

SUNPOWER TECHNOLOGY CORP.

SPECIFICATIONS OF SWITCHING POWER SUPPLY

MODEL NO.: SDX-6300-24 REV.: 1.3
SDX-6300-48
(UL/cUL/TUV APPROVED)

STAMP	APPROVED	CHECK	PREPARE

1.DC INPUT :

1-1.VOLTAGE :

SDX-6300-24: 19V --- 32V DC (TYPICAL 24V)**SDX-6300-48:** 36V --- 72V DC (TYPICAL 48V)

1-2. CURRENT :

SDX-6300-24: **24.0A** MAX. AT **19V** DC INPUT, FULL LOAD CONDITION.**SDX-6300-48:** **12.6A** MAX. AT **36V** DC INPUT, FULL LOAD CONDITION.

1-3. INPUT PROTECTION :

SDX-6300-24: CERAMIC FUSE, **25A/125V**.**SDX-6300-48:** CERAMIC FUSE, **15A/125V**.**2. DC OUTPUT:****SDX-6300-24:**

OUTPUT		V1	V2	V3	V4	V5	V6	
VOLTAGE		+3.3V	+5V	+12V	-5V	-12V	+5Vsb	
MIN. LOAD		0.1 A	0.5 A	0.2 A	0 A	0 A	0 A	
**MAX. LOAD	19V~23V	*20 A	*30 A	16 A	0.5 A	1 A	1 A	
	24V~32V						1.5 A	
***REGULATION		±5%	±5%	±5%	±5%	+8/-5%	±5%	
RIPPLE & NOISE (MAX.)		50mV	50mV	120mV	50mV	200mV	50mV	
OVP		+3.8V~+4.6V	+5.8V~+7.0V	+13.8V~+17.5V	---	---	---	
EFFICIENCY (TYP.)		67%						

SDX-6300-48:

OUTPUT		V1	V2	V3	V4	V5	V6	
VOLTAGE		+3.3V	+5V	+12V	-5V	-12V	+5Vsb	
MIN. LOAD		0.1 A	0.5 A	0.2 A	0 A	0 A	0 A	
***MAX. LOAD		*20 A	*30 A	16 A	**0.5 A	**1 A	2 A	
****REGULATION		±5%	±5%	±5%	±5%	+8/-5%	±5%	
RIPPLE & NOISE (MAX.)		50mV	50mV	120mV	50mV	200mV	50mV	
OVP		+3.8V~+4.6V	+5.8V~+7.0V	+13.8V~+17.5V	---	---	---	
EFFICIENCY (TYP.)		67%						

* +3.3V & +5V TOTAL OUTPUT MAXIMUM **150 WATTS**.** -5V & -12V TOTAL OUTPUT MAXIMUM **12 WATTS**.*** SDX-6300-24: INPUT VOLTAGE 19V~23V : TOTAL OUTPUT MAXIMUM **250 WATTS**.INPUT VOLTAGE 24V~32V : TOTAL OUTPUT MAXIMUM **300 WATTS**.SDX-6300-48: TOTAL OUTPUT MAXIMUM **300 WATTS**.

**** THE OUTPUT VOLTAGE LOAD REGULATION IS LESS THAN THE VALUES IN THE ABOVE TABLE BY CHANGING EACH OUTPUT LOAD $\pm 40\%$ FROM 60% RATED OF LOAD, AND KEEP THE OTHER OUTPUTS AT 60% OF RATED LOAD.

3. ELECTRONIC CHARACTERISTICS :

3-1. RISE TIME:

20mS MAX.

3-2. OVER LOAD PROTECTION:

WHEN OUTPUT POWER OVER 105% TO **150%** OF RATED LOAD, THE POWER SUPPLY WILL SHUTDOWN AND AUTO RECOVERY WHEN FAULT CONDITION HAS BEEN REMOVED.

3-3. SHORT CIRCUIT PROTECTION:

WHEN OUTPUT SHORT TO GROUND, THE POWER SUPPLY WILL SHUTDOWN AND AUTO RECOVERY WHEN SHORT CIRCUIT CONDITION HAS BEEN REMOVED.

3-4. POWER GOOD SIGNAL:

POWER ON WITHIN 100----500ms, HIGH LEVEL TTL SIGNAL RELEASE.

3-5. PS-ON INPUT SIGNAL:

THE PS-ON TTL SIGNAL SWITCHES ON/OFF THE PS.

THE INPUT IS DUE TO A 30K PULL UP RESISTOR CONNECTED TO +5VSB.

IF THE INPUT IS OPEN (DEFAULT)THE PS IS SWITCHED OFF.

LOGIC STATE	FUNCTION	INPUT VOLTAGE	INPUT CURRENT
PS-ON =HI	P/S IS SWITCHED OFF	PS-ON >2V	
PS-ON =LOW	P/S IS SWITCHED ON	PS-ON <0.8V	MAX-3mA@0V

4. MECHANICAL DATA :

OUTLINE DIMENSION : **W 100 xD 200 xH 67 mm**

5.COOLING:

FORCED AIRFLOW COOLING WITH TWO **15 CFM** (MIN.) DC FAN.

6. SAFETY :

THIS PRODUCT IS DESIGN TO COMPLY WITH THE FOLLOWING STANDARDS :

6-1. UL **1950 3rd** EDITION (1995) APPROVED. (E 129733)

6-2. CSA C22.2 NO.950-95 **3rd** EDITION (1995) APPROVED BY UL.

6-3. TUV EN 60950: 1992+A1+A2+A3+A4+A11 (1997) APPROVED. (R 5008519)

6-4. IEC 60950:1991+A1+A2+A3+A4 (1996) APPROVED.

6-5. EMKO-TSE (74-SEC) 207/94 APPROVED.

7. EMS :

THIS PRODUCT IS DESIGN TO COMPLY WITH THE FOLLOWING STANDARDS :

7-1. EMI

(1) . FCC CFR PART 15 SUBPART J , CLASS B LIMIT

(2) . EN 50081-1:1997 EMISSION STANDARD

EN 55022: 1997 CLASS B LIMIT.

(3) . CNS 13438 CLASS B.

7-2. EMS

(1) . EN 50082-1 (1997) IMMUNITY STANDARD:

EN 61000-4-2 : 1995 ELECTROSTATIC DISCHARGE STANDARD.

EN 61000-4-3 : 1996 RADIATED RF STANDARD.

EN 61000-4-4 : 1995 FAST TRANSIENT/BURST STANDARD.

EN 61000-4-5 : 1995 LIGHTNING SURGE STANDARD.

EN 61000-4-6 : 1996 CONDUCTED RF STANDARD.

EN 61000-4-8 : 1993 POWER FREQ. MAG. FILELD STANDARD.

EN 61000-4-11:1994 VOLTAGE DIP & INTERRUPT STANDARD

8. PHYSICAL ENVIRONMENT (AMBIENT) :**8-1. TEMPERATURE RANGE :**

OPERATING TEMPERATURE RANGE : 0 ~ 70°C

DERATING FACTOR 45°C ~ 70°C : 2.5%/°C

STORAGE -10 TO +75 °C

8-2. HUMIDITY :

OPERATION 20% TO 85% RH. (NON CONDENSING)

STORAGE AND SHIPPING 10% TO 95% RH. (NON CONDENSING)

9.M.T.B.F.:

138K HOURS APPROXIMATELY, ACCORDING TO MIL-HDBK-217F AT 25°C ENVIRONMENT.