



- ◆ Quiet Temperature Controlled Fan
- ◆ Low Cost
- ◆ Low Profile
- ◆ Wide Operating Temperature Range
- ◆ Active Power Factor Correction
- ◆ Input Transient Protected IEC61000-4
- ◆ Medical Approvals (SWS1000L)

## SWS600/1000L Series

### 600W and 1000W Low Profile Single Output Power Supplies

#### SWS600/1000L Features and Benefits

##### Features

- ◆ Temperature Controlled Fan
- ◆ Global safety Approvals
- ◆ Wide Temperature Range
- ◆ Level B EMI

##### Benefits

- ◆ Low Acoustic Noise
- ◆ Supports Global Use
- ◆ Suitable for Outdoor Temperature Extremes
- ◆ Assists System Compliance

#### Specifications

MODEL		SWS600L	SWS1000L
ITEMS			
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	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	<0.3mA
Remote Sense	-	Yes	
Parallel Connection	-	Yes	
Remote On/Off (CNT)	-	Yes	
Voltage Programming (1)	-	Yes, 1-6V adjusts output from 20 - 120% of nominal	
DC Good & Fan Fail Signal	-	Yes, open collector output	
Auxiliary Output	-	12V 0.1A	
LED Indicator	-	Green LED = On	
Operating Temperature	-	-40°C start up. -20 to 74°C, derating linearly to 50% load above 50°C	
Storage Temperature	-	-40 to +85°C	
Humidity (non condensing)	-	20 - 90% RH operating, 10 - 95%RH non operating	
Cooling	-	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 120VAC
Isolation Resistance	-	>50M at 25C & 70%RH, Output to Ground 500VDC	
Vibration (non operating)	-	10 - 55Hz (sweep for 1 min)23.52m/s <sup>2</sup> constant X, Y, Z 1 hour each plane)	
Shock	-	235.2m/s <sup>2</sup>	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11	
Safety Agency Approvals	-	UL, CSA, EN60950-1, EN/UL60601-1 (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)	mm	61 x 120 x 190	61 x 150 x 240
Warranty	yrs	Three Years	

Notes: (1) Not available on 3.3V & 5V SWS1000L models

## Model Selector

Model	Voltage	Adjust Range (via Trim Pot)	Max Curr. (A)	Max Pwr (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Eff. (2) (typ)%
SWS600L-3	3.3V	2.64 - 3.96V	120	396	30	20	120	70 / 72
SWS1000L-3*	3.3V	2.64 - 3.96V	200	660	30	20	120	74 / 76
SWS600L-5	5V	4 - 6V	120	600	30	20	120	75 / 77
SWS1000L-5	5V	4 - 6V	200	1000	30	20	120	79 / 81
SWS600L-12	12V	9.6 - 14.4V	53	636	72	48	150	79 / 82
SWS1000L-12	12V	9.6 - 14.4V	88	1056	72	48	150	82 / 84
SWS600L-15	15V	12 - 19.5V	43	645	90	60	150	79 / 82
SWS1000L-15	15V	12 - 19.5V	70	1050	90	60	150	82 / 84
SWS600L-24	24V	19.2 - 28.8V	27(31) <sup>3</sup>	648(744) <sup>3</sup>	144	96	150	81 / 84
SWS1000L-24	24V	19.2 - 28.8V	44(51) <sup>3</sup>	1056(1224) <sup>3</sup>	144	96	150	84 / 86
SWS600L-36	36V	28.8 - 43.2V	18	648	216	144	200	82 / 84
SWS1000L-36*	36V	28.8 - 43.2V	29	1044	216	144	200	84 / 86
SWS600L-48	48V	38.4 - 56V	13(15) <sup>3</sup>	624(720) <sup>3</sup>	288	192	200	82 / 84
SWS1000L-48*	48V	38.4 - 56V	22(25) <sup>3</sup>	1056(1200) <sup>3</sup>	288	192	200	84 / 86
SWS600L-60	60V	48 - 66V	10	600	360	240	200	82 / 84
SWS1000L-60	60V	48 - 66V	17	1020	360	240	200	84 / 86

Notes:

(2) 115 / 230VAC

(3) Peak current and power available at 170 - 265VAC Input, 10s max, 35% duty cycle

\* Coming Soon

## SWS600L Outline Drawing

**SIGNAL CONNECTOR INFORMATION**

**PIN CONFIGURATION AND FUNCTIONS OF CN1, CN2**

PIN NO.	FUNCTION
1	+V <sub>IN</sub> : INPUT VOLTAGE NUMBER
2	+S : +SENSE
3	-V <sub>IN</sub> : -INPUT VOLTAGE NUMBER
4	-S : -SENSE
5	N.C. : NO CONNECTION
6	PC : CURRENT BALANCE
7	PV : ADJUSTMENT OF OUTPUT VOLTAGE
8	COM : GROUND FOR PC AND PV SIGNAL
9	CN12 : REMOTE ON/OFF
10	TOG : REMOTE ON/OFF GROUND

**PIN CONFIGURATION AND FUNCTIONS OF CN3**

PIN NO.	FUNCTION
1	COM : GROUND FOR RS AND RV SIGNAL
2	COM : GROUND FOR PC AND PV SIGNAL
3	AUX : AUXILIARY OUTPUT (12V 0.1A)
4	CN11 : REMOTE ON/OFF
5	CS : GROUND FOR AUX AND CN11
6	CS : GROUND FOR AUX AND CN11
7	ALM : ALARM
8	GI : ALARM GROUND

**SIGNAL CONNECTOR USED**

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER	S10B-PH05S (CN1,CN2) S8B-PH05S (CN3)	JST

**MATCHING HOUSINGS, PIN & TOOL**

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-10VS (CN1,CN2) PHDR-0VS (CN3)	JST
TERMINAL PINS	SPHD-002T-P05(AWG28-24) SPHD-001T-P05(AWG26-24)	JST
HAND CRIMPING TOOL	YRS-R20(SPHD-002T-P05) YC-010R(SPHD-001T-P05)	JST

**NOTE:**

- MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, NOMINAL OUTPUT CURRENT AND PEAK OUTPUT CURRENT ARE SHOWN ON THE NAME PLATE IN ACCORDANCE WITH THE SPECIFICATIONS
- COUNTRY OF MANUFACTURE IS SHOWN ON THE NAME PLATE IN ACCORDANCE WITH THE SPECIFICATIONS
- M4 TAPPED HOLES (12) FOR CUSTOMER CHASSIS MOUNTING (SCREW PENETRATION DEPTH 8m/m MAX.)
- RECOMMENDED SCREW TORQUE OUTPUT TERMINAL(M5 SCREW) = 2.5N·m  
INPUT TERMINAL(M4 SCREW) = 1.27N·m

## SWS1000L Outline Drawing

**SIGNAL CONNECTOR INFORMATION**

**CN1/CN2 PIN ASSIGNMENT**

**CN3 PIN ASSIGNMENT**

**== ACCESSORIES ==**

\* SHORT PIECE +V<sub>IN</sub> - +S, -V<sub>IN</sub> - -S (ATTACHED ON CN1 AT SHIPMENT)

**== SIGNAL CONNECTOR USED ==**

PART DESCRIPTION	PART NAME	MANUFACT
PIN HEADER (CN1 & CN2)	S10B-PH05S	JST
PIN HEADER (CN3)	S8B-PH05S	JST

**== MATCHING HOUSINGS, PINS & TOOL ==**

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING (CN1 & CN2)	PHDR-10VS	JST
SOCKET HOUSING (CN3)	PHDR-BVS	JST
TERMINAL PINS	SPHD-002T-P05(AWG28-24) SPHD-001T-P05(AWG26-22)	JST
HAND CRIMPING TOOL	YRS-620R(SPHD-002T-P05) YC-610R(SPHD-001T-P05)	JST

**== NOTES ==**

- MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, NOMINAL OUTPUT CURRENT AND PEAK OUTPUT CURRENT ARE SHOWN ON NAME PLATE IN ACCORDANCE WITH THE SPECIFICATIONS.
- COUNTRY OF MANUFACTURE IS SHOWN HERE.
- M4 TAPPED HOLES (12) FOR CUSTOMER CHASSIS MOUNTING (SCREW PENETRATION DEPTH 8m/m MAX.)

**== NAME PLATE ==**

SEE NOTE A

SEE NOTE B

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