

750W Single Output Power Supply

RSP-750 series



Features :

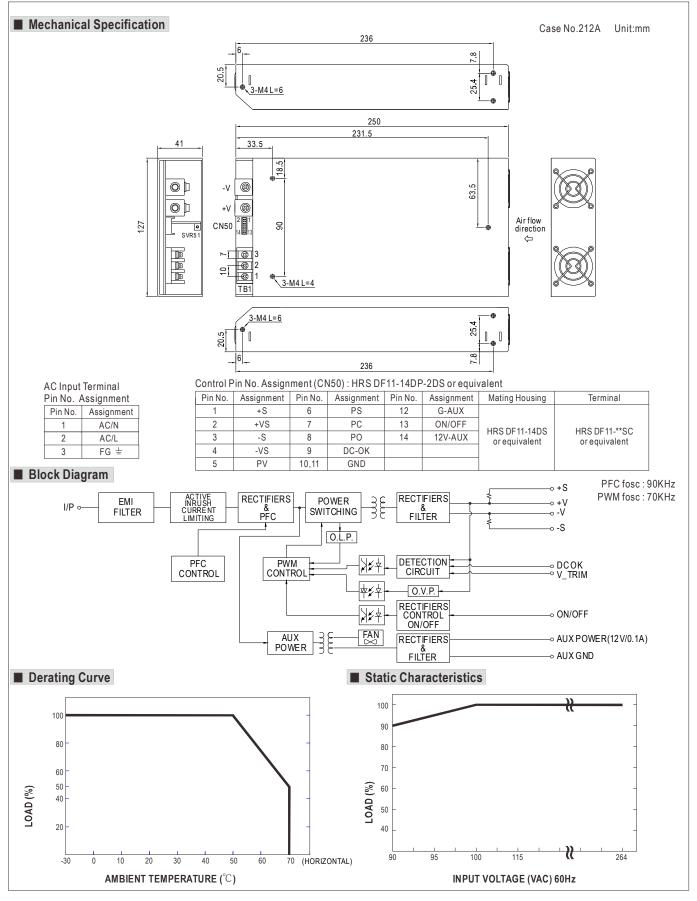
- Universal AC input / Full range
- AC input active surge current limiting
- High efficiency up to 92%
- Built-in 12V/0.1A auxiliary power
- Built-in active PFC function, PF>0.97
- Protections: Short circuit / Overload / Over voltage / Over temperature / Fan alarm
- Output voltage can be trimmed between 40 ~ 110% by 2 ~ 5.5VDC external control signal
- Output current can be trimmed between 40 ~ 110% by 2 ~ 5.5VDC external control signal
- Forced air cooling by built-in DC with fan speed control function
- High power density 9.44w/inch³
- 1U low profile 41mm
- DC OK Signal
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty



MODEL		RSP-750-5	RSP-750-12	RSP-750-15	RSP-750-24	RSP-750-27	RSP-750-48		
	DC VOLTAGE	5V	12V	15V	24V	27V	48V		
	RATED CURRENT	100A	62.5A	50A	31.3A	27.8A	15.7A		
	CURRENT RANGE	0~100A	0~62.5A	0~50A	0~31.3A	0~27.8A	0~15.7A		
	RATED POWER	500W	750W	750W	751.2W	750.6W	753.6W		
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p		
UTPUT	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10~13.5V	13.5 ~ 16.5V	20~26.4V	24 ~ 30V	43 ~ 55V		
	VOLTAGE TOLERANCE Note.3		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIME	1000ms, 50ms at full load							
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load							
		90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR (Typ.)	4/ ~ 63HZ 0.97/230VAC 0.98/115VAC at full load							
NPUT	EFFICIENCY (Typ.)	82%	87%	89%	90.5%	90.5%	92%		
	AC CURRENT (Typ.)	5V : 5.6A/115VAC	2.8A/230VAC				5270		
	INRUSH CURRENT (Typ.)	5V : 5.6A/115VAC 2.8A/230VAC 12V~48V : 8.2A/115VAC 3.9A/230VAC 25A/115VAC 40A/230VAC							
	LEAKAGE CURRENT								
		<2.0mA/240VAC							
	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed							
ROTECTION		5.75 ~ 6.75V	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	56.6~66.2V		
	OVER VOLTAGE		1				0010 00121		
	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							
	AUXILIARY POWER(AUX)	12V @ 0.1A; tolerance : ±10%							
	REMOTE ON/OFF CONTROL Note.6								
UNCTION	DC OK SIGNAL	The TTL signal out, PSU turn on = $0 \sim 1V$; PSU turn off = $3.3 \sim 5.6V$							
		Adjustment of output voltage is possible between 40 ~ 110% by 2 ~ 5.5VDC external control signal							
	OUTPUT CURRENT TRIM	Adjustment of output current is between 40 ~ 110% by 2 ~ 5.5VDC external control signal							
	WORKING TEMP.	Adjustment of output current is between 40 \sim 110% by 2 \sim 5.5 VDC external control signal -30 \sim +70 $^{\circ}$ C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
NVIRONMENT	STORAGE TEMP., HUMIDITY	20 ~ 90% RH non-condensing -40 ~ +85℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%°C (0 ~ 50°C)							
	VIBRATION								
	SAFETY STANDARDS	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes UL60950-1, TUV EN60950-1 approved							
	WITHSTAND VOLTAGE								
AFETY &	ISOLATION RESISTANCE	I/P-O/P:3KVAC I/P-FG:2KVAC 0/P-FG:0.5KVAC							
MC Note 4)	EMC EMISSION	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH							
1010 4/	EMC IMMUNITY	Compliance to EN55022 (CISPR22), EN61000-3-2,-3							
	MTBF	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A							
TUEDE		120.8K hrs min. MIL-HDBK-217F (25°C)							
THERS	DIMENSION PACKING	250*127*41mm (L*W	,						
IOTE	 All parameters NOT special Ripple & noise are measure Tolerance : includes set up The power supply is consid EMC directives. For guidant (as available on http://www. Derating may be needed ur The power supply unit will h 	1.64Kg; 6pcs/10.8Kg/1.1CUFT ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. to tolerance, line regulation and load regulation. dered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets and component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets and how to perform these EMC tests, please refer to "EMI testing of component power supplies." <i>u</i> ,meanwell.com) ander low input voltages. Please check the derating curve for more details. have no output if the shorting connector is not assembled. It contains three shorting wires: one is from on/off(pin13) to m PC(pin7) to PO(pin8) and the other is from PV(pin5) to PS(pin6). Please refer to function manual for details.							



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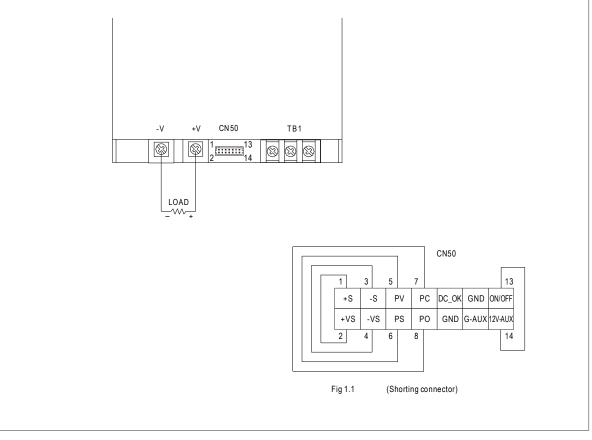
Function Description of CN50

Pin No.	Function	Description	
1	+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 minimize noise pick-up effect. The maximum line drop compensation is 0.5V.	
2	+VS	+V Signal. The +VS should be connected to the +S to reduce the noise when "output voltage TRIM" function is in use.	
3	-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 pai minimize noise pick-up effect. The maximum line drop compensation is 0.5V.	
4	-VS	-V Signal. The -VS should be connected to the -S to reduce the noise when "output voltage TRIM" function is in use.	
5	PV	Connect to external DC voltage source for output voltage triming, referenced to pin 10,11 (GND). Output voltage can be trimmed be 40 ~ 110% of the rated output voltage.	
6	PS	Short connecting between PV (pin5) and PS (pin6) if "output voltage TRIM" function is not used.	
7		Connect to external DC voltage source for output current triming, referenced output current can be trimmed between 40 ~ 110% of the routput current. Please refer to function manual for details.	
8	PO	Short connecting between PC (pin7) and PO (pin8) if output current trim function is not used.	
9	DC_OK	Open collector signal, referenced to pin10,11(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 5.6V.	
10,11	GND	These pins connect to the negative terminal (-V). Return for DC_OK Signal output.	
12	G-AUX	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).	
13	ON/OFF	Turns the output on and off by electrical or dry contact between pin 13 (ON/OFF) and pin 14 (12V-AUX). Short: Power ON, Open: Power OFF.	
14	12V-AUX	Auxiliary voltage output, 10.8~13.2V, referenced to pin 12(G-AUX). The maximum load current is 0.1A. This output is not controlled by the "remote ON/OFF control".	

Function Manual

1. "Remote ON/OFF" and "Output voltage trim" and "Output current trim" functions are not used.

(1)The power supply unit will have no output if the shorting connector (accessory comes along with the PSU) is not assembled. It contains three shorting wires : one is from ON/OFF (pin13) to 12V-AUX (pin14), two is from PV(pin5) to PS (pin6) and the other is from PC (pin7) to PO (pin8).
 (2)Factory setting is shorted as Fig1.1



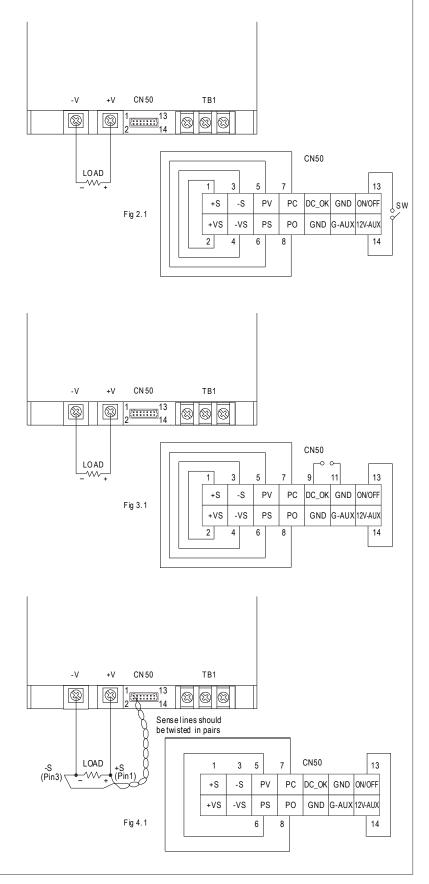


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2.Remote ON/OFF

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

Between ON/OFF(pin13) and 12V-AUX(pin14)	Output Status
SW close (Short)	PSU ON
SW open (Open)	PSU OFF



"DC_OK" is an open collector signal.

It indicates the output status of the PSU. It can operate in two ways : One is sinking current from external TTL signal ; the other is sending out a TTL voltage signal.

3-1 Sink current :

The maximum sink current is 10mA and the maximum external voltage is 5.6V.

3-2 TTL voltage signal :

Between DC- OK(pin9) and GND(pin10&11)	Output Status
0 ~ 1V	PSU ON
3.3 ~ 5.6V	PSU OFF

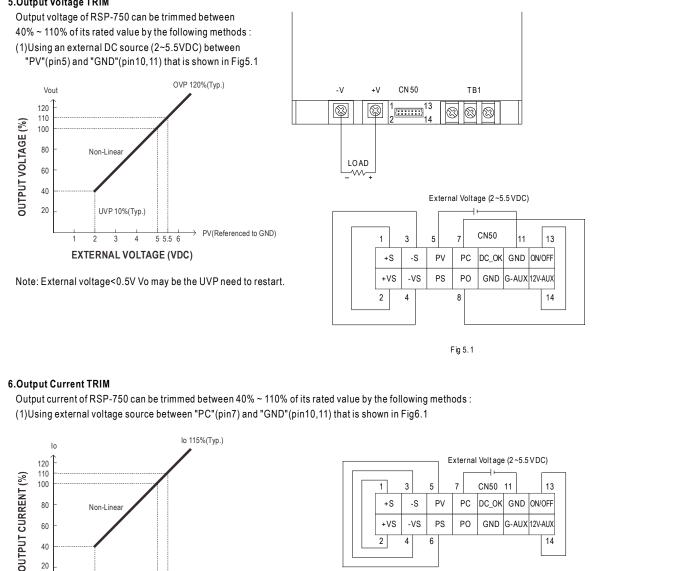
4.Remote Sense

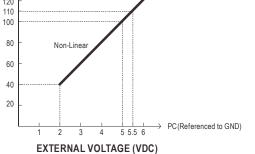
The remote sensing compensates voltage drop on the load wiring up to 0.5V.



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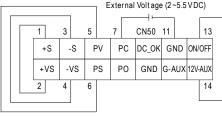


Fig 6.1