

600-1000W Single Output Low Profile Power Supplies

Features

- ◆ Low Cost
- ◆ Low Profile
- ◆ Active Power Factor Correction
- ◆ Universal Input (85 - 265VAC)
- ◆ Input Transient Protected IEC61000-4
- ◆ Low Acoustical noise
- ◆ Medical Certifications (SWS1000L)
- ◆ Global safety Approvals
- ◆ Variable speed fan



Key Market Segments & Applications



Specifications		SWS600L	SWS1000L
Input Voltage range	-	85 - 265VAC (47 - 63Hz) or 120 - 350VDC*	
Inrush Current (115 / 230VAC)	A	20 / 40	
Power Factor	-	Meets EN61000-3-2 Class A	
Input Current (100/200VAC)	A	7.1 / 3.6 (3.3V: 5 / 2.5)	12 / 6
Temperature Coefficient	-	<0.02%/°C	
Overcurrent Protection	-	>105%, Constant current style	
Overvoltage Protection	V	125% -145%	
Overtemperature Protection	-	Yes, cycle AC or Remote On/Off to reset	
Hold Up Time (Typ)	ms	20ms at 115/230VAC	
Leakage Current (max)	mA	<0.75mA	100µA at 115VAC 60Hz(2)
Remote Sense	-	Yes	
Parallel Connection	-	Yes	
Remote On/Off (CNT)	-	Yes	
Voltage Programming (1)	-	Yes	
DC Good & Fan Fail Signal	-	Yes, open collector output	
Auxiliary Output	-	12V 0.1A	
LED Indicator	-	Green LED = On	
Operating Temperature	°C	-40°C start up. -20 to 74°C, derating linearly to 50% load above 50°C	
Storage Temperature	°C	-40 to +85°C	
Humidity (non condensing)	-	20 - 90% RH operating, 10 - 95%RH non operating	
Cooling	-	Variable speed internal fan	
Withstand Voltage(One minute)	-	Input to Ground 2kVAC, Input to Output 3kVAC, Output to Ground 500VAC, Output to CNT 100VAC	Input to Ground 2kVAC, Input to Output 4kVAC**, Output to Ground 500VAC, Output to CNT 100VAC
Isolation Resistance	-	>50M at 25C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	MIL-STD-810F 514.5 Cat. 4, 10	
Shock	-	MIL-STD-810F 516.5 Procedure I, VI	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11	
Safety Agency Certification	-	UL/CSA/EN 60950-1, UL/CSA/IEC/EN 60601-1 & ANSI/AAMI ES60601-1, (1000W only), IEC61010-1 (600W only), EN50178, CE Mark	
Conducted & Radiated EMI	-	EN55011 / EN55022-B, FCC Class B	
Weight (Typ)	g	1600	2300
Size (WxHxD)	in	2.4 x 4.72 x 7.48"	2.4 x 5.91 x 9.45"
MTBF - Telcordia SR-332 issue 3***	hours	1,444,923	1,348,293
Warranty	yrs	Three Years	

(1) 1-6V program voltage input to adjust output 20-120% (typical) of nominal. See instruction manual for details & models with this feature.

(2) Worst case: <300µA at 264VAC, 63Hz (Normal Condition); <500µA (Single Fault Condition).

*Safety certified for AC input only

**2 x MOPPs (3rd edition 60601)

*** 24V output model, 25°C ambient, full load, 230VAC input

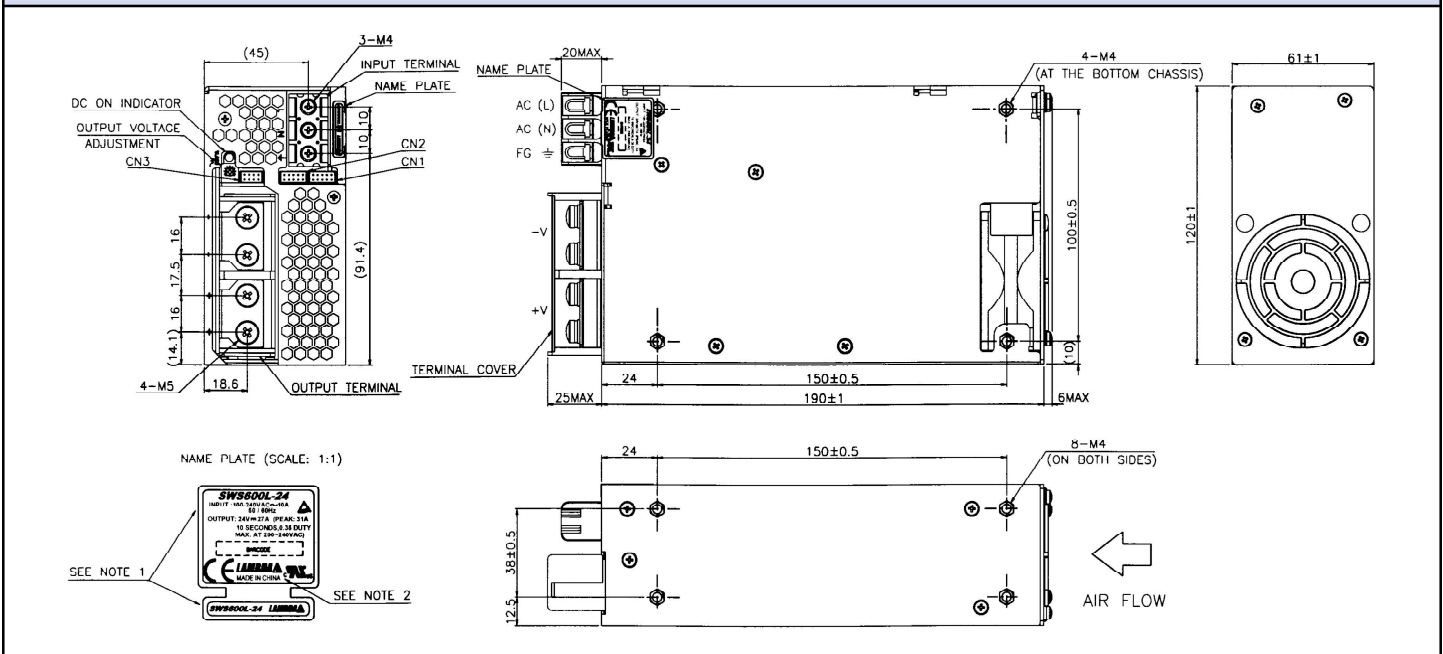
Model Selector

Model	Voltage	Adjust Range	Max Current (A)	Max Power (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Efficiency (typ) % ⁽³⁾
SWS600L-3	3.3V	2.64 - 3.96V	120A	396W	30	20	120	70 / 72
SWS1000L-3	3.3V	2.64 - 3.96V	200A	660W	30	20	120	74 / 76
SWS600L-5	5V	4 - 6V	120A	600W	30	20	120	75 / 77
SWS1000L-5	5V	4 - 6V	200A	1000W	30	20	120	79 / 81
SWS600L-12	12V	9.6 - 14.4V	53A	636W	72	48	150	79 / 82
SWS1000L-12	12V	9.6 - 14.4V	88A	1056W	72	48	150	82 / 84
SWS600L-15	15V	12 - 19.5V	43A	645W	90	60	150	79 / 82
SWS1000L-15	15V	12 - 19.5V	70A	1050W	90	60	150	82 / 84
SWS600L-24	24V	19.2 - 28.8V	27A (31A) ⁽⁴⁾	648W(744W)	144	96	150	81 / 84
SWS1000L-24	24V	19.2 - 28.8V	44A (51A) ⁽⁴⁾	1056W(1224W)	144	96	150	84 / 86
SWS600L-36	36V	28.8 - 43.2V	18A	648W	216	144	200	82 / 84
SWS1000L-36	36V	28.8 - 43.2V	29A	1044W	216	144	200	84 / 86
SWS600L-48	48V	38.4 - 56V	13A (15A) ⁽⁴⁾	624W(720W)	288	192	200	82 / 84
SWS1000L-48	48V	38.4 - 56V	22A (25A) ⁽⁴⁾	1056W(1200W)	288	192	200	84 / 86
SWS600L-60	60V	48 - 66V	10A	600W	360	240	200	82 / 84
SWS1000L-60	60V	48 - 66V	17A	1020W	360	240	200	84 / 86

Notes: (3) 115 / 230VAC

(4) Peak current and power possible at 170-265VAC input, 10s max, 35% duty cycle

SWS600L Outline Drawing



Other Industrial Products

SWS	50 - 300W Single Output
HWS	15 - 1800W Single output, high reliability
ZWS	5 - 240W pcb style single, output
DLP, DPP, DSP	10 - 480W DIN Rail mount
LS	25 - 200W Single output, low cost

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

