

150W Single Output with PFC Function

HRPG-150 series



Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 88%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 38mm
- Built-in remote ON-OFF control
- Stand by 5V@0.3A
- Built-in remote sense function
- No load power consumption<0.5W (Note.6)
- 5 years warranty

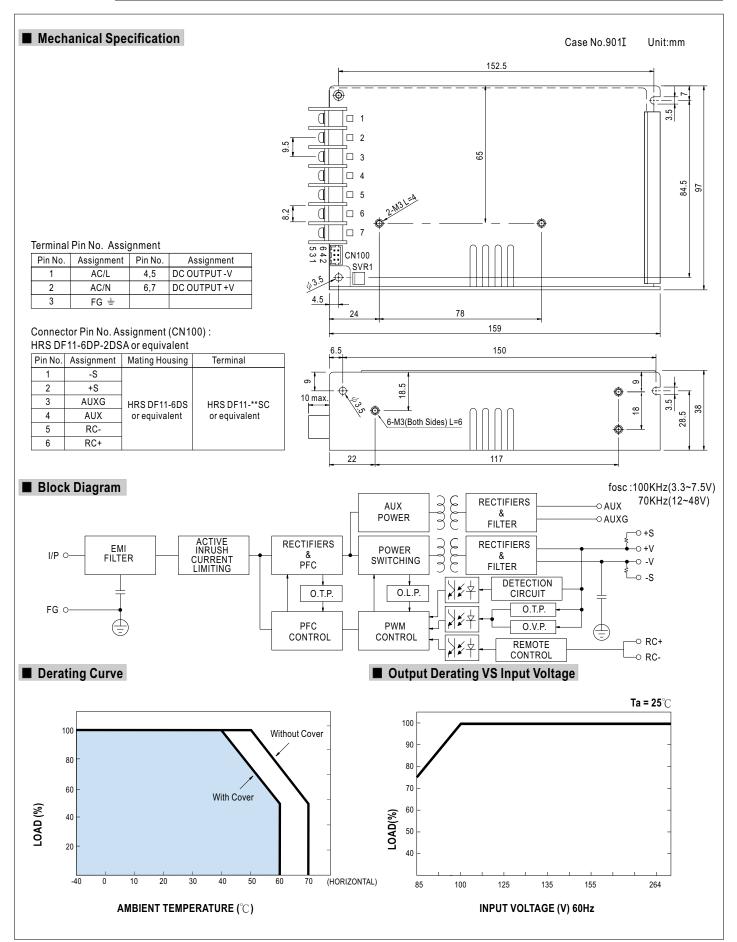


SPECIFICATION

MODEL		HRPG-150-3.3	HRPG-150-5	HRPG-150-7.5	HRPG-150-12	HRPG-150-15	HRPG-150-24	HRPG-150-36	HRPG-150-48		
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V		
OUTPUT	RATED CURRENT	30A	26A	20A	13A	10A	6.5A	4.3A	3.3A		
	CURRENT RANGE	0~30A	0~26A	0~20A	0~13A	0~10A	0~6.5A	0~4.3A	0~3.3A		
	RATED POWER	99W	130W	150W	156W	150W	156W	154.8W	158.4W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p	200mVp-p	240mVp-p		
	VOLTAGE ADJ. RANGE	2.8 ~ 3.8V	4.3~5.8V	6.8 ~ 9V	10.2 ~ 13.8V	13.5 ~ 18V	21.6~28.8V	28.8 ~ 39.6V	40.8~55.2V		
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.5%	±2.5%	±1.5%	±1.5%	±1.5%	±1.5%	±1.5%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%		
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIME	3000ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load									
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load									
INPUT	VOLTAGE RANGE Note.5	85~264VAC 120~370VDC									
	FREQUENCY RANGE	47~63Hz									
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.99/115VAC at full load									
	EFFICIENCY (Typ.)	78.5%	84%	86%	87%	87%	87%	88%	88%		
	AC CURRENT (Typ.)	2.3A/115VAC	1.3A/230VA	C	I	I	1				
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC									
	LEAKAGE CURRENT	<1mA/240VA0	<1mA/240VAC								
	OVERLOAD	105 ~ 135% rated output power									
		Protection type : Constant current limiting, recovers automatically after fault condition is removed									
	OVER VOLTAGE	3.96~4.62V	6 ~ 7V	9.4 ~ 10.9V	14.4 ~ 16.8V	18.8 ~ 21.8V	30~34.8V	41.4 ~ 48.6V	57.6~67.2V		
PROTECTION		Protection type	: Shut down o/	o voltage, re-pov	ver on to recove	r					
	OVER TEMPERATURE	95°C (3.3V ~ 7.5V), 85°C (12V ~ 48V) (TSW1 : detect on heatsink Q1 of power transistor)									
		105°C (3.3V ~ 7.5V), 100°C (12V ~ 48V) (TSW2 : detect on heatsink HS4 of power transistor)									
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down									
FUNCTION	5V STANDBY	5VSB : 5V@0.3A ; tolerance ± 5%, ripple : 50mVp-p(max.)									
FUNCTION	REMOTE CONTROL	RC+ / RC-: 4 ~ 10V or open = power on ; 0 ~ 0.8V or short = power off									
ENVIRONMENT	WORKING TEMP.	-40 ~ +70 $^\circ\mathrm{C}$ (Refer to "Derating Curve")									
	WORKING HUMIDITY	20~90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.04%/°C (0~50°C)									
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes									
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved									
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC									
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
(Note 4)	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3									
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, heavy industry level, criteria A									
OTHERS	MTBF	213.4K hrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	159*97*38mm (L*W*H)									
	PACKING	0.63Kg; 24pcs/	16Kg/0.76CUFT								
NOTE	 Ripple & noise are measure Tolerance : includes set up The power supply is consid EMC directives. For guidan (as available on http://www Derating may be needed ui 	ecially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Issured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47uf parallel capacitor. t up tolerance, line regulation and load regulation. Insidered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets idance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." ww.meanwell.com) d under low input voltages. Please check the derating curve for more details. ption-0.5W when RC- & RC+ (CN100 pin5,6) 0 ~ 8V or short.									



HRPG-150 series





Function Description of CN100

Pin No.	Function	Description
1	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2		Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
3	AUXG	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
4	AUX	Auxiliary voltage output, 4.75~5.25V, referenced to pin 3(AUXG). The maximum load current is 0.3A. This output has the built-in oring diodes and is not controlled by the "remote ON/OFF control".
5	RC-	Remote control ground.
6	RC+	Turns the output on and off by electrical or dry contact between pin 5 (RC-). Short: Power OFF, Open: Power ON.

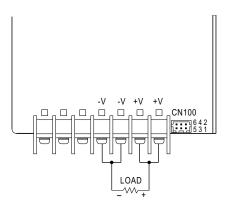
Function Manual

1.Remote Control

The PSU can be turned ON/OFF by using the "Remote

ON/OFF" function

Between RC-(pin5) and RC+(pin6)	Output Status		
SW ON (Short)	OFF		
SW OFF (Open)	ON		



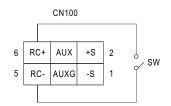


Fig 1.1

2.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.

