

300W Single Output with PFC Function

HRPG-300 series



Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 89%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- 1U low profile 41mm
- Built-in cooling fan ON-OFF control
- Built-in DC OK signal
- Built-in remote ON-OFF control
- Standby 5V@0.3A
- Built-in remote sense function
- No load power consumption<0.5W (Note.6)
- 5 years warranty

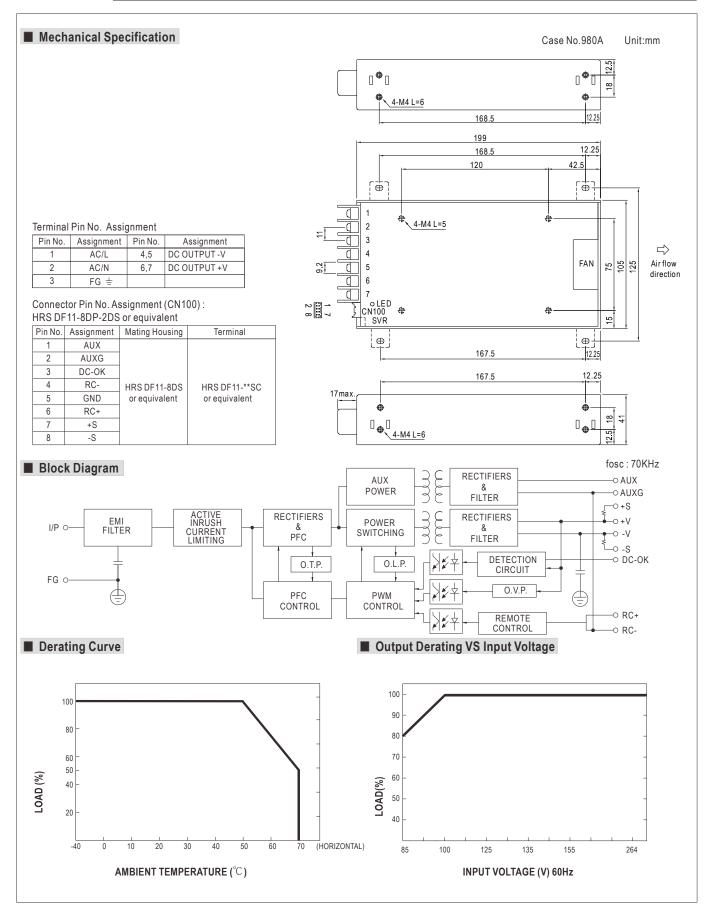


SPECIFICATION

MODEL		HRPG-300-3.3	HRPG-300-5	HRPG-300-7.5	HRPG-300-12	HRPG-300-15	HRPG-300-24	HRPG-300-36	HRPG-300-48		
	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	36V	48V		
OUTPUT	RATED CURRENT	60A	60A	40A	27A	22A	14A	9A	7A		
	CURRENT RANGE	0~60A	0~60A	0~40A	0~27A	0~22A	0~14A	0~9A	0~7A		
	RATED POWER	198W	300W	300W	324W	330W	336W	324W	336W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	90mVp-p	100mVp-p	120mVp-p	150mVp-p	150mVp-p	250mVp-p	250mVp-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%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	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	1000ms, 50ms/230VAC 2500ms, 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.)	80%	82%	86%	88%	88%	87%	88%	89%		
	AC CURRENT (Typ.)	3.5A/115VAC	1.8A/230VA	C							
	INRUSH CURRENT (Typ.)	35A/115VAC 70A/230VAC									
	LEAKAGE CURRENT	<1.2mA/240VAC									
		105 ~ 135% rated output power									
	OVERLOAD	Protection type : Constant current limiting, recovers automatically after fault condition is removed									
PROTECTION	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		
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover Shut down o/p voltage, recovers automatically after temperature goes down									
	5V STANDBY		0 /	5	1	e goes down					
	DC OK SIGNAL	5VSB : 5V@0.3A ; tolerance ± 5%, ripple : 50mVp-p(max.) PSU turns on : 3.3 ~ 5.6V ; PSU turns off : 0 ~ 1V									
FUNCTION	REMOTE CONTROL	$RC + / RC - : 4 \sim 10V$ or open = power on ; 0 ~ 0.8V or short = power off									
	FAN CONTROL (Typ.)	Load 35±15% or RTH2≥50°C Fan on									
	WORKING TEMP.										
	WORKING HUMIDITY	-40 ~ +70 °C (Refer to "Derating Curve")									
ENVIRONMENT	STORAGE TEMP., HUMIDITY	20 ~ 90% RH non-condensing -40 ~ +85°C , 10 ~ 95% RH									
	TEMP. COEFFICIENT										
	VIBRATION	±0.03%/°C (0~50°C)									
	SAFETY STANDARDS	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes									
		UL60950-1, TUV EN60950-1 approved									
SAFETY &	WITHSTAND VOLTAGE										
EMC (Note 4)	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
(NOLE 4)		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									
	MTBF	176K hrs min. MIL-HDBK-217F (25°C)									
OTHERS	DIMENSION	199*105*41mm (L*W*H)									
	PACKING	0.95Kg;15pcs/1	5.3Kg/0.69CUF	Т							
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 up No load power consumption 	ed at 20MHz of I tolerance, line re lered a componence on how to pe meanwell.com) nder low input vo	bandwidth by us egulation and lo ent which will be rform these EM pltages. Please	sing a 12" twister ad regulation. e installed into a IC tests, please check the derati	d pair-wire termi final equipment. refer to EMI test ng curve for moi	nated with a 0.1 The final equipr ing of componer	uf & 47uf paralle	-confirmed that i	it still meets		



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Function Description of CN100

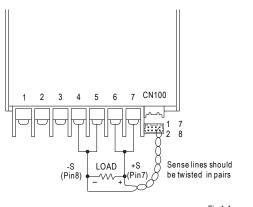
Pin No. Function Description

PIN NO.	Function	Description
1	AUX	Auxiliary voltage output, 4.75~5.25V, reference to pin 2(AUXG). The maximum load current is 0.3A. This output is not controlled by the "remote ON/OFF control".
2	AUXG	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
3	DC-OK	DC-OK signal is a TTL level signal, referenced to pin5(DC-OK GND). High when PSU turns on.
4	RC-	Remote control ground.
5	GND	This pin connects to the negative terminal(-V). Return for DC-OK signal output.
6	RC+	Turns the output on and off by electrical or dry contact between pin 4 (RC-), Short: Power OFF, Open: Power ON.
7	+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.
8	-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.

Function Manual

1.Remote Sense

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





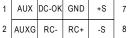
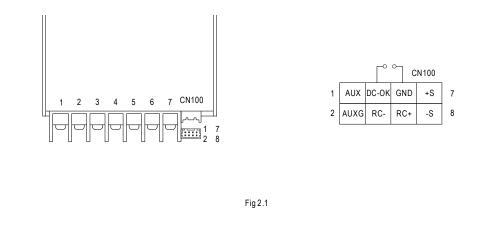


Fig 1.1

2.DC-OK Signal

DC-OK signal is a TTL level signal. High when PSU turns on.

Between DC-OK(pin3) and GND(pin5)	Output Status
3.3~5.6V	ON
0~1V	OFF





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3.Remote Control

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

Between RC+(pin6) and RC-(pin4)	Output Status
SW ON (Short)	OFF
SW OFF (Open)	ON

