



SUNPOWER TECHNOLOGY CORP.
 16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.).
 TEL: 886-2-8226-3100 FAX: 886-2-8226-3111
 http://www.sunpower.com.tw
 E-mail: sunpower@sunpower.com.tw

SDX-300-24

300W, 24V Input
DC-DC for ATX System



150 x 140 x 86 mm
 5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * Soft start function, low inrush current
- * Input over voltage and under voltage protection
- * Over voltage, over load & short circuit protection
- * Input polarity reverse protection
- * 3.3V, 5V main output remote sensing
- * Meet Intel ATX 2.01 / ATX 2.03 / ATX 12V
- * 100% full load burn-in test
- * 1 year warranty

Specification:

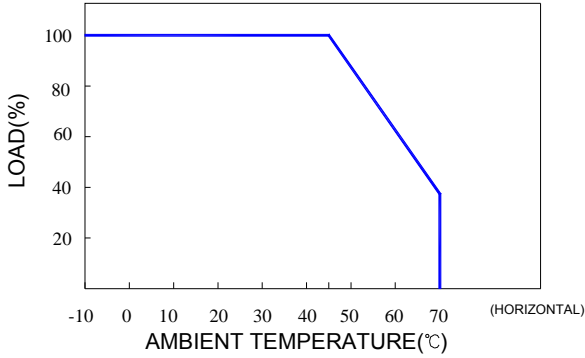
INPUT	Model No.	SDX-300-24					
	Voltage	19V~32V (Typical 24V)					
	Current	<26.3A@19V DC					
	Protection	CERAMIC FUSE 30A/250V					
OUTPUT	OUTPUT	V1	V2	V3	V4	V5	V6
	Voltage	5V	3.3V	12V	-5V	-12V	5Vsb
	Min Load	3 A	0.2 A	0.5 A	0 A	0 A	0 A
	Max Load	30 A	25 A	18 A	0.5 A	1 A	1.5A
	Output Tolerance ②	±5%	±5%	±5%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	120mV	70mV	150mV	70mV
	Efficiency (TYP.)	66%					
	Output MAX.	300W					
	Over Voltage	5.8V ~ 7.0V	3.8V ~ 4.6V	13.8V~ 16.8V	---	---	---
	Protection	Shutdown, it needs re-power on to recover					
ELEC. CHAR.	Input Voltage	Under Voltage Protection : <15V~18V · Over Voltage Protection : >33V~36V.					
	Over Load & Short Circuit	When power supply over 105%~ 180% max load or short circuit acted, power supply will be shutdown and recover automatically after the fault is removed.					
	Rise time	<20mS					
ENVIRONMENT	Power good signal	Power ON within 100---500ms, high level TTL Signal release.					
	PS-ON signal	P/S ON : PS-ON=LOW or < 0.8V ; P/S OFF : PS-ON=HI or >2V					
SAFETY	Temperature ④	Operating: -10 ~ 70°C ; De-rating: 45 ~ 70°C: 2.5%/°C ; Storage: -20 ~ 85°C					
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)					
EMC	Withstand voltage	I/P-O/P:2.0KVAC, I/P-FG:1KVAC, 1minute					
	Isolation resistance	I/P-O/P, I/P-FG, >100MΩ/500VDC at 25°C / 70% RH					
OTHERS	EMI	EN 55022 CLASS B · FCC CFR 47 PART 15 CLASS B · CNS 13438 CLASS B.					
	EMS	EN 55024 : EN 61000-4-2,3,4,6,8 ; ENV 50204					
NOTE	Cooling	Forced airflow cooling with a DC fan					
	M.T.B.F.	170K hours					
	Dimension	150 x 140 x 86 mm (W*L*H)					
	Packing	N.W.: 1.98 Kg / 1pc; 6 pcs / 1.44 CUFT / 1 CTN					
NOTE	① All measurements which not mentioned are based on 24VDC input, output Max at ambient 25°C / 70%RH.						
	② Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured at the condition : when any of output is with 20% ~ 100% max load and the rest of each outputs are with 60% max load , Each output could work within max load but must under total output max .						
	③ Ripple & noise are measured at 21~32VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~15" twisted pair-wire with a 0.1uF & a 47uF parallel capacitor.						
	④ The operating temperature shall follow the de-rating curve in spec						
	⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.						



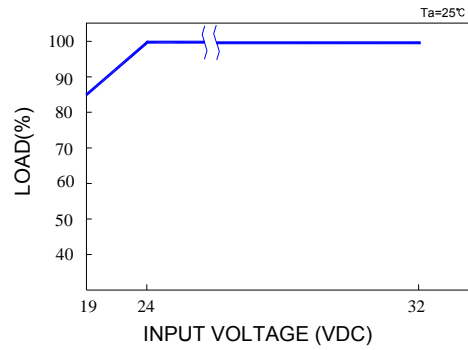
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SDX-300-24

De-rating Curve :

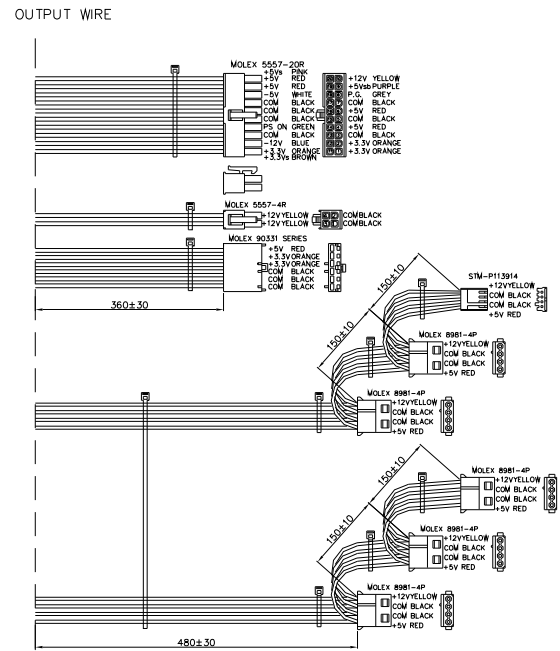
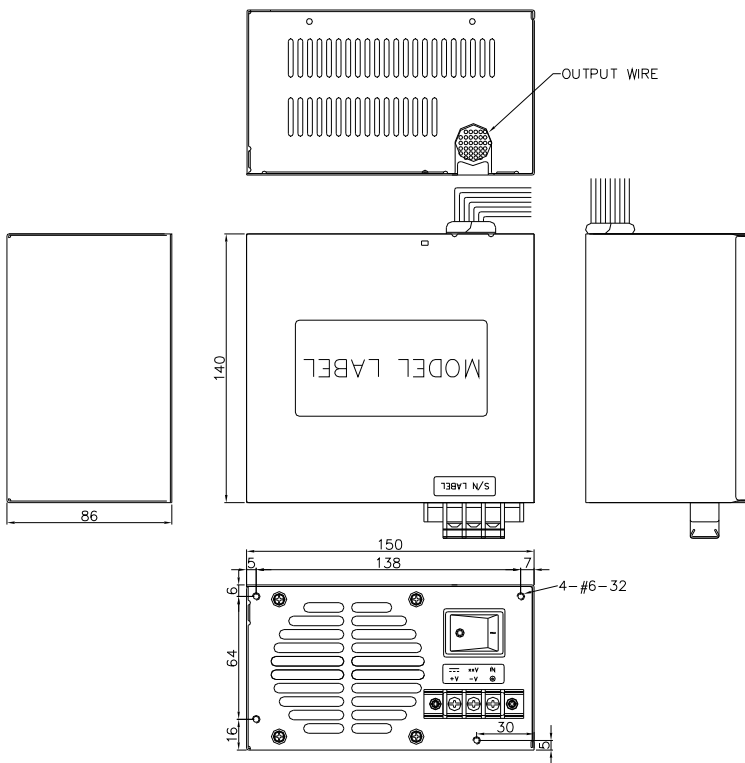


Output De-rating Vs Input Voltage



Dimension:

(Unit: mm)





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SDX-300-48 ; SDX-425-48

48V Input, 300/425 watts
DC-DC for ATX System



150 x 140 x 86 mm
 5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * Soft start function, low inrush current
- * Input polarity reverse protection
- * Over voltage, over load & short circuit protection
- * High current for main output
- * Meet Intel ATX 2.01 / ATX2.03 / ATX 12V
- * Built-in long life ball bearing fan
- * 100% full load burn-in test
- * UL, cUL, CB, CE approved (except SDX-425-48)
- * 1 year warranty

Specification:

INPUT	Model	SDX-300-48						SDX-425-48					
	Voltage	36V~72V (Typical 48V).											
OUTPUT	Current	<13A@40V DC						<17A@40VDC					
	Voltage	V1	V2	V3	V4	V5	V6	V1	V2	V3	V4	V5	V6
		5 V	3.3 V	12 V	-5 V	-12 V	5 Vsb	5 V	3.3 V	12 V	-5 V	-12 V	5 Vsb
	Min Load	3 A	0.5 A	1 A	0 A	0 A	0 A	3 A	0.5 A	1 A	0 A	0 A	0 A
	Max Load	35 A	30 A	18 A	0.5 A	1 A	1A	45 A	28 A	20 A	0.5 A	1 A	1.5 A
	Output Tolerance ②	±5%	±5%	±5%	±5%	±10%	±5%	±5%	±5%	±5%	±5%	±10%	±5%
	Ripple Noise MAX. ③	70mV	70mV	120mV	100mV	150mV	70mV	70mV	70mV	120mV	100mV	150mV	70mV
	Efficiency (TYP)	68%						68%					
	Output MAX.	300W						425W					
	PROTECTION	Over Voltage Protection	5.8~ 7.0V	3.8~ 4.6V	13.8~ 16.8V	---	---	---	5.8~ 7.0V	3.8~ 4.6V	13.8~ 16.8V	---	---
Shutdown, it needs re-power on to recover													
Over Load & Short Circuit		When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and recover automatically after the fault is removed.											
Input Protection		Ceramic Fuse, 15A/250V						Ceramic Fuse, 20A / 250V.					
ELEC. CHAR.	Rise time	<20mS											
	TTL Signal	Power Good Signal, PS-ON Input Signal.											
ENVIRONMENT	Temperature ④	Operating: -10~70°C; De-rating: 45°C ~70°C : 2.5%/°C.; Storage: -20~+85°C											
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)											
SAFETY	Withstand voltage	I/P-O/P:2.0KVAC, I/P-FG:1KVAC, 1minute											
	Isolation resistance	I/P-O/P, I/P-FG, > 100MΩ/500VDC at 25°C / 70% RH											
	Safety standard	UL 60950 ^{3rd} , CSA C22.2 No. 60950 3 rd , IEC 60950 approved. (For SDX-300-48 only)											
EMC	EMI	EN 55022 CLASS B · FCC CFR 47 PART 15 CLASS B · CNS 13438 CLASS B.											
	EMS	EN 55024 : EN 61000-4-2,3,4,6,8 ; ENV 50204											
OTHERS	Cooling	Forced airflow cooling with a DC fan											
	M.T.B.F.	130K hours											
	Dimension	150 x 140 x 86 mm (W*L*H)											
	PACKING	N.W.: 1.84 Kg / 1pc; 6 pcs / 1.44 CUFT / 1 CTN											

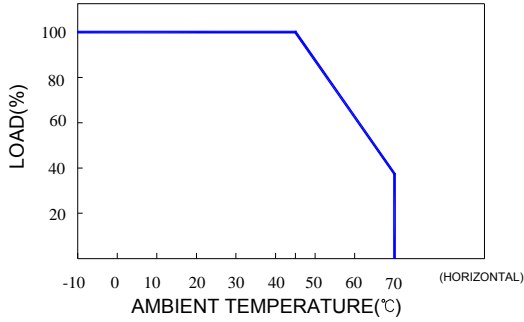
- NOTE**
- ① All measurements which not mentioned are based on 48VDC input, **output Max** at ambient 25°C / 70%RH.
 - ② Output tolerance included set up voltage, line regulation and load regulation.
The regulation is measured at the condition : when any of output is with 20% ~ 100% **max load** and the rest of each outputs are with 60% **max load**, Each output could work within **max load** but must under total **output max**.
 - ③ Ripple & noise are measured at 40~72VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~15" twisted pair-wire with a 0.1uF & a 47uF parallel capacitor.
 - ④ The operating temperature shall follow the de-rating curve in spec
 - ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.



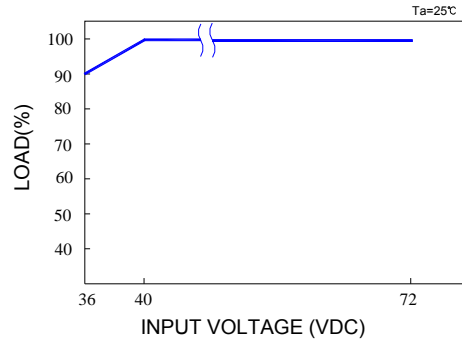
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SDX-300-48 ; SDX-425-48

De-rating Curve :



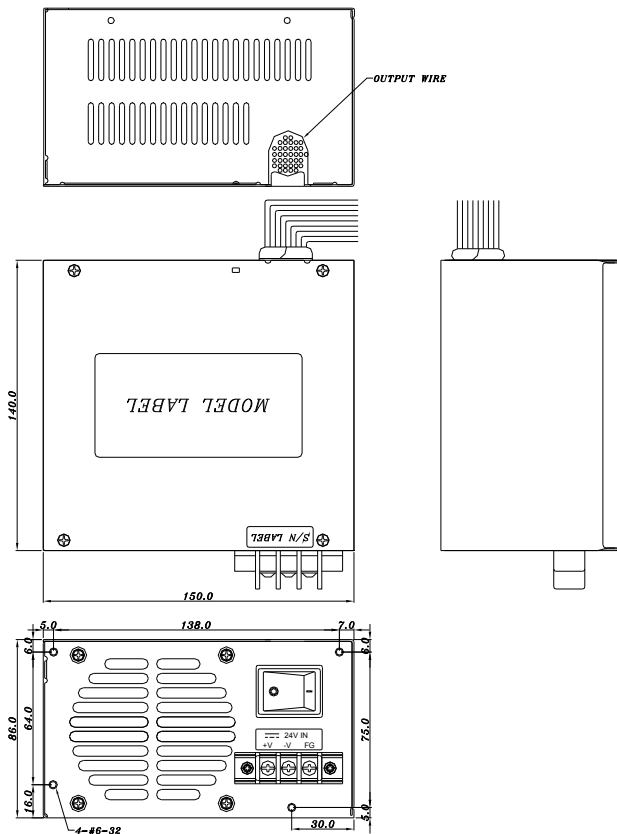
Output De-rating Vs Input Voltage



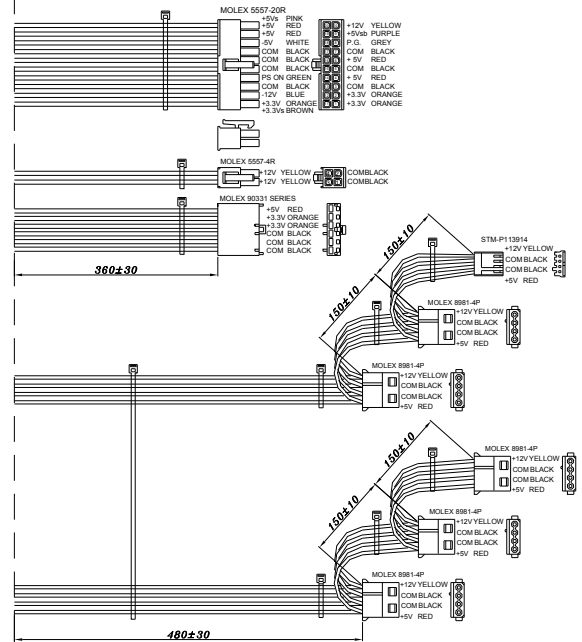
Dimension:

SDX-300-48

(Unit: mm)



OUTPUT WIRE



UNIT : mm



SDX-300-96 SDX-425-96

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**96V Input, 300W/425W
DC-DC for ATX System**



150 x 140 x 86 mm
5.90 x 5.51 x 3.39 inch



Features:

- * Input and output isolation
- * Soft start function, low inrush current
- * Input polarity reverse protection
- * Over voltage, over load & short circuit protection
- * Built-in long life ball bearing fan
- * 100% full load burn-in test
- * Meet Intel ATX 2.01 / ATX 2.03 / ATX 12V
- * 1 year warranty

Specification:

INPUT	MODEL No.	SDX-300-96						SDX-425-96						
	Voltage	72V~144V DC												
OUTPUT	Current	<5.9A@72VDC.						<8.5A@72VDC						
	Input Protection	Ceramic Fuse, 8A / 250V.						Ceramic Fuse 12A/250V						
OUTPUT	Voltage	V1	V2	V3	V4	V5	V6	V1	V2	V3	V4	V5	V6	
		5 V	3.3 V	12 V	-5 V	-12 V	5 Vsb	5 V	3.3 V	12 V	-5 V	-12 V	5 Vsb	
	Min Load	3A	0.5 A	1 A	0A	0A	0A	3A	0.5A	1A	0A	0A	0A	
	Max Load	35 A	30 A	18 A	0.5 A	1 A	1.5 A	45A	28A	20A	0.5A	1A	1.5A	
	Output Tolerance	②	±5%	±5%	±5%	±5%	±10%	±5%	+5/-4%	±5%	±6%	±5%	+10/-8%	±5%
	Ripple Noise MAX.	③	70mV	70mV	120mV	70mV	150mV	70mV	70mV	70mV	120mV	100mV	150mV	70mV
	Efficiency (TYP)		72%						73%					
Output MAX.		300W						425W						
PROTECTION	Over Voltage	5.8V~7.0V	13.8V~16.8V	----	----	----	----	5.8V~7.0V	13.8V~16.8V	----	----	----	----	
		Shutdown, it needs re-power on to recover												
	Over Load & Short Circuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be shutdown and recover automatically after the fault is removed.												
ELEC. CHAR	Rise time	<20mS												
	Power Good signal	Power on within 100~500ms, high level TTL signal release.												
ENVIRONMENT	Temperature	④ Operating: -10~70°C; De-rating: 45°C ~70°C : 2.5%/°C.; Storage: -20~+85°C												
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)												
SAFETY	Withstand voltage	I/P-O/P:2.0KVAC, I/P-FG:1KVAC, 1minute												
	Isolation resistance	I/P-O/P, I/P-FG, >100MΩ/500VDC at 25°C/ 70% RH												
	Safety standard	UL 60950 ^{3rd} , CSA C22.2 No. 60950 3 rd , TUV EN 60950-1:2001+A11, IEC 60950 standard.												
EMC	EMI	EN 55022 CLASS B、FCC CFR 47 PART 15 CLASS B、CNS 13438 CLASS B.												
	EMS	EN 55024 : EN 61000-4-2,3,4,6,8 ; ENV 50204												
OTHERS	Cooling	Forced airflow cooling with a DC fan												
	M.T.B.F.	188K hours												
	Dimension	150 x 140 x 86 mm (W*L*H)												
PACKING		N.W.: 1.84 Kg / 1pc; 6 pcs / 1.44 CUFT / 1 CTN												

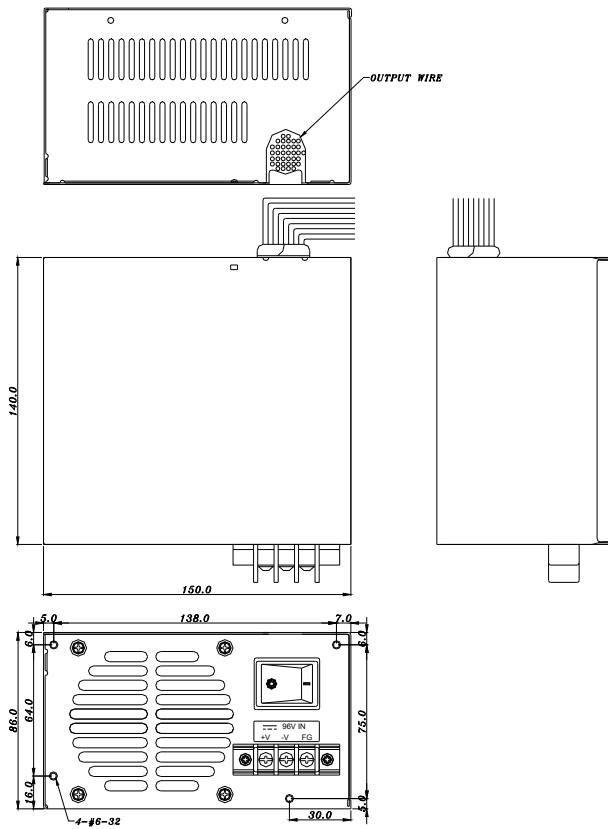
- NOTE**
- ① All measurements which not mentioned are based on 96VDC input, **output Max** at ambient 25°C / 70%RH.
 - ② Output tolerance included set up voltage, line regulation and load regulation.
The regulation is measured at the condition : when any of output is with 20% ~ 100% **max load** and the rest of each outputs are with 60% **max load**, Each output could work within **max load** but must under total **output max**.
 - ③ Ripple & noise are measured at 72~144VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~15" twisted pair-wire with a 0.1uF & a 47uF parallel capacitor.
 - ④ The operating temperature shall follow the de-rating curve in spec
 - ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.



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SDX-425-96



OUTPUT WIRE

