload

25% preload required on main output of SVT115 and SVQ130, and on +12V auxiliary output of SVT170, SVT300, SVQ200, SVQ300. Preload may be shared on multiple outputs. Consult the factory for details.

Remote Sensing

Remote sense capability is provided on single output models and main outputs only. (0.5V Maximum IR drop across load cables.)

Inrush Current

75A typical for cold startup at 25°C.

Fusing

AC line is fused internally.

Overcurrent Protection

Limits output current to 140% (typical) of maximum rating on main output.

Short Circuit Protection

All outputs are protected from temporary short circuits (30 seconds on auxiliary outputs).

Overvoltage Protection

OV protection is provided on 5V single output models and main outputs of multiple output models. The unit will reset after input line is cycled if OV condition is removed.

Remote On/Off

Remote on/off is possible. Contact the factory for details.

Monitoring Signals

AC Power Fail and DC Output Good Signals (Open Collector, Conductance Signal) are provided standard. Signals can be deleted from the unit for OEM applications (Option Code "L").

Surge Current Capability

Auxiliary outputs are capable of providing a 10 second surge of three times the output current rating with a 50% duty cycle. Total power must always remain within package ratings.

Operating Temperature

0°C to +60°C with derating above +50°C.

Storage Temperature

-30°C +85°C.

Cooling

Ratings are provided for convection cooling and operation with external airflow.

Vibration

The SV Series meets MIL-STD-810E specifications for transportation.

Isolation Ratings

3000VRMS input to output (SELV Construction).
1500VRMS input to chassis ground.
500VRMS output to ground.

Input and Output Connections

Molex connectors, bussbars, quick-disconnect terminal strips. See the mechanical drawings for details.

Construction

L Chassis only for SVXX10X, SVXX15X, SVXX115, SVXX130.
U Chassis only for SVXX170, SVXX200, SVXX25 and SVXX300.
PC Board only construction is available as an option on the SVXX10X, SVXX115 and SVXX130 (Option Code "N"). Covers for units with chassis are available as an option (Option Code "Z").

Physical Data

Package Model	Weight		Dimensions (inches)
	Lbs. Net	Lbs. Ship	
SVS100	1.7	2.7	4.75 x 1.77 x 7.5
SVPS10	2.1	3.1	4.75 x 1.77 x 7.5
SVS150	2.2	3.2	4.75 x 1.77 x 8.5
SVPS15	2.9	3.9	4.75 x 1.77 x 8.5
SVT115, SVQ130	2.1	3.1	4.75 x 1.77 x 8.5
SVPT115, SVPQ130	2.8	3.8	4.75 x 1.77 x 8.5
SVT170, SVQ200	2.5	3.5	4.75 x 1.77 x 9.5
SVPT170, SVPQ200, SVPS25	2.9	3.9	4.75 x 1.77 x 9.5
SVT300, SVQ130	3.2	4.2	4.75 x 1.77 x 11.0
SVPT300, SVPQ300	3.7	4.7	4.75 x 1.77 x 11.0

Superior Value Options

The following features are optional and provide the opportunity to optimize the power supply for cost driven applications. Contact the factory for technical information and pricing on any option prior to ordering.

Option Code	Description	Price Adder
A	Jumper select 110/220VAC input (removes auto-select circuit for non-PFC units)	Consult Factory
N	PC Board only construction (SVPS100, SVPT115, SVPQ130 only)	Consult Factory
Z	Fully enclosed unit (adds vented cover)	\$10.00

Safety Agency Approvals

Under evaluation for UL 1950, CSA22.2 #234-M90 and EN60950.

Guarantee

One year guarantee includes labor as well as parts. Guarantee applies to operation within published specifications and recommended application data at the end of one year.

Commercial Ratings Table - Triple Output

SW SERIES

- Lowest Cost Wide Range Input
- Industry Standard Footprint
- Meets FCC, VDE Class B EMI

ULTRAFLEX™ SERIES

- Compact Modular Power Supplies
- 1 to 10 Outputs
- 85-265VAC Wide Range Input
- Meets Level B EMI

PFC SERIES

- 3 to 5 Outputs
- Power Factor Corrected
- Meets Level B EMI
- 85-265VAC Wide Range Input

V AND Z SERIES

- Low Cost 110VAC and 110/220VAC Inputs
- PCB and Chassis Mount Construction
- Meets FCC and VDE Curve B

LW SERIES

- High Density, Low Profile
- 110/220 Universal Input
- Meets VDE Curve A

MAX POWER	OUTPUT 1	OUTPUT 2	OUTPUT 3	COMPLETE ELEC. SPEC. PG.	1	UNIT PRICE PER DELIVERED QUANTITY				MODEL
						10	25	50		
TRIPLE OUTPUT. 110VAC INPUT.										
5V, +12V, -12V OUTPUT										
15W	5V @ 2A	+12V @ 0.3A	-12V @ 0.2A	92	\$ 64	\$ 54	\$ 50	\$ 43		VT15-522
30W	5V @ 3A	+12V @ 1.2A	-12V @ 0.3A	92	78	71	65	55		VT30-522
5V, +15V, -15V OUTPUT										
15W	5V @ 2A	+15V @ 0.3A	-15V @ 0.2A	92	64	54	50	43		VT15-5FF
30W	5V @ 3A	+15V @ 1A	-15V @ 0.3A	92	78	71	65	55		VT30-5FF
TRIPLE OUTPUT. 110/220VAC INPUT.										
5V, +12V, -12V OUTPUT										
25W	+5V @ 3A	+12V @ 0.6A	-12V @ 0.3A	84	128	114	107	98		LWT-2H-522
30W	5V @ 2A	+12V @ 1.5A	-12V @ 0.3A	88	67	64	60	45		SWT30-522
40W	5V @ 3A	+12V @ 2A	-12V @ 0.3A	88	78	74	70	53		SWT40-522
50W	+5V @ 5A	+12V @ 1.2A	-12V @ 0.6A	84	166	147	139	127		LWT-3H-522
65W	5V @ 6A	+12V @ 2.5A	-12V @ 0.5A	88	95	90	86	64		SWT65-522
70W	+5V @ 8A	+12V @ 1.5A	-12V @ 1A	84	204	180	170	155		LWT-4HA-522
90W	5V @ 10A	+12V @ 3A	-12V @ 0.3A	92	184	168	152	130		ZT90-522
100W	5V @ 8A	+12V @ 4A	-12V @ 0.8A	88	135	128		91		SWT100-522
115W	5V @ 15A	+12V @ 4A	-12V @ 2A	80	178	160	144	130		SVT115-1
115W	5V @ 15A	+12V @ 4A	-12V @ 2A	80	223	200	180	162		SVPT115-1
170W	5V @ 20A	+12V @ 5A	-12V @ 1A	92	279	253	229	196		ZT170-522
170W	5V @ 22A	+12V @ 3.8A	-12V @ 1.5A	80	232	209	188	169		SVT170-1
170W	5V @ 22A	+12V @ 5A	-12V @ 3A	80	290	261	235	212		SVPT170-1
300W	5V @ 38A	+12V @ 6A	-12V @ 3A	80	388	349	314	282		SVPT300-1
300W	5V @ 38A	+12V @ 6A	-12V @ 3A	80	324	292	262	236		SVT300-1
500W	5V @ 75A	+12V @ 12A	-12V @ 4A	72	610	580	545	480		PFC0500-3AH-Z
750W	5V @ 110A	+12V @ 18A	-12V @ 7A	72	900	855	780	660		PFC0750-3AH-Z
1000W	5V @ 150A	+12V @ 24A	-12V @ 10A	72	950	905	830	715		PFC1000-3AH-Z
5V, +15V, -15V OUTPUT										
30W	+5V @ 3A	+15V @ 0.6A	-15V @ 0.3A	84	128	114	107	98		LWT-2H-5FF
30W	5V @ 3A	+15V @ 1A	-15V @ 0.3A	92	116	105	95	82		ZT30-5FF
50W	+5V @ 5A	+15V @ 1.2A	-15V @ 0.6A	84	166	147	139	127		LWT-3H-5FF
65W	5V @ 5A	+15V @ 2A	-15V @ 0.5A	92	139	127	114	98		ZT60-5FF
75W	+5V @ 8A	+15V @ 1.5A	-15V @ 1A	84	204	180	170	155		LWT-4HA-5FF
90W	5V @ 10A	+15V @ 2.5A	-15V @ 0.5A	92	184	168	152	130		ZT90-5FF
115W	5V @ 15A	+15V @ 4A	-15V @ 2A	80	178	160	144	130		SVT115-2
115W	5V @ 15A	+15V @ 2.5A	-15V @ 1A	80	223	200	180	162		SVPT115-2
170W	5V @ 22A	+15V @ 5A	-15V @ 3A	80	232	209	188	169		SVT170-2
170W	5V @ 22A	+15V @ 3.8A	-15V @ 1.5A	80	290	261	235	212		SVPT170-2
300W	5V @ 38A	+15V @ 8A	-15V @ 4A	80	310	279	251	226		SVT300-2
300W	5V @ 38A	+15V @ 6A	-15V @ 3A	80	388	349	314	282		SVPT300-2
5V, +12V, -5V OUTPUT										
30W	5V @ 2A	+12V @ 1.5A	-5V @ 0.3A	88	67	64	60	45		SWT30-525
40W	5V @ 3A	+12V @ 2A	-5V @ 0.3A	88	78	74	70	53		SWT40-525
60W	5V @ 5A	+12V @ 2.5A	-5V @ 0.5A	92	139	127	114	98		ZT60-525
65W	5V @ 6A	+12V @ 2.5A	-5V @ 0.5A	88	95	90	86	64		SWT65-525
100W	5V @ 8A	+12V @ 4A	-5V @ 0.8A	88	135	128	122	91		SWT100-525

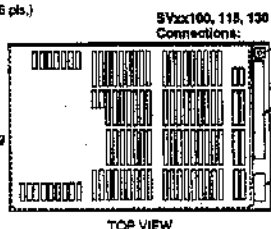
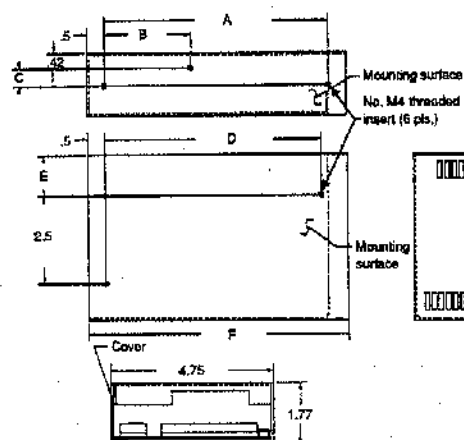
TRIPLE OUTPUT. 180/250VAC INPUT.

5V, +12V, -12V OUTPUT

1500W	5V @ 200A	12V @ 20A	12V @ 10A	76	1412	1302	1250	1199		313AE5F-1010
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SV Series Mechanical Drawings

SV100
SV115
SV130
SV150



TOP VIEW

SV100, 115, 130 Connections:

Main adj. pot.
15 pin conn., Molex non-locking male, .156 centers (J2) DC output
5 pin conn., Molex locking male, .156 centers (J1) AC input

SV150 Connections:

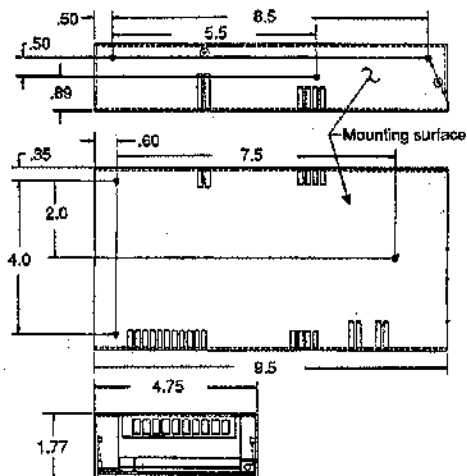
- Bus Bar (pos.)
- Bus Bar (neg.)
- C/P adj. pot.
- 6 position conn., .100 centers, signal/sense (J2)
- 5 pin conn., Molex locking male, .156 centers input (J1)

Dimension	A	B	C	D	E	F
Model						
SV100	6.5	2.5	.5	6.5	1.175	7.5
SV115	7.5	2.5	1.0	7.5	1.175	8.5
SV130	7.5	2.5	1.0	7.5	1.175	8.5
SV150	7.5	2.5	1.0	7.5	1.175	8.5

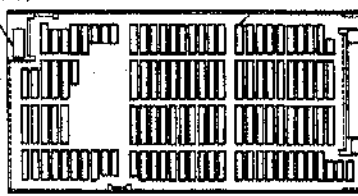
Model	Net Weight	with cover	without cover
SV100	1.5	1.7	
SV115	2.3	2.1	
SV130	2.3	2.1	
SV150	3.0	2.8	
SV160	2.4	2.2	
SV150	3.1	2.9	

Model	Molex Part No.	Amc Part No.	Model	Molex Part No.	Amc Part No.
SV100, 115, 130:			SV150:		
J1 Mating Connector Housing	08-50-0051	640250-5	J1 Mating Connector Housing	08-50-0051	640250-5
J2 Mating Connector Housing	08-50-0180	1-840251-6	J2 Mating Connector Housing	22-01-3067	770602-6
J1 & J2 Crimp Terminals	08-50-0106	640707-1	J1 Crimp Terminals	08-50-0106	640707-1
			J2 Crimp Terminals	08-50-0114	770606-1

SV170
SV200
SV250



SV170, SV200:
5 pin connector (J1),
AC input



TOP VIEW

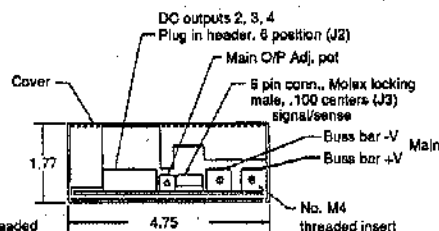
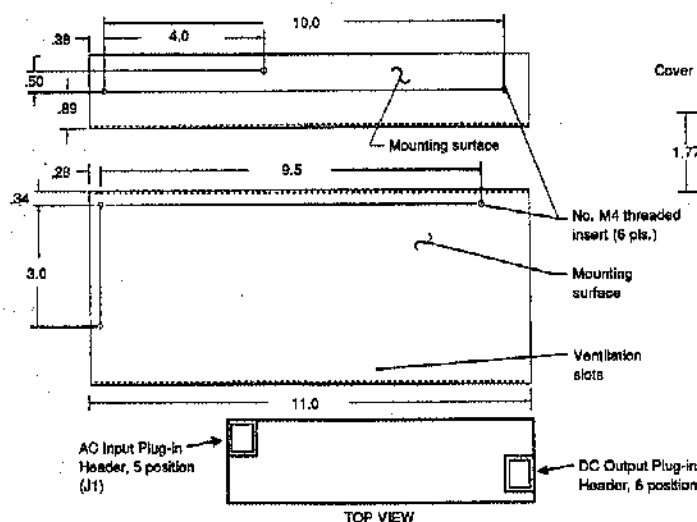
Model	Net Weight	with cover	without cover
SV170	2.8	2.5	
SV170	3.2	2.9	
SV200	2.8	2.5	
SV200	3.2	2.9	
SV250	3.2	2.9	

SV250 Connections:

- Bus Bar (pos.)
- Bus Bar (neg.)
- 6 pin conn., Molex locking male, .100 centers (J2)

Model	Molex Part No.	Amc Part No.	Model	Molex Part No.	Amc Part No.
SV170, 200:			SV250:		
Lambda Connecting Kit: SVKT200-30	08-50-0051	640250-5	Lambda Connecting Kit: SVKT250-10	22-01-3067	770602-6
J1 Mating Connector Housing	08-50-0180	1-840251-6	J2 Mating Connector Housing	08-50-0114	770602-6
J2 Mating Connector Housing	22-01-3067	770602-6	J2 Crimp Terminal	08-50-0106	640707-1
J3 Mating Connector Housing	08-50-0106	640707-1	J1 Mating Connector Housing	08-50-0106	640707-1
J1 & J2 Crimp Terminals	08-50-0114	770606-1	J1 Crimp Terminal		

SV300



TOP VIEW

Notes on All Units:
1. Units are supplied standard without a cover.
2. All customer mounting screws are No. M4 and must not protrude into power supply by more than 1/4".
3. Dimensions are in inches (multiply by 25.4 for mm.)

Model	Net Weight	with cover	without cover
SV300	3.5	3.2	
SV300	4.0	3.7	

Model	Molex Part No.	Amc Part No.	Model	Molex Part No.	Amc Part No.
SV300:			SV300:		
Lambda Connecting Kit: SVKT300-11	08-50-0051	640250-5	Lambda Connecting Kit: SVKT300-11	22-01-3067	770602-6
J3 Mating Connector Housing	08-50-0114	770602-6	J2 Mating Connector Housing	08-50-0106	640707-1
J3 Crimp Terminal	08-50-0106	640707-1	J1 Mating Connector Housing	08-50-0106	640707-1
J1 Mating Plug-in Header	10-808-005	ELFP05110	J1 Crimp Terminal		
J2 Mating Plug-in Header	10-808-005	ELFP05110	J2 Crimp Terminal		