HRPG-300-3.3 HRPG-300-5



SPECIFICATION

MODEL



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



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 RATED CURRENT 60A 60A 40 A 27A 22A 14A 7A 9A 0~60A 0 ~ 40A 0 ~ 27A 0~22A 0 ~ 14A 0~9A 0 ~ 7A **CURRENT RANGE** $0 \sim 60A$ 300W RATED POWER 198W 300W 324W 330W 336W 324W 336W 250mVp-p RIPPLE & NOISE (max.) Note.2 80mVp-p 90mVp-p 100mVp-p 120mVp-p 150mVp-p 150mVp-p 250mVp-p **OUTPUT VOLTAGE ADJ. RANGE** 2.8 ~ 3.8V 4.3 ~ 5.8 V 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% 1000ms, 50ms/230VAC 2500 ms, 50 ms/115 VAC at full load SETUP. RISE TIME **HOLD UP TIME (Typ.)** 16ms/230VAC 16ms/115VAC at full load **VOLTAGE RANGE** Note.5 85 ~ 264VAC 120 ~ 370VDC 47 ~ 63Hz **FREQUENCY RANGE** PF>0.95/230VAC POWER FACTOR (Typ.) PF>0.99/115VAC at full load INPUT 80% 88% 88% 89% EFFICIENCY (Typ.) 82% 86% 87% AC CURRENT (Typ.) 4 5A/115VAC 2 5A/230VAC 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 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 VOLTAGE PROTECTION** Protection type: Shut down o/p voltage, re-power on to recover 90° C $\pm 5^{\circ}$ C (TSW1: detect on heatsink of power transistor) 100° C $\pm 5^{\circ}$ C for 3.3V,5V,7.5V; 95° C $\pm 5^{\circ}$ C for others (TSW2: detect on heatsink of power diode) **OVER TEMPERATURE** Protection type: Shut down o/p voltage, recovers automatically after temperature goes down 5VSB:5V@0.3A; tolerance $\pm 5\%$, ripple: 50mVp-p(max.)**5V STANDBY** PSU turns on : $3.3 \sim 5.6V$; PSU turns off : $0 \sim 1V$ DC OK SIGNAL **FUNCTION** RC+ / RC-: $4 \sim 10V$ or open = power on; $0 \sim 0.8V$ or short = power off REMOTE CONTROL Load 35±15% or RTH2≥50°C Fan on FAN CONTROL (Typ.) -40 ~ +70°C (Refer to "Derating Curve") WORKING TEMP 20 ~ 90% RH non-condensing WORKING HUMIDITY ENVIRONMENT STORAGE TEMP., HUMIDITY -40 ~ +85°C, 10 ~ 95% RH TEMP. COEFFICIENT ±0.03%/°C (0 ~ 50°C) VIBRATION $10 \sim 500$ Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes SAFETY STANDARDS UL60950-1, TUV EN60950-1 approved WITHSTAND VOLTAGE I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC SAFETY & I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH ISOLATION RESISTANCE **EMC** (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 **MTBF** 176K hrs min. MIL-HDBK-217F (25°C) **OTHERS** DIMENSION 199*105*41mm (L*W*H)

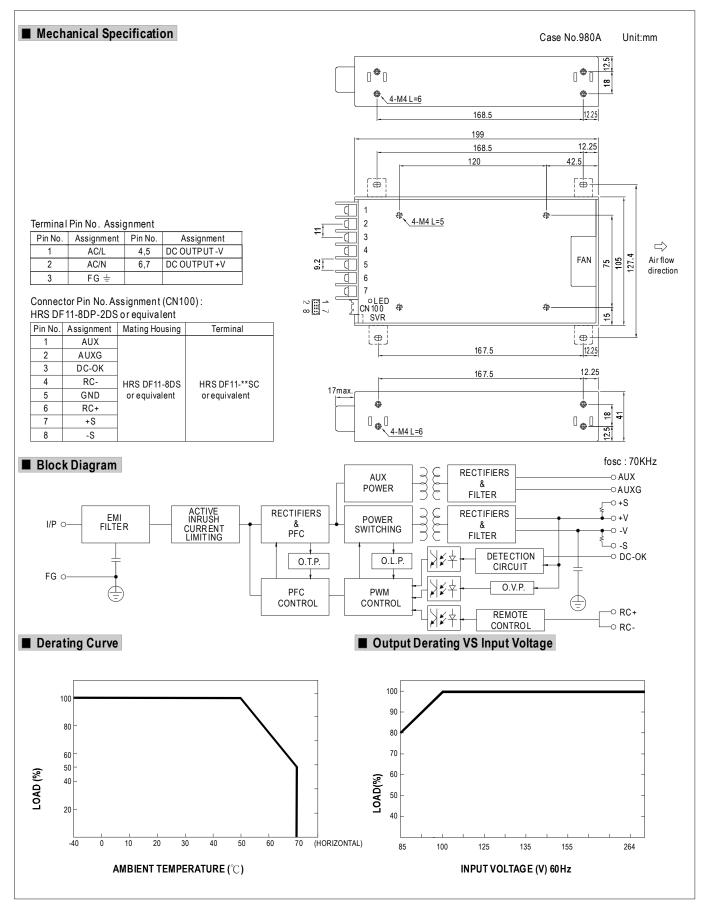
NOTE

PACKING

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
 Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
- Derating may be needed under low input voltages. Please check the derating curve for more details.
- 6. No load power consumption < 0.5W when RC- & RC+ (CN100 pin4,6) 0 ~ 0.8V or short.

0.95Kg;15pcs/15.3Kg/0.69CUFT







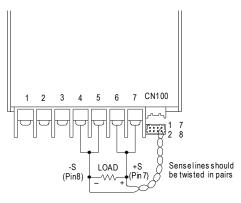
■ Function Description of CN100

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		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.



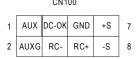
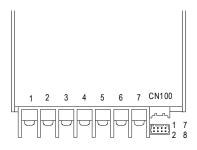


Fig 1.1

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	



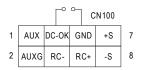


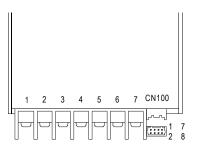
Fig 2.1



3.Remote Control

The PSU can be turned ON/OFF by using the "Remote ON/OFF" function $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left$

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



1 AUX DC-OK GND +S 7 2 AUXG RC- RC+ -S 8

CN100

Fig 3.1