

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

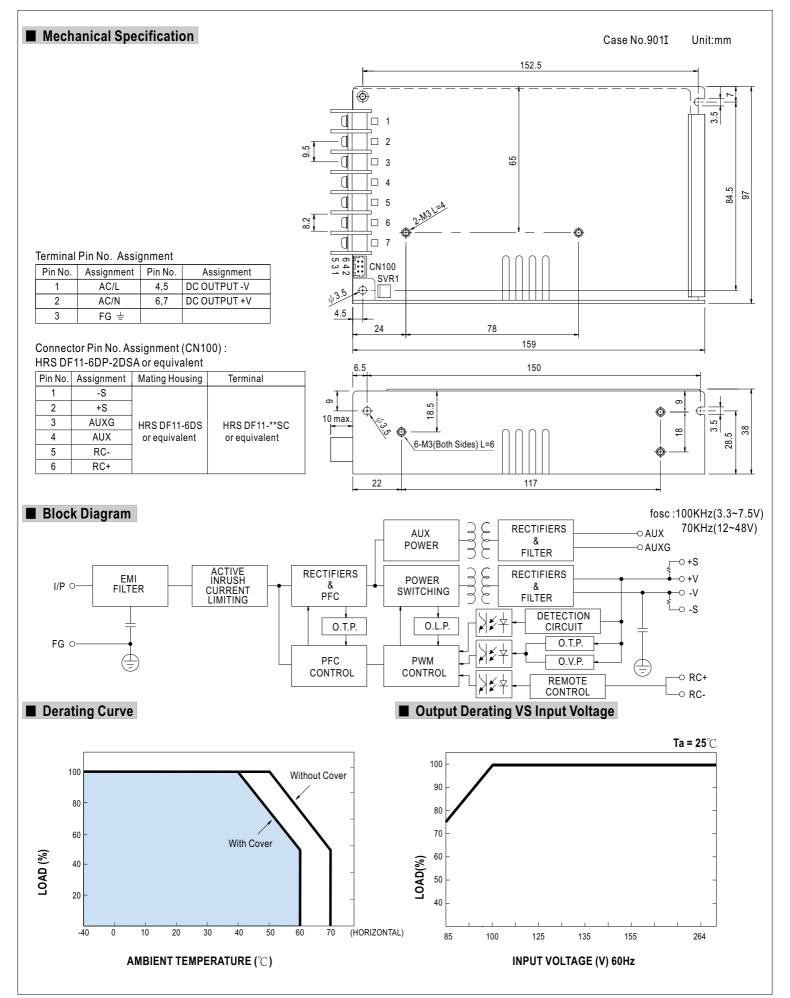


SPECIFICATION

		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	12V 13A	10A	6.5A	4.3A	3.3A		
	CURRENT RANGE	0~30A	0~26A	0~20A	0~13A	0~10A	0.5A	4.3A	0~3.3A		
	RATED POWER	99W	130W	150W	156W	150W	156W	154.8W	158.4W		
	RIPPLE & NOISE (max.) Note.2		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%	±1.5%	±1.5%	±1.5%	±1.5%	±1.5%		
		±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%		
		±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									
		85~264VAC 120~370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.95/230V/	AC PF>0.9	9/115VAC at full	load						
INPUT	EFFICIENCY (Typ.)	78.5%	84%	86%	87%	87%	87%	88%	88%		
	AC CURRENT (Typ.)	2.3A/115VAC 1.3A/230VAC									
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC									
	LEAKAGE CURRENT	<1mA/240VAC									
	OVERLOAD	105 ~ 135% rated output power									
		Protection type	e : Constant cur	rent limiting, rec	overs automatic	ally after fault co	ondition is remov	ved			
	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	e : Shut down o/	p 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									
	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									
	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
ENVIRONMENT	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 EMISSION Compliance to EN53022 (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						eria A				
	MTBF	213.4K hrs min			, 21101000	0 2, noury mat					
OTHERS	DIMENSION	213.4K hrs min. MIL-HDBK-217F (25°C) 159*97*38mm (L*W*H)									
	PACKING		(<u> </u>								
NOTE	 All parameters NOT specia 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 No load power consumption 	Illy mentioned ar ed at 20MHz of I tolerance, line r lered a compone ice on how to pe .meanwell.com) nder low input vo	e measured at a bandwidth by us egulation and lo ent which will be prform these EM bltages. Please	230VAC input, ra sing a 12" twister ad regulation. installed into a IC tests, please check the derati	d pair-wire termi final equipment. refer to "EMI tes ng curve for mor	nated with a 0.1 The final equipr ting of compone	uf & 47uf paralle	-confirmed that	t still meets		
-	•			MeanWell Dir	ect		Fi	ile Name:HRPG-150	-SPEC 2011-06-1		



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	+S	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.

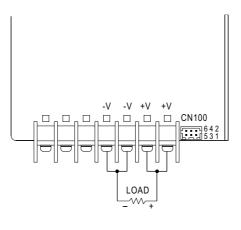
Function Manual

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		



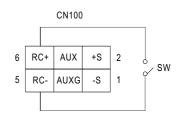
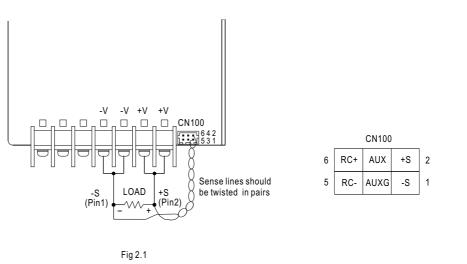


Fig 1.1

2.Remote Sense

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



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MEAN WELL:

<u>HRPG-150-48</u> <u>HRPG-150-3.3</u> <u>HRPG-150-24</u> <u>HRPG-150-15</u> <u>HRPG-150-5</u> <u>HRPG-150-36</u> <u>HRPG-150-12</u> <u>HRPG-150-7.5</u>