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

SPS-150P-xx Series

150W, Single Output
Active P.F.C Function



198 x 99 x 50 mm
7.8 x 3.9 x 1.97 inch

Features:

- Universal AC input with active PFC circuit, P.F.>0.95
- Power ON with LED indicator
- Built in EMI filter, low ripple noise
- Over voltage、over load & short circuit protection
- Over temperature protection (Optional)
- Output voltage ±10% adjustment
- Output voltage remote sense
- Remote control ON/OFF
- 100% full load burn-in test
- UL, cUL, CB, CE approved
- 3 years warranty

Specification:

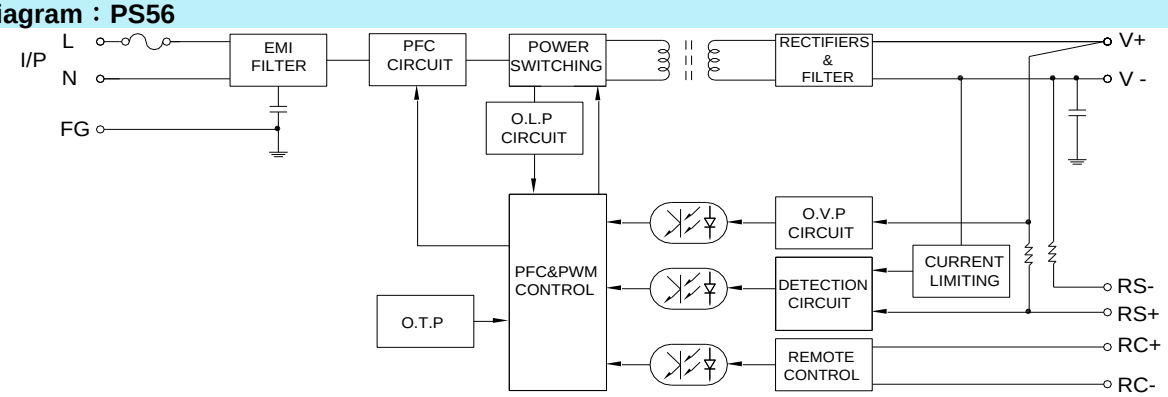
INPUT	**Voltage**	85V ~ 264VAC universal full range or 120V ~ 375VDC.							
	Frequency	47 ---- 63 Hz							
	Current	<2.2A @100V AC input, full load condition							
	Inrush Current(TYP.)	35A@115V , 70A@230V AC input. Cold start at 25℃ ambient							
	Leakage Current	<1.5mA@264V AC input							
	Power Factor	PF ＞ 0.95							
OUTPUT	**MODEL No.**	**SPS-150P-3.3**	**SPS-150P-05**	**SPS-150P-7.5**	**SPS-150P-12**	**SPS-150P-15**	**SPS-150P-24**	**SPS-150P-27**	**SPS-150P-30**	**SPS-150P-48**
	Voltage	3.3V	5V	7.5V	12V	15V	24V	27V	30V	48V
	Min Load	0A	0A	0A	0A	0A	0A	0A	0A	0A
	Max Load	30A	30A	20A	12.5A	10A	6.3A	5.6A	5.0A	3.2A
	Output Tolerance ②	±3%	±2%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
	Ripple Noise MAX. ③	70mV	70mV	80mV	120mV	120mV	200mV	200mV	200mV	200mV
	Efficiency (TYP.)	72%	77%	82%	84%	84%	85%	85%	85%	86%
	Output MAX.	100W	150W	150W	150W	150W	151W	151W	150W	154W
PROTECTION	**Over Voltage**	3.8V~4.6V	5.8V~7.0V	8.6V~10.5V	13.8V~16.8V	17.3V~21.0V	27.6V~33.6V	31.1V~37.8V	34.5V~42.0V	55.2V~67.2V
		Shutdown and latch off, recover after re-start up.								
	Over Load & Short Circuit	When power supply over 105%~ 150% max load or short circuit acted, power supply will be constant current limiting and recover automatically after the fault is removed.								
	Over Temperature	Optional, Over 95℃± 5℃ Shutdown, recovers automatically after fault condition has been removed.								
ELEC. CHAR.	**Rise time**	<20mS								
	Hold up time	>20mS@230V, full load condition								
	Setup time	<3.0S@100 ～ 240V AC								
	Remote sensing	(RS+, RS-).								
	Remote Control	RC+/RC-: 0~0.7V= Power On; 3~10V= Power Off. Sink Current: 3~10 mA								
ENVIRONMENT	**Temperature** ④	Operating: -20 ~ +70℃ ; De-rating: 50 ~ 70℃: 2.5%/℃ ; Storage: -40 ~ +85℃								
	Humidity	Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing)								
	Altitude	6562 ft (≒ 2000 m) operating								
SAFETY	**Withstand voltage**	I/P-O/P:3KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute								
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG ＞100MΩ/500VDC at 25℃/ 70% RH								
	Safety standard	UL 60950-1 2nd,CSA C22.2 No. 60950-1- 07 2nd, IEC 60950-1:2005+A1+A2, approved								
EMC	**EMI**	EN 55032 CLASS B, FCC CFR 47 PART 15 CLASS B								
		Compliance to EN61000-3-2 CLASS D, EN61000-3-3								
	EMS	EN 55024：EN 61000-4-2,3,4,5,6,8,11								
OTHERS	**Cooling**	Natural cooling								
	M.T.B.F.	229.1 K hours								
	Dimension	198 x 99 x 50 ㎜ (L*W*H)								
	Packing	N.W.:0.84 Kg / 1pc; 18 pcs / 1.38 CUFT / 1 CTN								
NOTE	① All measurements which not mentioned are based on 230VAC input, **output Max** at ambient 25℃ / 70%RH ② Output tolerance included set up voltage, line regulation and load regulation. ③ Ripple & noise are measured at 100～254VAC input with 10～50℃ condition and 20MHz of bandwidth by using a 10″ ～15″ twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor. ④ The operating temperature shall follow the de-rating curve in spec The output load may be requested for decreasing as de-rating curve in spec when low input voltage is under 100VAC. ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.									

Copy Right Sunpower Technology Corp. 2009, All Rights Reserved.
Specifications subject to change without notice.

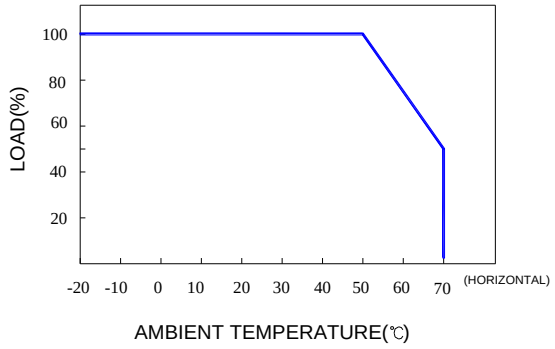
SUNPOWER TECHNOLOGY CORP.
16F.-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.).
TEL: 886-2-8226-3100 FAX: 886-2-8226-3111
http://www.sunpower.com.tw
E-mail: sunpower@sunpower.com.tw

SPS-150P-xx Series

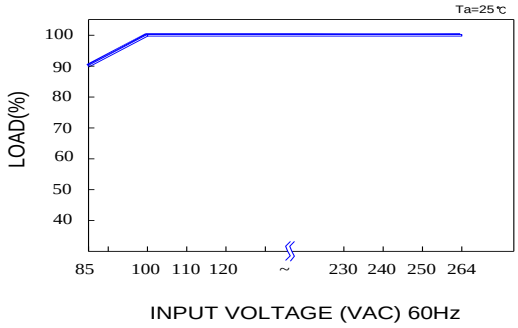
Block Diagram：PS56



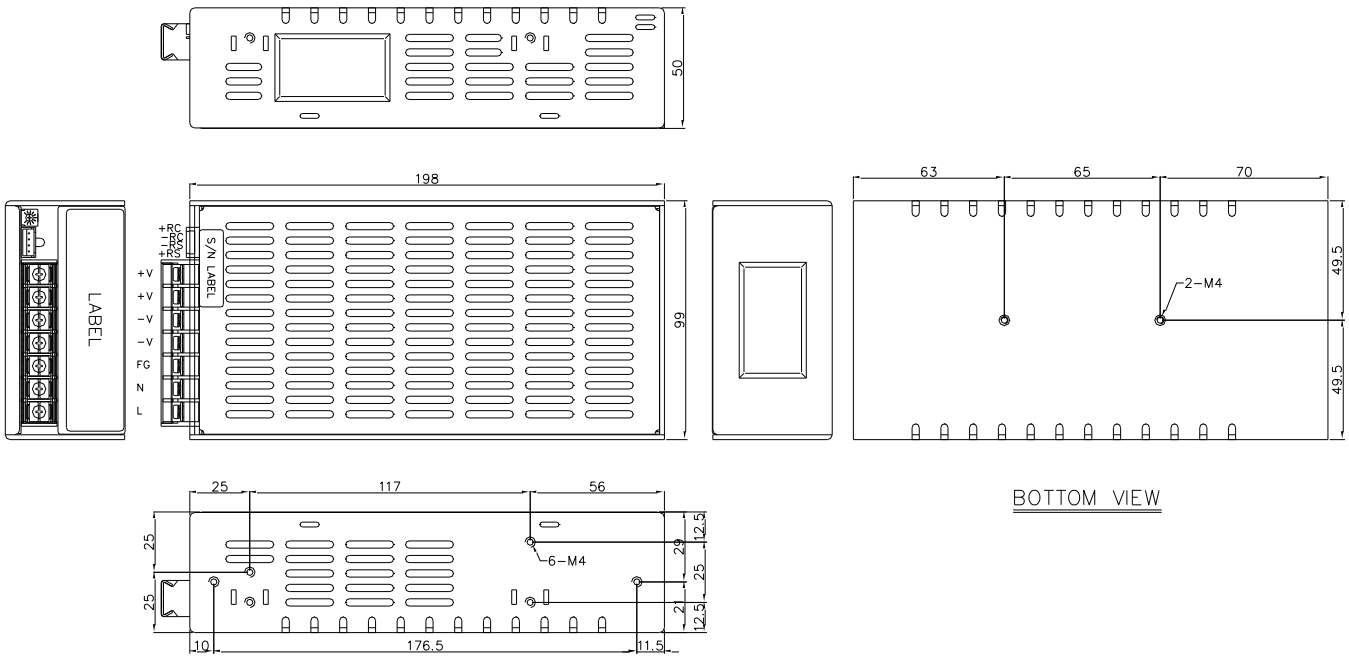
De-rating Curve：



Output De-rating Vs Input Voltage：



Dimension: (Unit: mm)



NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm WITH PC COVER.

MODEL No.	1	2	3	4	5	6	7
SPS-150P-xx	L	N	FG	-V	-V	+V	+V

Copy Right Sunpower Technology Corp. 2009, All Rights Reserved.
Specifications subject to change without notice.

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

SPS-150P-xx Series

Remote sense & Remote control ON/OFF:

❶ Remote control ON/OFF becomes available by applying voltage in CON2

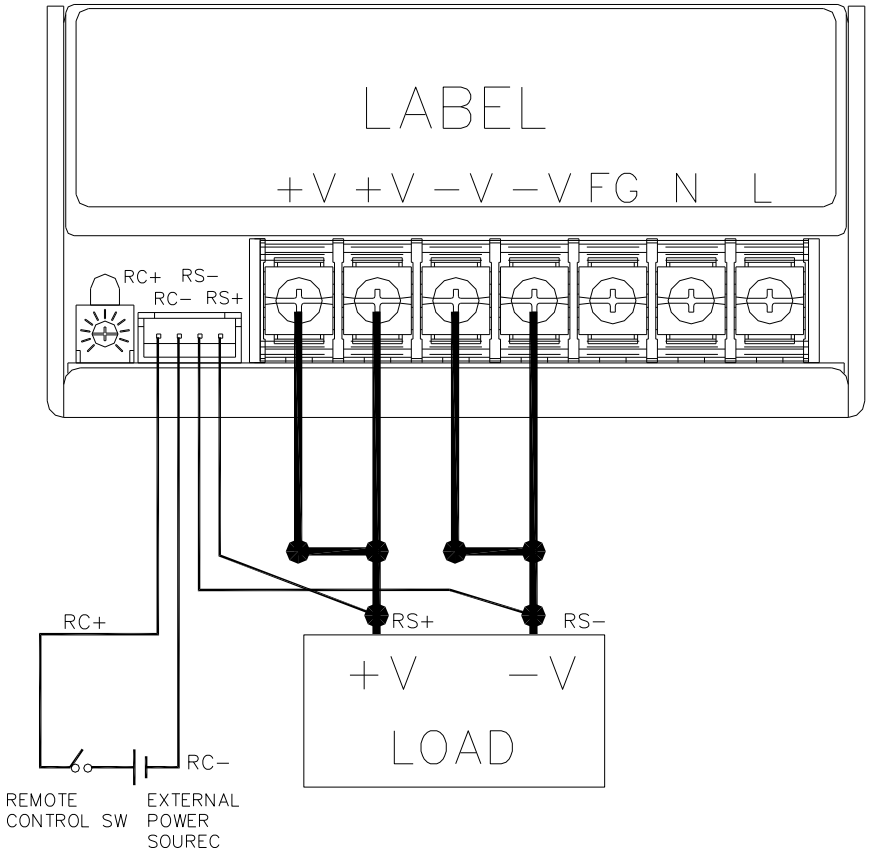
❷ Table A shows the specification of remote control ON/OFF function

❸ Fig 1 slows the example to connect remote control ON/OFF function

Table A： Specification of remote control ON/OFF

Connection Method		Fig 1	Between RC+ and RC-
SW Logic	Power ON	SW Open	0~0.7V
	Power OFF	SW Close	3~10V

Fig 1 Examples of connecting remote control ON/OFF



Copy Right Sunpower Technology Corp. 2009, All Rights Reserved.
Specifications subject to change without notice.