



- Quiet Temperature Controlled Fan
- Low Cost
- Low Profile
- Wide Operating Temperature Range
- Active Power Factor Correction
- 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

ITEMS	MODEL	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 (3.3V : 8/4)
Temperature Coefficient	-	<0.02%/°C	
Overcurrent Protection	-	>105%, Constant current style	
Overvoltage Protection	V	125% -145%	
Over temperature 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	-	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)	-	MIL-STD-810F 514.5 CAT. 4, 10	
Shock (in packaging)	-	MIL-STD-810F 516.5 Procedure 1, V1	
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	3 Years	



Model Selector								
Model	Voltage (V)	Adjust Range (via Trim Pot)	Max Curr. (A)	Max Pwr (W)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV)	Eff. ⁽¹⁾ (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)2	648(744)2	144	96	150	81 / 84
SWS1000L-24	24V	19.2 - 28.8V	44(51)2	1056(1224)2	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)2	624(720)2	288	192	200	82 / 84
SWS1000L-48	48V	38.4 - 56V	22(25)2	1056(1200)2	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: (1) 115 / 230VAC (2) Peak current and power available at 170 - 265VAC Input, 10s max, 35% duty cycle

For full data and drawings please visit
www.emea.tdk-lambda.com/www/sws



Outline Drawing SWS600L Series

SIGNAL CONNECTOR INFORMATION

PIN CONFIGURATION AND FUNCTIONS OF CN1,CN2

PIN No.	FUNCTION
1	+V _m : +OUTPUT VOLTAGE MONITOR
2	+S : +SENSING
3	-V _m : -OUTPUT VOLTAGE MONITOR
4	-S : -SENSING
5	N.C. : NO CONNECTION
6	PC : CURRENT BALANCE
7	PV : ADJUSTMENT OF OUTPUT VOLTAGE
8	COM : GROUND FOR PC AND PV SIGNAL
9	CNT2 : REMOTE ON/OFF
10	TOG : REMOTE ON/OFF GROUND

PIN CONFIGURATION AND FUNCTIONS OF CN3

PIN No.	FUNCTION
1	COM : GROUND FOR PC AND PV SIGNAL
2	COM : GROUND FOR PC AND PV SIGNAL
3	AUX : AUXILIARY OUTPUT (12V 0.1A)
4	CNT1 : REMOTE ON/OFF
5	G2 : GROUND FOR AUX AND CNT1
6	G2 : GROUND FOR AUX AND CNT1
7	ALLM : ALARM
8	G1 : ALARM GROUND

PIN 1 3 5 7 1 3 5 7 9 1 3 5 7 9
 2 4 6 8 2 4 6 8 10 2 4 6 8 10
 CN3 CN2 CN1

SIGNAL CONNECTOR USED

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

MATCHING HOUSINGS, PIN & TOOL

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING	PHDR-10VS (CN1,CN2) PHDR-8VS (CN3)	JST
TERMINAL PINS	SPHD-002T-P05(AWG28~24) SPHD-001T-P05(AWG26~24)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	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 6mm MAX.)
- RECOMMENDED SCREW TORQUE OUTPUT TERMINAL(M5 SCREW) = 2.5N·m
INPUT TERMINAL(M4 SCREW) = 1.27N·m

Outline Drawing SWS1000L Series

SIGNAL CONNECTOR INFORMATION

CN1,CN2 PIN ASSIGNMENT

S10B-PHDSS (JST)

1	+V _m
2	+S
3	-V _m
4	-S
5	N.C.
6	PC
7	PV
8	COM
9	CNT2
10	TOG

CN3 PIN ASSIGNMENT

S8B-PHDSS (JST)

1	COM
2	COM
3	AUX
4	CNT1
5	G2
6	G2
7	ALLM
8	G1

== ACCESSORIES ==

* SHORT PIECE -----
 SHORTING +V_m-+S, -V_m-S
 (ATTACHED ON CN1 AT SHIPMENT)

== SIGNAL CONNECTOR USED ==

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

== MATCHING HOUSINGS , PINS & TOOL ==

PART DESCRIPTION	PART NAME	MANUFACT
SOCKET HOUSING (CN1 & CN2)	PHDR-10VS	JST
SOCKET HOUSING (CN3)	PHDR-8VS	JST
TERMINAL PINS	SPHD-002T-P0.5(AWG28~24) SPHD-001T-P0.5(AWG26~22)	JST
HAND CRIMPING TOOL	YRS-620(SPHD-002T-P0.5) YC-610R(SPHD-001T-P0.5)	JST

== NAME PLATE ==

SEE NOTE A

SEE NOTE B

== NOTES ==

A : MODEL NAME, INPUT VOLTAGE RANGE, NOMINAL OUTPUT VOLTAGE, NOMINAL OUTPUT CURRENT AND PEAK OUTPUT CURRENT ARE ON NAME PLATE IN ACCORDANCE WITH THE SPECIFICATIONS.

B : COUNTRY OF MANUFACTURE IS SHOWN HERE.

C : M4 TAPPED HOLES (12) FOR CUSTOMER CHASSIS MOUNTING. (SCREW PENETRATION DEPTH 6mm MAX.)



TDK-LAMBDA EMEA

www.emea-tdk-lambda.com



TDK-Lambda France SAS
 ZAC des Delaches
 BP 1077-Gometz-le-Chatel
 91940 LES ULIS
 France
 Tel: +33 1 60 12 71 65
 Fax: +33 1 60 12 71 66
 france@fr.tdk-lambda.com
 www.fr.tdk-lambda.com



TDK-Lambda Germany GmbH
 Karl-Bold-Strasse 40
 77855 Achern
 Tel: +49 7841 666 0
 Fax: +49 7841 5000
 info.germany@de.tdk-lambda.com
 www.emea.tdk-lambda.com



TDK-Lambda Italy S.r.l.
 Via dei Lavoratori 128/130
 20092 Cinisello Balsamo (MI)
 Italy
 Tel: +39 02 61 29 38 63
 Fax: +39 02 61 29 09 00
 info.italia@it.tdk-lambda.com
 www.it.tdk-lambda.com



TDK-Lambda Austria Sales Office
 Aredstrasse 22
 2544 Leobersdorf
 Tel: +43 2256 655 84
 Fax: +43 2256 645 12
 info.germany@de.tdk-lambda.com
 www.emea.tdk-lambda.com



TDK-Lambda Scandinavia Sales Office
 PO Box 546
 Rallarvägen 41
 184 40 Åkersberga
 Sweden
 Tel: +46 854 084 990
 Fax: +46 854 066 096
 info.germany@de.tdk-lambda.com
 www.emea.tdk-lambda.com



TDK-Lambda UK Ltd.
 Kingsley Avenue
 Ilfracombe
 Devon EX34 8ES
 United Kingdom
 Tel: +44 (0) 12 71 85 66 66
 Fax: +44 (0) 12 71 86 48 94
 powersolutions@uk.tdk-lambda.com
 www.uk.tdk-lambda.com



Nemic Lambda Ltd.
 Kibbutz Givat
 Hashlosha 48800
 Israel
 Tel: +9 723 902 4333
 Fax: +9 723 902 4777
 info@nemic.co.il
 www.nemic.co.il



TDK-Lambda Americas Inc.
 Low Power
 3055 Del Sol Blvd
 San Diego CA 92154
 USA
 Tel: +1 800-LAMBDA-4 or 1-800-526-2324
 Tel: +1 619-575-4400
 Fax: +1 619-429-1011
 www.us.tdk-lambda.com/lp/



TDK-Lambda Corporation
 5F Dempa Bldg. 1-11-15
 Higashi-Gotanda
 Shinagawa-Ku
 Tokyo 141-0022
 Japan
 Tel: +81 3 3447 4693
 Fax: +81 3 3447 4750
 www.tdk-lambda.com

High Power
 405 Essex Road Neptune NJ 07753
 USA
 Tel: +1 732 922 9300
 Fax: +1 732 922 1441
 www.us.tdk-lambda.com/hp/

LOCAL DISTRIBUTION

