

#### Dimension -

W \* 159 \* 97 \* 30 mm 6.26 \* 3.82 \* 1.18 inch















BS FN/FN61558-1



















#### Features

- Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 89%
- · Cooling by free air convection
- · Built-in remote ON-OFF control
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · LED indicator for power on
- · 3 years warranty

### Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- RF application

#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### Description

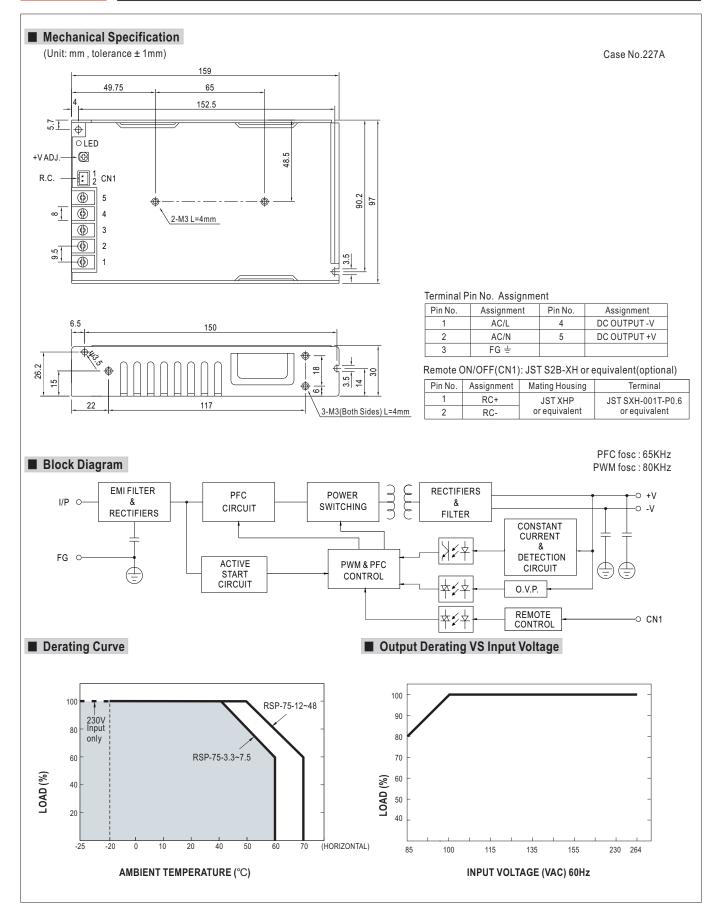
RSP-75 is a 75W single output enclosed type AC/DC power supply. This series operates for 85~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by free air convection, working for the temperature up to 70°C.





MODEL		RSP-75-3.3	RSP-75-5	RSP-75-7.5	RSP-75-12	RSP-75-13.5	RSP-75-15	RSP-75-24	RSP-75-27	RSP-75-48			
	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V			
	RATED CURRENT	15A	15A	10A	6.3A	5.6A	5A	3.2A	2.8A	1.6A			
	CURRENT RANGE	0 ~ 15A	0 ~ 15A	0 ~ 10A	0 ~ 6.3A	0 ~ 5.6A	0 ~ 5A	0 ~ 3.2A	0 ~ 2.8A	0 ~ 1.6A			
	RATED POWER	49.5W	75W	75W	75.6W	75.6W	75W	76.8W	75.6W	76.8W			
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	80mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	120mVp-p	200mVp-p			
OUTPUT	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8V			
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%			
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%			
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%			
	SETUP, RISE TIME	600ms, 30ms	at full load										
	HOLD UP TIME (Typ.)	16ms at full lo											
	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370	OVDC									
	FREQUENCY RANGE	47 ~ 63Hz	.20 0.1										
	POWER FACTOR (Typ.)	PF>0.93/230\	/ΔC PF>(	0.98/115VAC at	t full load								
INPUT	EFFICIENCY (Typ.)	76%	82%	84%	85%	85%	86%	87%	88%	89%			
01	AC CURRENT (Typ.)	0.9A/115VAC			3070	3070	3070	31 /0	3070	30 /0			
	INRUSH CURRENT (Typ.)	COLD START		VAU									
	LEAKAGE CURRENT	<2mA / 240VA											
	LEARAGE CORRENT												
	OVERLOAD		ated output pov			4! II <b>f</b> t <b>f</b>							
		Protection type: Constant current limiting, recovers automatically after fault condition is removed											
PROTECTION	OVER VOLTAGE		1.63 ~ 4.46V   5.5 ~ 6.75V   8.25 ~ 10.13V   13.2 ~ 16.2V   14.85 ~ 18.23V   16.5 ~ 20.25V   26.4 ~ 32.4V   29.7 ~ 36.45V   52.8 ~ 64.  Protection type: Shut down o/p voltage, re-power on to recover										
	OVER TEMPERATURE	,				erature goes do	own						
FUNCTION	REMOTE CONTROL	CN1: < 0~0.8\	/DC POWER (	ON, 4~10VDC	POWER OFF								
	WORKING TEMP.		Refer to "Derat										
	WORKING HUMIDITY	20 ~ 90% RH	non-condensir	ng									
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C,	10 ~ 95% RH n	on-condensing	1								
	TEMP. COEFFICIENT	±0.05%/°C (0	~ 50°C)										
	VIBRATION	10 ~ 500Hz, 2	G 10min./1cyc	cle, 60min. eacl	n along X, Y, Z	axes							
	OVER VOLTAGE CATEGORY	III ; Accordir	ng to EN6155	8, EN50178,I	EN60664-1, E	N62477-1; a	Ititude up to 2	2000 meters					
	SAFETY STANDARDS					S EN/EN61558 1:2005(except f			TP TC 004, C0	CC GB4943.1,			
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:4KVA	C I/P-FG:2K	CVAC O/P-FC	G:0.5KVAC								
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-F0	G, O/P-FG:100	OM Ohms / 500'	VDC / 25°C / 7	0% RH							
(Note 4)	EMC EMISSION	Compliance to	BS EN/EN550	32 (CISPR32) (	Class B, BS EN	/EN61000-3-2,-	3, EAC TP TC	020, CNS15936	6, GB9254 Clas	B, GB17625.1			
	EMC IMMUNITY	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS15936, GB9254 Class B, GB17625.  Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020											
	MTBF	2171.5K hrs min. Telcordia SR-332 (Bellcore) ; 296.7K hrs min. MIL-HDBK-217F (25°C)											
OTHERS	DIMENSION	159*97*30mm		,									
	PACKING	0.44Kg; 30pcs	,	UFT									
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capac 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 it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power suppl (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)  5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).  ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx								onfirmed that ver supplies.				







#### Dimension -

L \* W \* H 179 \* 99 \* 30 mm 7.05 \* 3.90 \* 1.18 inch

































#### ■ Features

- · Universal AC input / Full range
- · Built-in active PFC function
- High efficiency up to 88%
- · Cooling by free air convection
- Built-in remote ON-OFF control
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · LED indicator for power on
- 3 years warranty

### Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- · Burn-in facility
- · RF application

#### **■** GTIN CODE

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### Description

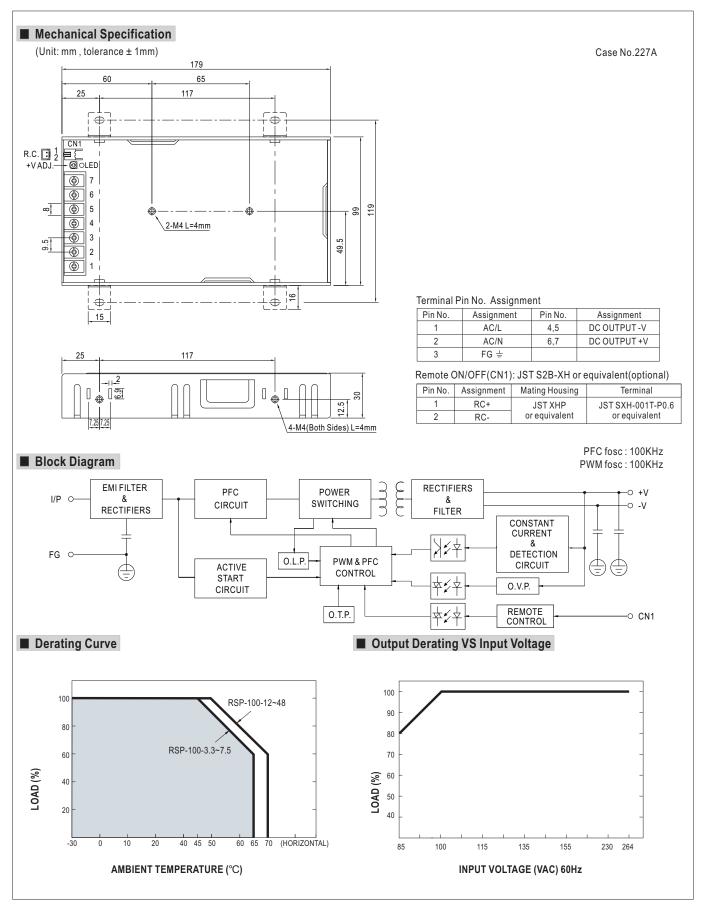
RSP-100 is a 100W single output enclosed type AC/DC power supply. This series operates for 85~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by free air convection, working for the temperature up to 70°C.





MODEL		RSP-100-3.3	RSP-100-5	RSP-100-7.5	RSP-100-12	RSP-100-13.5	RSP-100-15	RSP-100-24	RSP-100-27	RSP-100-48	
	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V	
	RATED CURRENT	20A	20A	13.5A	8.5A	7.5A	6.7A	4.2A	3.8A	2.1A	
	CURRENT RANGE	0 ~ 20A	0 ~ 20A	0 ~ 13.5A	0 ~ 8.5A	0 ~ 7.5A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 3.8A	0 ~ 2.1A	
	RATED POWER	66W	100W	101.25W	102W	101.25W	100.5W	100.8W	102.6W	100.8W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p	
OUTPUT	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	600ms, 30ms	at full load								
	HOLD UP TIME (Typ.)	16ms at full lo	ad								
	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370	0VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.93/230\	/AC PF>(	0.98/115VAC at	t full load						
INPUT	EFFICIENCY (Typ.)	83%	86%	87%	86%	86.5%	87%	87%	87%	88%	
	AC CURRENT (Typ.)	1.1A/115VAC	0.55A/23	OVAC							
	INRUSH CURRENT (Typ.)	COLD START	30A/230VAC								
	LEAKAGE CURRENT	<2mA/240VAC									
		105 ~ 135% rated output power									
	OVERLOAD				recovers auton	natically after fa	ault condition is	removed			
						14.85 ~ 18.23V			29 7 ~ 36 45V	52 8 ~ 64 8V	
PROTECTION	OVER VOLTAGE			o/p voltage, re-			10.0 20.201	20.1 02.11	20.1 00.101	02.0 01.01	
	OVER TEMPERATURE	7.		1 0,		erature goes do	wn				
FUNCTION	REMOTE CONTROL	CN1: < 0~0.8	/DC POWER	ON, 4~10VDC	POWER OFF						
	WORKING TEMP.	-30 ~ +70°C (	Refer to "Dera	ting Curve")							
	WORKING HUMIDITY	20 ~ 90% RH	non-condensir	ng							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C,	10 ~ 95% RH n	on-condensing	1						
	TEMP. COEFFICIENT	±0.05%/°C (0	~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2	G 10min./1cyc	cle, 60min. eacl	n along X, Y, Z	axes					
	OVER VOLTAGE CATEGORY	III ; According to EN61558, EN50178,EN60664-1, EN62477-1 ; altitude up to 2000 meters									
	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, BS EN/EN61558-1, BS EN/EN61558-2-16, EAC TP TC 004, CCC GB4943.1, BSMI CNS15598-1,BIS IS13252(Part1): 2010/IEC 60950-1:2005(except for 48V) approved, Design refer to AS/NZS 62368.1									
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC									
EMC	ISOLATION RESISTANCE			OM Ohms / 500							
(Note 4)	EMC EMISSION	·		,	-	EN61000-3-2,-3	-		•	B, GB17625.1	
	EMC IMMUNITY	Compliance to	BS EN/EN61	000-4-2,3,4,5,6	6,8,11, BS EN/I	EN55035, light	industry level,	EAC TP TC 0	20		
	MTBF	2325.2K hrs n	nin. Telcord	ia SR-332 (Bel	lcore) ; 288.5K	hrs min. MII	-HDBK-217F	(25°℃)			
OTHERS	DIMENSION	179*99*30mm	n (L*W*H)								
	PACKING	0.52Kg; 24pcs	s/14.5Kg/0.810	CUFT							
NOTE	2. Ripple & noise are meas 3. Tolerance: includes set 4. The power supply is con it still meets EMC directi (as available on https://w 5. Strongly recommended to 6. The ambient temperature than 2000m(6500ft).	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 $\mu$ F & 47 $\mu$ F parallel capacit Tolerance: includes set up tolerance, line regulation and load regulation. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that t still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplic (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)  Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-100-3.3/-5/-7.5)  The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher							onfirmed that ver supplies.		







#### - Dimension -

W \* 199 \* 99 \* 30 mm 7.83 \* 3.90 \* 1.18 inch









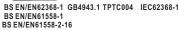






















IS13252

(except 7.5V,13.5V,48V)

#### Features

- · Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 90%
- · Cooling by free air convection
- · Built-in remote ON-OFF control
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · LED indicator for power on
- · 3 years warranty

### Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- Burn-in facility
- · RF application

#### ■ GTIN CODE

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### Description

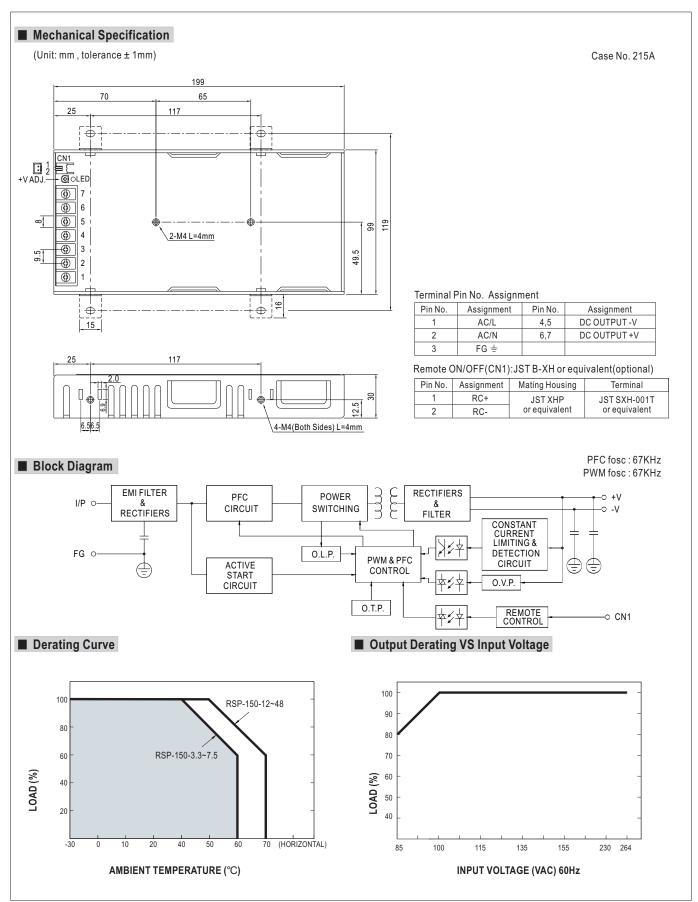
RSP-150 is a 150W single output enclosed type AC/DC power supply. This series operates for 85~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by free air convection, working for the temperature up to 70°C.





MODEL		RSP-150-3.3	RSP-150-5	RSP-150-7.5	RSP-150-12	RSP-150-13.5	RSP-150-15	RSP-150-24	RSP-150-27	RSP-150-48	
	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V	
	RATED CURRENT	30A	30A	20A	12.5A	11.2A	10A	6.3A	5.6A	3.2A	
	CURRENT RANGE	0 ~ 30A	0 ~ 30A	0 ~ 20A	0 ~ 12.5A	0 ~ 11.2A	0 ~ 10A	0 ~ 6.3A	0 ~ 5.6A	0 ~ 3.2A	
	RATED POWER	99W	150W	150W	150W	151.2W	150W	151.2W	151.2W	153.6W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p	
OUTPUT	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V		7.13 ~ 8.25V		12.8 ~ 14.9V			25.7 ~ 29.7V	45.6 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP. RISE TIME	600ms, 30ms									
	HOLD UP TIME (Typ.)	· ·	6ms at full load								
	( • • • •	85 ~ 264VAC	120 ~ 370	0VDC							
	FREQUENCY RANGE	47 ~ 63Hz	.20 0								
	POWER FACTOR (Typ.)	PF>0.93/230\	/AC PF>(	0.98/115VAC a	t full load						
INPUT	EFFICIENCY (Typ.)	81.5%	87%	88.5%	89%	87.5%	88.5%	89%	89.5%	90%	
	AC CURRENT (Typ.)	1.6A/115VAC 0.8A/230VAC									
	INRUSH CURRENT (Typ.)	COLD START 45A/230VAC									
	LEAKAGE CURRENT	<2mA / 240VA									
	LLANAGE CONNENT		ated output pov	wor							
	OVERLOAD				rocovers autor	natically after fa	ault condition is	romovod			
						14.85 ~ 18.2V			20.7 ~ 26.45\	52 0 ~ 64 01	
PROTECTION	OVER VOLTAGE					1	10.5 ~ 20.250	20.4 ~ 32.4 V	29.1 ~ 30.430	32.0 ~ 04.0 V	
		Protection typ	e : Shut down	o/p voltage, re-	-power on to re	cover					
	OVER TEMPERATURE	Protection typ	e : Shut down	o/p voltage, re	covers automa	tically after tem	perature goes	down			
FUNCTION	REMOTE CONTROL	CN1: < 0~0.8	VDC POWER	ON , 4~10VDC	POWER OFF						
	WORKING TEMP.	-30 ~ +70°C (	Refer to "Dera	ting Curve")							
	WORKING HUMIDITY	20 ~ 90% RH	non-condensir	ng							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C,	10 ~ 95% RH n	non-condensing	3						
	TEMP. COEFFICIENT	±0.05%/°C (0	) ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2	G 10min./1cyc	cle, 60min. eacl	h along X, Y, Z	axes					
	OVER VOLTAGE CATEGORY	Ⅲ ; Accordir	ng to EN6155	8, EN50178,	EN60664-1, E	EN62477-1 ; a	Ititude up to 2	2000 meters			
	SAFETY STANDARDS	UL62368-1, T	UV BS EN/EN	62368-1, BS E	N/EN61558-1,	BS EN/EN615	58-2-16, EAC T	P TC 004, CC	C GB4943.1,		
		BSMI CNS15	598-1, AS/NZS	62368.1, IS13	3252(Part1)/IE0	C60950-1(exce	pt for 7.5V,13.5	5V,48V)approv	ed		
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:4KVA	C I/P-FG:2K	(VAC O/P-FC	G:0.5KVAC						
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-F	G, O/P-FG:100	OM Ohms / 500	VDC / 25°C/ 70	)% RH					
(Note 4)	EMC EMISSION	Compliance to	BS EN/EN5503	2 (CISPR32) Cla	ss B, BS EN/EN	161000-3-2,-3, E	AC TP TC 020, (	GB9254 Class B	, GB17625.1,CN	S15936 Class E	
	EMC IMMUNITY	Compliance to	BS EN/EN61	000-4-2,3,4,5,6	6,8,11, BS EN/	EN55035, light	industry level,	EAC TP TC 0	20		
	MTBF	2253.9K hrs r	nin. Telcord	lia SR-332 (Bel	Icore); 290.7K	hrs min. MI	L-HDBK-217F	(25°℃)			
OTHERS	DIMENSION	199*99*30mn	n (L*W*H)								
	PACKING	0.6Kg; 24pcs/	/15.4Kg/0.89C	UFT							
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F parallel capacited.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed the it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplied (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-150-3.3/-5/-7.5/-12)</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher</li> </ol>								onfirmed tha ver supplies		
NOTE	it still meets EMC directing (as available on https://www.s.com/discourse) (as available on https://www.s.com/disc	insidered a component which will be installed into a final equipment. The final equipment must be re-confirmed the tives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplied www.meanwell.com//Upload/PDF/EMI_statement_en.pdf) and under low input voltages. Please check the derating curve for more details. If that external output capacitance should not exceed 5000uF. (Only for: RSP-150-3.3/-5/-7.5/-12)									







Dimension -

L \* W \* H 215 \* 115 \* 30 mm

8.46 \* 4.53 \* 1.18 inch



























EN61558-1/2-16 for 12V or higher models) (

IS13252 (except 2.5V,4V,48V

### **■** Features

- · Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 90%
- Cooling by free air convection
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- · LED indicator for power on
- · 3 years warranty











### Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- Burn-in facility
- · RF application

#### **■** GTIN CODE

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### **■** Description

RSP-200 is a 200W single output enclosed type AC/DC power supply. This series operates for 88~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by free air convection, working for the temperature up to 70°C.





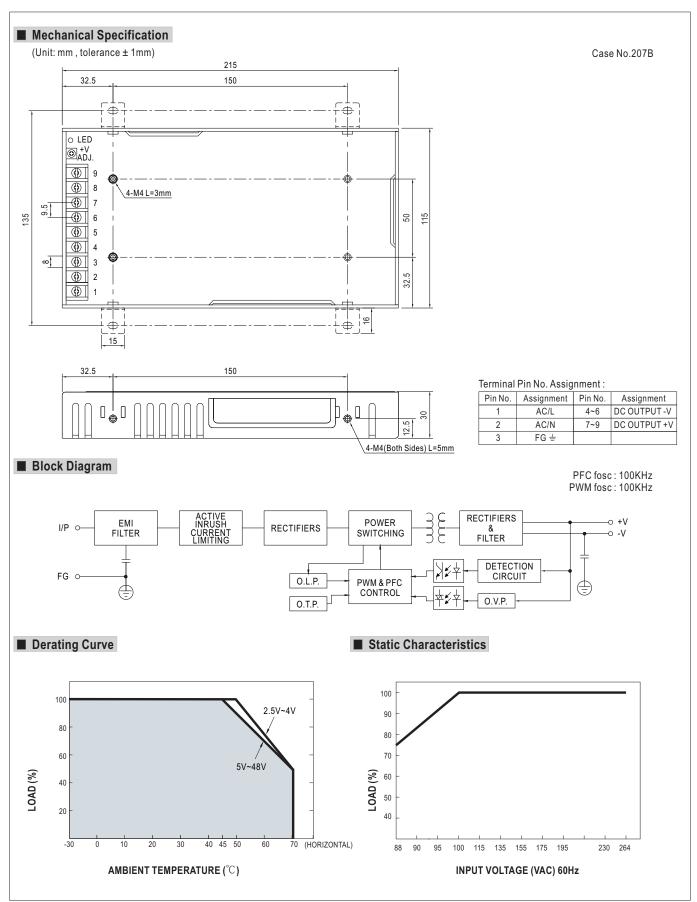
MODEL		RSP-200-2.5	RSP-200-3.3	RSP-200-4	RSP-200-5	RSP-200-7.5	RSP-200-12					
	DC VOLTAGE	2.5V	3.3V	4V	5V	7.5V	12V					
	RATED CURRENT	40A	40A	40A	40A	26.7A	16.7A					
	CURRENT RANGE	0 ~ 40A	0 ~ 40A	0~40A	0 ~ 40A	0 ~ 26.7A	0 ~ 16.7A					
	RATED POWER	100W	132W	160W	200W	200.25W	200.4W					
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p					
DUTPUT	VOLTAGE ADJ. RANGE	2.35 ~ 2.85V	2.97 ~ 3.8V	3.7 ~ 4.3V	4.5 ~ 5.5V	6~9V	10 ~ 13.2V					
	VOLTAGE TOLERANCE Note.3		±2.0%	±2.0%	±2.0%	±2.0%	±1.0%					
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.3%					
	LOAD REGULATION	±1.5%	±1.5%	±1.0%	±1.0%	±1.0%	±0.5%					
	SETUP, RISE TIME		- 1.5%   ± 1.5%   ± 1.0%   ± 1.0%   ± 1.0%   ± 0.5%   ± 0.5%									
	HOLD UP TIME (Typ.)	8ms at full load 230VAC /115VAC										
	( ) . ,	88 ~ 264VAC	124 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz	124 * 370 V D C									
	POWER FACTOR (Typ.)	PF>0.95/230VAC	PF>0.98/115V/	AC at full load								
NPUT	EFFICIENCY (Typ.)	79.5%	81.5%	84%	85.5%	89%	89%					
NFUI			1.1A/230VAC	04 /0	2.5A/115VAC	1.3A/230VAC	09 /0					
	AC CURRENT (Typ.) INRUSH CURRENT (Typ.)	20A/115VAC	40A/230VAC		2.5A/115VAC	1.3A/230VAC						
	( ) ( )		40A/230VAC									
	LEAKAGE CURRENT	<1mA / 240VAC										
	OVERLOAD	105 ~ 135% rated										
		7.	3.8 ~ 4.62V		er fault condition is rem		40.0.40.0\/					
PROTECTION	OVER VOLTAGE	2.88 ~ 3.5V	1000	4.5 ~ 5.6V	5.75 ~ 7V	9.4 ~ 10.9V	13.8 ~ 16.2V					
		7.	Shut down o/p voltag	· · ·								
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down  -30 ~ +70°C (Refer to "Derating Curve")										
	WORKING TEMP.	`		")								
	WORKING HUMIDITY	20 ~ 90% RH non-										
NVIRONMENT	STORAGE TEMP., HUMIDITY											
	TEMP. COEFFICIENT	±0.03%/°C (0~45°C)										
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes										
	SAFETY STANDARDS	UL62368-1,TUV BS EN/EN62368-1, EAC TP TC 004, CCC GB4943.1,BSMI CNS15598-1, AS/NZS 60950.1, Dekra EN 61558-1/2-16,IEC 61558-1/2-16(for 12V or higher models), BIS IS13252(Part1): 2010/IEC 60950-1:2005(except for 2.5V,4V,48V) approved										
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	I/P-FG:2KVAC O/	P-FG:0.5KVAC								
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, C	/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
Note 5)	EMC EMISSION	Compliance to BS E GB17625.1,KN 32(	,	2) Class B, BS EN/EN	61000-3-2,-3, EAC TP T	C 020, CNS15936, GB	9254 Class B,					
	EMC IMMUNITY	Compliance to BS	EN/EN61000-4-2,3	4,5,6,8,11, BS EN/E	EN55035, light industry	y level, EAC TP TC 02	20					
	MTBF	2078.1K hrs min.	Telcordia SR-332 (	Bellcore) ; 224.5K hrs	s min. MIL-HDBK-21	7F (25°C)						
OTHERS	DIMENSION	215*115*30mm (L	.*W*H)									
	PACKING	0.72Kg; 15pcs/11.	8Kg/0.67CUFT									
NOTE	1. All parameters NOT spe 2. Ripple & noise are meas 3. Tolerance: includes set 4. Derating may be needed 5. The power supply is con mounting the unit on a 3 EMC directives. For guid (as available on https://w 6. For charging related app 7. Strongly recommended 8. The ambient temperatur than 2000m(6500ft).	sured at 20MHz of up tolerance, line of under low input issidered a composition of the co	of bandwidth by use regulation and low voltages. Please of the please with the plate with the plate with the perform these EMC m//Upload/PDF/El consult Mean We but capacitance should be regulationally and the plate with the plate w	ing a 12" twisted pad regulation. check the derating installed into a fin m of thickness. The clests, please reful_statement_en. If for details.	pair-wire terminated groups for more detained equipment. All the final equipment mer to "EMI testing of pdf.)	with a 0.1 $\mu$ F & 47 ails. e EMC tests are becaust be re-confirmed component power SP-200-2.5/-3.3/-4/-	μ F parallel capaci en executed by d that it still meets supplies."					
	9. Some model may not ha	eve the BIS logo,	please contact you	ur MEAN WELL sa	ales for more inform	ation.						

 $\begin{tabular}{ll} \hline \& Product\ Liability\ Disclaimer: For\ detailed\ information,\ please\ refer\ to\ https://www.meanwell.com/serviceDisclaimer.aspx \end{tabular}$ 



MODEL		RSP-200-13.5	RSP-200-15	RSP-200-24	RSP-200-27	RSP-200-36	RSP-200-48						
	DC VOLTAGE	13.5V	15V	24V	27V	36V	48V						
	RATED CURRENT	14.9A	13.4A	8.4A	7.5A	5.56A	4.2A						
	CURRENT RANGE	0 ~ 14.9A	0 ~ 13.4A	0 ~ 8.4A	0 ~ 7.5A	0 ~ 5.56A	0 ~ 4.2A						
	RATED POWER	201.15W	201W	201.6W	202.5W	200.16W	201.6W						
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	200mVp-p	220mVp-p	240mVp-p						
OUTPUT	VOLTAGE ADJ. RANGE	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 31.5V	32.4 ~ 39.6V	41 ~ 56V						
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%						
	LINE REGULATION	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%						
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%						
	SETUP, RISE TIME	1500ms, 50ms/23	500ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load										
	HOLD UP TIME (Typ.)	,	8ms at full load 230VAC /115VAC										
	( ) . ,	88 ~ 264VAC	124 ~ 370VDC										
	FREQUENCY RANGE	47 ~ 63Hz	124 070700										
	POWER FACTOR (Typ.)	PF>0.95/230VAC	PF>0.98/115V	AC at full load									
INPUT	EFFICIENCY (Typ.)	89%	89.5%	89.5%	89%	90%	90%						
	AC CURRENT (Typ.)	2.5A/115VAC	1.3A/230VAC	00.070	0070	3070	0070						
	INRUSH CURRENT (Typ.)	20A/115VAC	40A/230VAC										
	LEAKAGE CURRENT	<1mA / 240VAC	40/1/200 1/10										
	LLANAGE CONNENT	105 ~ 135% rated	output nower										
	OVERLOAD			are automatically ofto	r fault condition is ron	aavad							
DOTECTION					r fault condition is ren		50 1 60\/						
PROTECTION	OVER VOLTAGE		15.7 ~ 18.4V   18.8 ~ 21.8V   27.6 ~ 32.4V   32.9 ~ 38.3V   41.4 ~ 48.6V   58.4 ~ 68V										
	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											
	OVER TEMPERATURE	· ·	nut down o/p voltage, recovers automatically after temperature goes down 30 ~ +70 °C (Refer to "Derating Curve")										
	WORKING TEMP.	20 ~ 90% RH non-condensing											
TAIV/IDONMENT	WORKING HUMIDITY												
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH ±0.03%°C (0 ~ 45°C)											
	TEMP. COEFFICIENT												
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
	SAFETY STANDARDS	UL62368-1,TUV BS EN/EN62368-1, EAC TP TC 004, CCC GB4943.1,BSMI CNS15598-1, AS/NZS 60950.1, Dekra EN 61558-1/2-16,IEC 61558-1/2-16(for 12V or higher models), BIS IS13252(Part1): 2010/IEC 60950-1:2005(except for 2.5V,4V,48V) approved											
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC 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 5)	EMC EMISSION	Compliance to BS E	N/EN55032 (CISPR3	32) Class B, BS EN/EN	61000-3-2,-3,EAC TP 1	TC 020, CNS15936, GB	9254 Class B, GB1762						
	EMC IMMUNITY	Compliance to BS	EN/EN61000-4-2,3	,4,5,6,8,11, BS EN/E	N55035, light industr	y level, EAC TP TC 02	20						
	MTBF	2078.1K hrs min.	Telcordia SR-332 (	Bellcore) ; 224.5K hrs	min. MIL-HDBK-21	7F (25°℃)							
OTHERS	DIMENSION	215*115*30mm (L	*W*H)	· · · · · · · · · · · · · · · · · · ·		, ,							
	PACKING	0.72Kg; 15pcs/11.8Kg/0.67CUFT											
NOTE	1. All parameters NOT spe 2. Ripple & noise are meas 3. Tolerance: includes set 4. Derating may be needed 5. The power supply is con it still meets EMC directi (as available on https://w 6. For charging related app 7. Strongly recommended 18. The ambient temperatur than 2000m(6500ft).	sured at 20MHz of up tolerance, line of under low input sidered a composures. For guidance www.meanwell.co. olications, please that external output e derating of 3.5°	of bandwidth by use regulation and low voltages. Please nent which will be e on how to perform//Upload/PDF/E consult Mean We but capacitance should be regulational to the consult of the	sing a 12" twisted p pad regulation. check the derating installed into a finar m these EMC test: MI_statement_en.  Il for details. nould not exceed 50 less models and of	air-wire terminated curve for more deta al equipment. The fs, please refer to "Eodf)  2000uF. (Only for: R: 5°C/1000m with fa	with a 0.1 $\mu$ F & 47 ails. inal equipment must MI testing of composers SP-200-2.5/-3.3/-4/n models for operation	μ F parallel capacit at be re-confirmed the conent power supplied -5/-7.5/-12/-13.5/-15						







Dimension -

L \* W \*

215 \* 115 \* 30 mm

8.46 \* 4.53 \* 1.18 inch















**DEKRA** EN61558-1/2-16

















IEC62368-1

## **■** Features

- Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 90%
- · Forced air cooling by built-in DC Fan with fan speed control function
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- Operating altitude up to 5000 meters
- · Optional conformal coating
- · LED indicator for power on
- 3 years warranty

# Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- Burn-in facility
- · RF application

#### ■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### Description

RSP-320 is a 320W single output enclosed type AC/DC power supply. This series operates for 88~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C.



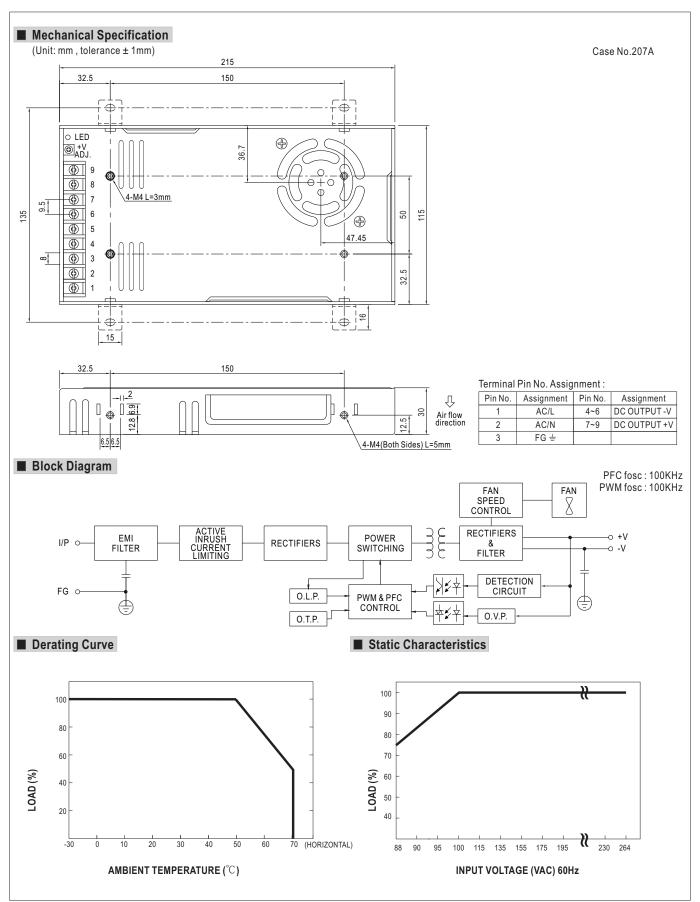


MODEL		RSP-320-2.5	RSP-320-3.3	RSP-320-4	RSP-320-5	RSP-320-7.5	RSP-320-12				
	DC VOLTAGE	2.5V	3.3V	4V	5V	7.5V	12V				
	RATED CURRENT	60A	60A	60A	60A	40A	26.7A				
	CURRENT RANGE	0 ~ 60A	0~60A	0 ~ 60A	0 ~ 60A	0 ~ 40A	0 ~ 26.7A				
	RATED POWER	150W	198W	240W	300W	300W	320.4W				
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p				
OUTPUT	VOLTAGE ADJ. RANGE	2.35 ~ 2.85V	2.97 ~ 3.8V	3.7 ~ 4.3V	4.5 ~ 5.5V	6 ~ 9V	10 ~ 13.2V				
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%				
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.3%				
	LOAD REGULATION	±1.5%	±1.5%	±1.0%	±1.0%	±1.0%	±0.5%				
	SETUP, RISE TIME	1500ms, 50ms/230V	AC 3000ms, 50	ms/115VAC at full loa	ad						
	HOLD UP TIME (Typ.)	8ms at full load 230	OVAC /115VAC								
	, , , ,	88 ~ 264VAC 1:	24 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.95/230VAC	PF>0.98/115VAC	at full load							
INPUT	EFFICIENCY (Typ.)	75.5%	79.5%	81%	83%	88%	88%				
	AC CURRENT (Typ.)	2.7A/115VAC 1	.5 A/230VAC	1	4A/115VAC 2A	V/230VAC					
	INRUSH CURRENT (Typ.)		0A/230VAC								
	LEAKAGE CURRENT	<1mA / 240VAC									
	ELYHOTOL GOTHLENT	105 ~ 135% rated ou	itnut nower								
	OVERLOAD			automatically after fa	ult condition is remov	n d					
PROTECTION		2.88 ~ 3.38V	3.8 ~ 4.5V	4.5 ~ 5.3V	5.75 ~ 6.75V	9.4 ~ 10.9V	13.8 ~ 16.2V				
FROILCHON	OVER VOLTAGE					0.4 10.01	10.0 10.2 V				
	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									
	WORKING TEMP.	Shut down o/p voltage, recovers automatically after temperature goes down -30 ~ +70°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20 ~ 90% RH non-co									
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95									
ENVIRONMENT	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes									
	OPERATING ALTITUDE	5000 meters									
	OPERATING ALTITUDE	UL62368-1,TUV BS EN/EN62368-1,EAC TP TC 004, CCC GB4943.1,BSMI CNS15598-1, AS/NZS 60950.1, IS13252(Part1)/									
	SAFETY STANDARDS	UL62368-1,TUV BS EN/EN62368-1,EAC TP TC 004, CCC GB4943.1,BSMI CNS15598-1, AS/NZS 60950.1, IS13252(Part1)/ IEC60950-1(except for 2.5V,48V),Dekra EN 61558-1/2-16,IEC 61558-1/2-16(for 12V or higher models) approved									
0.45557/.0	WITHSTAND VOLTAGE										
SAFETY &	ISOLATION RESISTANCE	/P-O/P:3KVAC									
EMC (Note 6)	EMC EMISSION	, , , ,				020 CNS15026 CD	0254 Class P				
(11010 0)	LING LINISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS15936, GB9254 Class B, GB17625.1,KN 32(only for 5V)									
	EMC IMMUNITY	Compliance to BS E	N/EN61000-4-2,3,4,	5,6,8,11, BS EN/EN5	5035, light industry le	vel, EAC TP TC 02	20				
	MTBF	1826.4K hrs min.	Telcordia SR-332 (Bel	lcore); 192.9K hrs mi	n. MIL-HDBK-217F	(25°℃)					
OTHERS	DIMENSION	215*115*30mm (L*V	V*H)								
	PACKING	0.9Kg; 15pcs/14.5Kg/0.67CUFT									
NOTE	1. All parameters NOT spe 2. Ripple & noise are meas 3. Tolerance: includes set 4. Derating may be needed 5. The ambient temperatur than 2000m(6500ft). 6. The power supply is con mounting the unit on a 3 EMC directives. For guid (as available on https://v 7. For charging related app	sured at 20MHz of the up tolerance, line in the up tolerance, line in the under low input vote dearating of 3.5°C/sidered a compone 60mm*360mm metalance on how to pewww.meanwell.com	pandwidth by using egulation and load oltages. Please che (1000m with fanles ent which will be instal plate with 1mm rform these EMC t //Upload/PDF/EMI	y a 12" twisted pair regulation. eck the derating cu s models and of 5° stalled into a final e of thickness. The fi ests, please refer t _statement_en.pdf	wire terminated with rve for more details C/1000m with fan not equipment. All the E inal equipment muston o "EMI testing of co	th a 0.1 $\mu$ F & 47  i. nodels for operate  MC tests are best be re-confirmed	μ F parallel capacitor ing altitude higher en executed by d that it still meets				



OUTPUT	DC VOLTAGE RATED CURRENT CURRENT RANGE RATED POWER RIPPLE & NOISE (max.) Note.2 VOLTAGE ADJ. RANGE	13.5V 23.8A 0 ~ 23.8A 321.3W	15V 21.4A	24V 13.4A	27V	36V	48V					
OUTPUT	CURRENT RANGE RATED POWER RIPPLE & NOISE (max.) Note.2	0 ~ 23.8A		13 4A								
OUTPUT	RATED POWER RIPPLE & NOISE (max.) Note.2		0 04 44	10.171	11.9A	8.9A	6.7A					
OUTPUT	RIPPLE & NOISE (max.) Note.2	321.3W	0 ~ 21.4A	0 ~ 13.4A	0 ~ 11.9A	0 ~ 8.9A	0 ~ 6.7A					
ОИТРИТ	,		321W	321.6W	321.3W	320.4W	321.6W					
	VOLTAGE AD L BANGE	150mVp-p	150mVp-p	150mVp-p	200mVp-p	220mVp-p	240mVp-p					
	VOLIAGE ADD. NAMOL	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 31.5V	32.4 ~ 39.6V	41 ~ 56V					
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%					
	LINE REGULATION	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%					
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%					
	SETUP, RISE TIME	1500ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load										
	HOLD UP TIME (Typ.)	8ms at full load 23	0VAC /115VAC									
	VOLTAGE RANGE Note.4	88 ~ 264VAC 1	24 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz										
	POWER FACTOR (Typ.)	PF>0.95/230VAC	PF>0.98/115VA0	C at full load								
INPUT	EFFICIENCY (Typ.)	88%	88.5%	89%	89%	89.5%	90%					
	AC CURRENT (Typ.)	4A/115VAC 2A	/230VAC									
	INRUSH CURRENT (Typ.)	20A/115VAC 4	0A/230VAC									
	LEAKAGE CURRENT	<1mA / 240VAC										
		105 ~ 135% rated ou	utput power									
	OVERLOAD			automatically after	r fault condition is ren	noved						
PROTECTION		15.7 ~ 18.4V	18.8 ~ 21.8V	27.6 ~ 32.4V	32.9 ~ 38.3V	41.4 ~ 48.6V	58.4 ~ 68V					
	OVER VOLTAGE	Protection type : Sh	ut down o/p voltage.	re-power on to reco	over	l						
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down										
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")										
-	WORKING HUMIDITY	20 ~ 90% RH non-condensing										
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH										
ENVIDONMENT	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)										
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes										
	OPERATING ALTITUDE	5000 meters										
		UL62368-1,TUV BS EN/EN62368-1,EAC TP TC 004, CCC GB4943.1,BSMI CNS15598-1, AS/NZS 60950.1, IS13252(Part1)/										
	SAFETY STANDARDS	IEC60950-1,10V B3 EIN/EN02300-1,1AC 17 10 004, 000 GB4943.1,B3MI CN310390-1,A3/N23 00930.1,1310232(Paitty)										
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC										
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/F	P-FG:100M Ohms / 5	00VDC/25°C/70%	RH							
	EMC EMISSION	Compliance to BS EN	/EN55032 (CISPR32)	Class B, BS EN/EN6	31000-3-2,-3, EAC TP	TC 020, CNS15936, GE	39254 Class B, GB17625.1					
	EMC IMMUNITY	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS15936, GB9254 Class B, GB17625. Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020										
	MTBF	1826.4K hrs min.	Telcordia SR-332 (Be	ellcore): 192.9K hrs	min. MIL-HDBK-21	7F (25°C)						
OTHERS	DIMENSION	215*115*30mm (L*V	,									
	PACKING	0.9Kg; 15pcs/14.5Kg	,									
NOTE	<ol> <li>All parameters NOT spe</li> <li>Ripple &amp; noise are meas</li> <li>Tolerance: includes set</li> <li>Derating may be needed</li> <li>The ambient temperatur than 2000m(6500ft).</li> <li>The power supply is con it still meets EMC directi (as available on https://w</li> <li>For charging related app</li> <li>Strongly recommende (Only for: RSP-320-2.5</li> <li>Product Liability Disclair</li> </ol>	sured at 20MHz of lup tolerance, line of under low input view de derating of 3.5°C, sidered a componence ves. For guidance www.meanwell.com plications, please of d that external out/-3.3/-4/-5/-7.5/-	bandwidth by using regulation and load pltages. Please chewidth fanle and which will be in on how to perform the property on sult Mean Well atput capacitance 12/-13.5/-15)	g a 12" twisted particle of regulation. seek the derating ass models and of a stalled into a final of these EMC tests of the stalled into a final of these the stalled into a final of these the stalled into a final of the stall	air-wire terminated curve for more deta 5°C/1000m with fa all equipment. The fis, please refer to "Eodf")	with a 0.1 $\mu$ F & 47 alls.  In models for operating all equipment must MI testing of compositions.	$\mu$ F parallel capacitor. ing altitude higher it be re-confirmed that onent power supplies.'					







#### Dimension

L \* W \* F

230 \* 127 \* 40.5(1U) mm 9.06 \* 5 \* 1.59(1U) inch

































### **■** Features

- · Universal AC input / Full range
- Built-in active PFC function
- · High efficiency up to 90.5%
- Forced air cooling by built-in DC fan (Note.5)
- Built-in remote ON-OFF control / remote sense
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 3 years warranty

### Applications

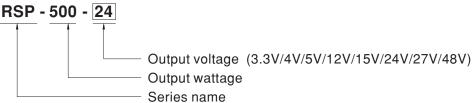
- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- Burn-in facility
- RF application

#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### Description

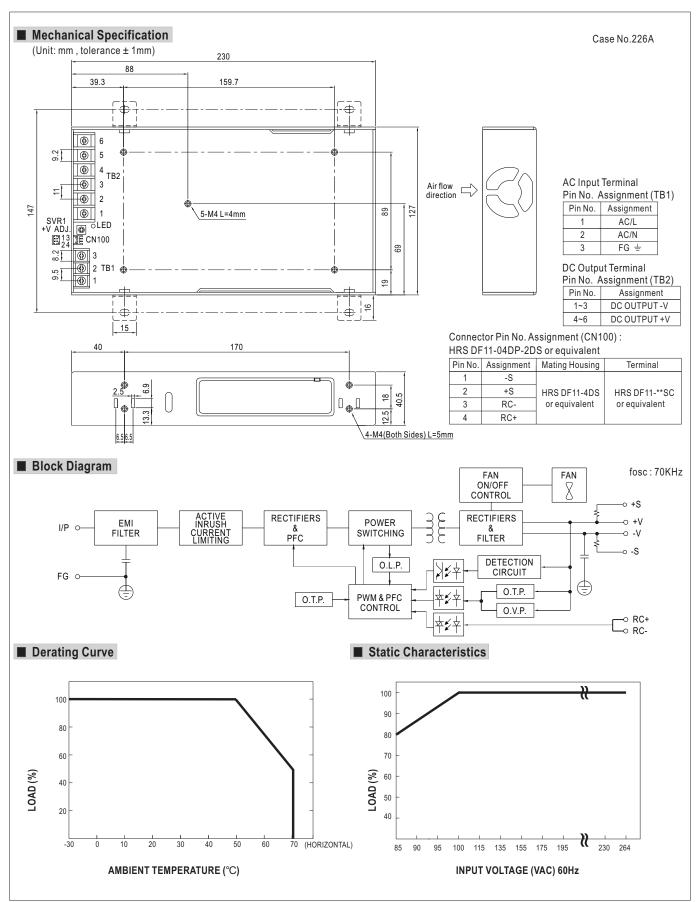
RSP-500 is a 500W single output enclosed type AC/DC power supply. This series operates for 85~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-500 provides vast design flexibility by equipping various built-in functions such as remote ON-OFF control, remote sense, etc.





MODEL		RSP-500-3.3	RSP-500-4	RSP-500-5	RSP-500-12	RSP-500-15	RSP-500-24	RSP-500-27	RSP-500-48				
	DC VOLTAGE	3.3V	4V	5V	12V	15V	24V	27V	48V				
	RATED CURRENT	90A	90A	90A	41.7A	33.4A	21A	18.6A	10.5A				
	CURRENT RANGE	0 ~ 90A	0 ~ 90A	0~90A	0 ~ 41.7A	0 ~ 33.4A	0 ~ 21A	0 ~ 18.6A	0 ~ 10.5A				
	RATED POWER	297W	360W	450W	500.4W	501W	504W	502.2W	504W				
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p				
OUTPUT	VOLTAGE ADJ. RANGE	2.8 ~ 3.6V	3.6 ~ 4.3V	4.5 ~ 5.5V	10 ~ 13.2V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 30V	41 ~ 56V				
	VOLTAGE TOLERANCE Note.3	±2.0%	±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	1500ms, 80ms/	230VAC 3	000ms, 80ms/1	15VAC at full lo	ad			·				
	HOLD UP TIME (Typ.)	18ms/230VAC 14ms/115VAC at full load											
	VOLTAGE RANGE Note.4	85 ~ 264VAC	120 ~ 370VI	DC									
	FREQUENCY RANGE	47 ~ 63Hz											
	POWER FACTOR (Typ.)	PF>0.95/230VA	C PF>0.9	8/115VAC at fu	Il load								
INPUT	EFFICIENCY (Typ.)	81%	83%	84%	88%	88%	89%	89.5%	90.5%				
	AC CURRENT (Typ.)	4.2A/115VAC	2.1 A/230VAC	5.3A/115VAC	2.65 A/230								
	INRUSH CURRENT (Typ.)	20A/115VAC	40A/230VA0	2		-							
	LEAKAGE CURRENT	<2mA / 240VAC											
	ELMOTOL GOTTLETT	105 ~ 130% rat		r									
	OVERLOAD				rovers automati	cally after fault o	ondition is remo	ved					
		3.8 ~ 4.5V	4.5 ~ 5.3V	5.75 ~ 6.75V	13.8 ~ 16.2V	18.8 ~ 21.8V	27.6 ~ 32.4V	32.9 ~ 38.3V	58.4 ~ 68V				
PROTECTION	OVER VOLTAGE	3.0 ~ 4.5 v											
KOTLOTION	OVER TEMPERATURE	7.	Shut down o/p voltage, recovers automatically after temperature goes down										
	REMOTE CONTROL		POWER ON:open or 0~0.8VDC between RC+(Pin 4)&RC-(Pin3) on CN100 POWER OFF: 4~10VDC between RC+(Pin 4)&RC-(Pin3) on CN100										
FUNCTION													
FUNCTION	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.3V  RTH2≧50°C±10°C Fan on; RTH2≦40°C±10°C Fan off (Fan always on for 3.3~5V,Fan ON/OFF control for 12~48V)											
	FAN CONTROL (Typ.)				Fan off (Far	always on for 3	3.3~5V,Fan ON/0	JFF control for	12~48V)				
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
ENVIRONMENT	STORAGE TEMP., HUMIDITY												
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
	SAFETY STANDARDS				62368.1, EAC T (except for 48V)	PTC 004, CCC approved	GB4943.1, BSN	MI CNS15598-1	,				
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	I/P-FG:2KV	AC O/P-FG:0	.5KVAC								
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG	, O/P-FG:100M	Ohms / 500VD	C/25°C/70%	RH							
(Note.4)	EMC EMISSION	Compliance to	BS EN/EN5503	2 (CISPR32) C	lass B, BS EN/E	N61000-3-2,-3,	EAC TP TC 020	,GB/T 9254, CN	IS15936 Class				
	EMC IMMUNITY	Compliance to I	BS EN/EN61000	0-4-2,3,4,5,6,8	11, BS EN/EN5	5035, BS EN/EN	61000-6-2, EAC	TP TC 020					
	MTBF	1372.4K hrs min	. Telcordia S	R-332 (Bellcore	) ; 187.9K hrs mi	n. MIL-HDBK-	·217F (25°C)						
OTHERS	DIMENSION	230*127*40.5m	ım (L*W*H)										
	PACKING	1.3Kg; 9pcs/12.	7Kg/0.7CUFT										
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>Fan always on for 3.3~5V,Fan ON/OFF control for 12~48V.</li> <li>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 https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol>												







### ■ Function Description of CN100

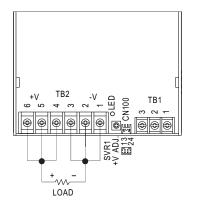
Pin No.	Function	Description
1		Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.3V.
2		Positive sensing. The +S signal should be connected 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 0.3V.
3	RC-	Return for RC+ signal input.
4	RC+	Turns the output on and off by electrical or dry contact between pin 4 (RC+) and pin 3 (RC-). 0~0.8VDC or open: Power ON, 4~10VDC: Power OFF.

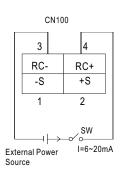
#### **■** Function Manual

#### 1.Remote Control

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

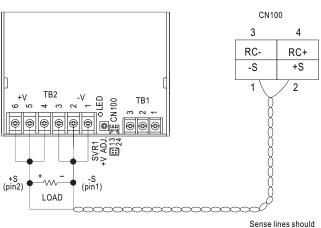
Between RC-(pin3) and RC+(pin4) on CN100	PSU Status
SW OFF (0 ~ 0.8VDC) or open	ON
SW ON (4 ~ 10V)	OFF





#### 2.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to  $0.3\mbox{\ensuremath{V}}$ 



Sense lines should be twisted in pairs



#### Dimension

250 \* 127 \* 41 (1U) mm 9.84 \* 5 \* 1.61(1U) inch































#### Features

- · Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 92%
- · Forced air cooling by built-in DC fan
- · Output voltage and constant current level programmable
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

### Applications

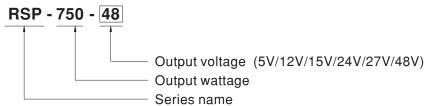
- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- RF application

#### GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### Description

RSP-750 is a 750W single output enclosed type AC/DC power supply. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-750 provides vast design flexibility by equipping various built-in functions such as the output programming, remote ON-OFF control, auxiliary power, etc.





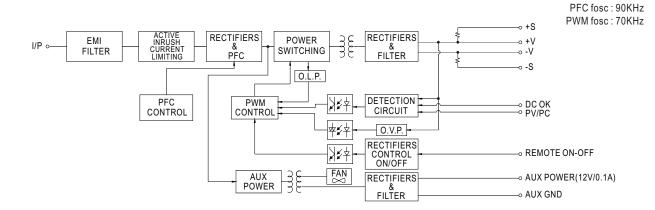
MODEL		RSP-750-5	RSP-750-12	RSP-750-15	RSP-750-24	RSP-750-27	RSP-750-48				
	DC VOLTAGE	5V	12V	15V	24V	27V	48V				
	RATED CURRENT	100A	62.5A	50A	31.3A	27.8A	15.7A				
	CURRENT RANGE	0 ~ 100A	0 ~ 62.5A	0 ~ 50A	0 ~ 31.3A	0 ~ 27.8A	0 ~ 15.7A				
	RATED POWER	500W	750W	750W	751.2W	750.6W	753.6W				
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p				
OUTPUT	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	±2.0%	±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 fu	ll load							
		90 ~ 264VAC 12	27 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz	. 0.0.20								
	POWER FACTOR (Typ.)		.98/115VAC at full I	nad							
NPUT	EFFICIENCY (Typ.)	82%	87%	89%	90.5%	90.5%	92%				
	AC CURRENT (Typ.)	5V : 5.6A/115VAC	2.8A/230VAC	12V~48V : 8.2A/1			92 /0				
	INRUSH CURRENT (Typ.)		)A/230VAC	12V~40V . 0.2A/1	13VAC 3.9A/230VA	<u> </u>					
			JA/230VAC								
	LEAKAGE CURRENT	<2.0mA / 240VAC									
	OVERLOAD	105 ~ 125% rated ou	T F								
					cally after fault condition i		1				
PROTECTION	OVER VOLTAGE (OVP)	5.75 ~ 6.75V	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	56.6 ~ 66.2V				
	. ,	, ,		, re-power on to recove							
	OVER TEMPERATURE		•	atically after temperatu							
	OUTPUT VOLTAGE PROGRAMMABLE(PV)	-	-		ominal output voltage. P						
	CONSTANT CURRENT LEVEL PROGRAMMABLE(PC)	Adjustment of const	ant current level is	s allowable to 40 ~ 11	0% of rated current. Plea	ase refer to the Fu	nction Manual.				
		12V @ 0.1A; tolerance: ±10%  Power on: short between Remote ON-OFF(pin13) & 12V-AUX(pin14) on CN50  Power off: open between Remote ON-OFF(pin13) & 12-AUX(pin14) on CN50									
FUNCTION	AUXILIARY POWER	12V @ 0.1A; toleran	ce: ±10%								
FUNCTION	AUXILIARY POWER REMOTE ON-OFF CONTROL			3) & 12V-AUX(pin14) on C	N50 Power off : open between	en <i>Remote ON-OFF(pir</i>	n13) & 12-AUX(pin14) on CN				
FUNCTION		Power on : short between	Remote ON-OFF(pin1	, , ,	N50 Power off : open between oply turn off = 3.3 ~ 5.6V	en Remote ON-OFF(pir	n13) & 12-AUX(pin14) on CN				
FUNCTION	REMOTE ON-OFF CONTROL	Power on : short between	Remote ON-OFF(pin1 ower supply turn o	n = 0 ~ 1V ; power sup	<u>'</u>	en Remote ON-OFF(pin	n13) & 12-AUX(pin14) on CN				
FUNCTION	REMOTE ON-OFF CONTROL DC OK SIGNAL	Power on : short between The TTL signal out, p	Remote ON-OFF(pin1 power supply turn on "Derating Curve")	n = 0 ~ 1V ; power sup	<u>'</u>	en Remote ON-OFF(pin	n13) & 12-AUX(pin14) on CN				
FUNCTION	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP.	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co	Remote ON-OFF(pin1 nower supply turn on Departing Curve") ndensing	n = 0 ~ 1V; power sup	<u>'</u>	en Remote ON-OFF(pin	n13) & 12-AUX(pin14) on CN				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY	Power on : short between The TTL signal out, $p$ -30 $\sim$ +70 $^{\circ}$ C (Refer to 20 $\sim$ 90% RH non-co -40 $\sim$ +85 $^{\circ}$ C, 10 $\sim$ 95	Remote ON-OFF(pin1) power supply turn o p "Derating Curve") ndensing % RH non-condens	n = 0 ~ 1V; power sup	<u>'</u>	en Remote ON-OFF(pin	n13) & 12-AUX(pin14) on CN				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	Power on : short between The TTL signal out, properties of the TTL signal out, properties out	Remote ON-OFF(pin1) bower supply turn of "Derating Curve") ndensing % RH non-condense	n = 0 ~ 1V; power sup	ply turn off = 3.3 ~ 5.6V	en Remote ON-OFF(pin	n13) & 12-AUX(pin14) on CN				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION	Power on : short between The TTL signal out, properties of the TTL signal out, provided and the TT	Remote ON-OFF(pin1) bower supply turn of power supply turn of powersing Curve") We RH non-condense C) in./1cycle, 60min. 6	n = 0 ~ 1V; power sup	pply turn off = 3.3 ~ 5.6V	v.					
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	Power on : short between The TTL signal out, $p = -30 \sim +70^{\circ}\text{C}$ (Refer to $20 \sim 90\%$ RH non-co $-40 \sim +85^{\circ}\text{C}$ , $10 \sim 95 \pm 0.03\%/^{\circ}\text{C}$ (0 $\sim 50^{\circ}$ 10 $\sim 500\text{Hz}$ , 2G 10m UL62368-1, CSA C22.	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") ndensing % RH non-condens C) in./1cycle, 60min. 6 2 No. 62368-1, TUV	n = 0 ~ 1V; power sup	ply turn off = 3.3 ~ 5.6V	v.					
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION	Power on : short between The TTL signal out, $p = -30 \sim +70^{\circ}\text{C}$ (Refer to $20 \sim 90\%$ RH non-co $-40 \sim +85^{\circ}\text{C}$ , $10 \sim 95 \pm 0.03\%/^{\circ}\text{C}$ (0 $\sim 50^{\circ}$ 10 $\sim 500\text{Hz}$ , 2G 10m UL62368-1, CSA C22.	Remote ON-OFF(pin1) rower supply turn of "Derating Curve") ndensing % RH non-condens C) in./1cycle, 60min. 6 2 No. 62368-1, TUV   010/IEC 60950-1:20	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro	ply turn off = 3.3 ~ 5.6V	v.					
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS	Power on : short between The TTL signal out, properties of the TTL signal out, properties out,	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro	s C GB4943.1, BSMI CNS1559 oved	v.					
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	Power on : short between The TTL signal out, properties of the TTL signal out, properties out,	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing sach along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro	s C GB4943.1, BSMI CNS1559 oved	v.	1, EAC TP TC 004,				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	Power on : short between The TTL signal out, program -30 ~ +70 °C (Refer to 20 ~ 90% RH non-co -40 ~ +85 °C, 10 ~ 95 ±0.03%/ °C (0 ~ 50 ° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P-	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing  each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro 2-FG:0.5KVAC 500VDC / 25°C/ 70% F  Standard	s C GB4943.1, BSMI CNS1559 oved	98-1, AS/NZS62368.	1, EAC TP TC 004,				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P-Parameter	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing  sach along X, Y, Z axe: BS EN/EN62368-1, CCC 05(except for 48V) approv-FG:0.5KVAC 500VDC / 25°C/ 70% F Standard BS EN/EN55032	s GB4943.1, BSMI CNS1550 Ved	98-1, AS/NZS62368.	1, EAC TP TC 004,				
	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, $p$ -30 ~ +70 °C (Refer to 20 ~ 90% RH non-co -40 ~ +85 °C, 10 ~ 95 $\pm$ 0.03%/ °C (0 ~ 50 ° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/P I/P-O/P, I/P-FG, O/P-Parameter Conducted	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing  sach along X, Y, Z axe: BS EN/EN62368-1, CCC 05(except for 48V) approv-FG:0.5KVAC 500VDC / 25°C/ 70% F Standard BS EN/EN55032	s GB4943.1, BSMI CNS155 oved (CISPR32), CNS15936 (CISPR32), CNS15936	98-1, AS/NZS62368.  Test Level / Not Class B	1, EAC TP TC 004,				
ENVIRONMENT	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated	Remote ON-OFF(pin1) cower supply turn of "Derating Curve") mensing RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV in 10/1EC 60950-1:20 P-FG:2KVAC O/F	n = 0 ~ 1V; power sup sing each along X, Y, Z axe: BS EN/EN62368-1, CCC 05(except for 48V) approx P-FG:0.5KVAC 500VDC / 25°C / 70% F Standard BS EN/EN55032 BS EN/EN55032	s S GB4943.1, BSMI CNS1555 oved CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2	98-1, AS/NZS62368.  Test Level / Not Class B Class B	1, EAC TP TC 004,				
ENVIRONMENT	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p $-30 \sim +70^{\circ}\text{C}$ (Refer to $20 \sim 90\%$ RH non-co $-40 \sim +85^{\circ}\text{C}$ , $10 \sim 95$ $\pm 0.03\%/^{\circ}\text{C}$ ( $0 \sim 50^{\circ}$ $10 \sim 500\text{Hz}$ , 2G $10\text{m}$ UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P-Parameter Conducted Radiated Harmonic Current Voltage Flicker	Remote ON-OFF(pin1 power supply turn of power suppl	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approx 2-FG:0.5KVAC 500VDC / 25°C / 70% F Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 BS EN/EN61000	s S C GB4943.1, BSMI CNS1555 oved CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2	98-1, AS/NZS62368.  Test Level / Not Class B Class B	1, EAC TP TC 004,				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B	Remote ON-OFF(pin1 power supply turn of power suppl	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approx 2-FG:0.5KVAC 500VDC / 25°C/ 70% F Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 BS EN/EN61000 2, CCC GB17625.1, G	s S C GB4943.1, BSMI CNS1555 oved CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2	98-1, AS/NZS62368.  Test Level / Not Class B Class B	1, EAC TP TC 004,				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter	Remote ON-OFF(pin1 power supply turn of power suppl	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approx P-FG:0.5KVAC 500VDC / 25°C / 70% F Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 2, CCC GB17625.1, G Standard	s CGB4943.1, BSMI CNS1555 oved  RH  (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 6B/T9254	98-1, AS/NZS62368.  Test Level / Not Class B Class B Test Level / Not	1, EAC TP TC 004,  e				
ENVIRONMENT  SAFETY &  EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B. Parameter ESD	Remote ON-OFF(pin1 power supply turn of power suppl	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro- -FG:0.5KVAC 500VDC / 25°C / 70% F Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 BS EN/EN61000 2, CCC GB17625.1,G Standard BS EN/EN61000	s CGB4943.1, BSMI CNS1550 oved  RH  (CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 0-4-2	98-1, AS/NZS62368.  Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air	1, EAC TP TC 004,				
ENVIRONMENT  SAFETY &  EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated	Remote ON-OFF(pin1 power supply turn of power suppl	n = 0 ~ 1V; power sup sing each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) appro- -FG:0.5KVAC 500VDC / 25°C / 70% F Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 BS EN/EN61000 2, CCC GB17625.1,G Standard BS EN/EN61000 BS EN/EN61000 BS EN/EN61000 BS EN/EN61000	s CGB4943.1, BSMI CNS1550 oved  (CISPR32), CNS15936 (CISPR32), CNS15936 (OSPR32), CNS1596	98-1, AS/NZS62368.  Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3	1, EAC TP TC 004,  e				
ENVIRONMENT  SAFETY &  EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst	Remote ON-OFF(pin1 power supply turn of power suppl	sing  seach along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approx  FG:0.5KVAC  500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000  BS EN/EN61000  Standard  BS EN/EN61000  BS EN/EN61000  BS EN/EN61000  BS EN/EN61000  BS EN/EN61000  BS EN/EN61000	s GB4943.1, BSMI CNS1550 oved  (CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 GB/T9254	98-1, AS/NZS62368.  Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3 Level 3	e e; Level 2, 4KV contact				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge	Remote ON-OFF(pin1 power supply turn of power suppl	sing  sach along X, Y, Z axes  BS EN/EN62368-1, CCC 05(except for 48V) appro  2-FG:0.5KVAC  500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000	s CGB4943.1, BSMI CNS1550 oved  RH  (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 0-3-2 0-4-2 0-4-3 0-4-4	98-1, AS/NZS62368.  Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3 Level 3 Level 3	e e; Level 2, 4KV contact				
ENVIRONMENT	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge Conducted	Remote ON-OFF(pin1 power supply turn of power suppl	sing  sach along X, Y, Z axes  BS EN/EN62368-1, CCC 05(except for 48V) appro  2-FG:0.5KVAC 500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000	s GB4943.1, BSMI CNS1550 oved CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 (O-3-2 D-3-3 BB/T9254 CISPR32) -4-2 D-4-5 D-4-6 D-4-5 D-4-6	Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3 Level 3 Level 3 Level 4, 4KV/Line- Level 3	e e; Level 2, 4KV contact				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge	Remote ON-OFF(pin1 power supply turn of power suppl	sing  sach along X, Y, Z axes  BS EN/EN62368-1, CCC 05(except for 48V) appro  2-FG:0.5KVAC  500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000	s GB4943.1, BSMI CNS1550 oved CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 (O-3-2 D-3-3 BB/T9254 CISPR32) -4-2 D-4-5 D-4-6 D-4-5 D-4-6	Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3 Level 3 Level 4, 4KV/Line-level 3 Level 4	e e ; Level 2, 4KV contact  Earth; Level 3, 2KV/Line-Li				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P:3KVAC I/F I/P-O/P, I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge Conducted	Remote ON-OFF(pint) rower supply turn of "Derating Curve") ndensing % RH non-condens C) in./1cycle, 60min. 6 2 No. 62368-1, TUV 1 010/IEC 60950-1:20 P-FG:2KVAC O/F FG:100M Ohms / 5	sing  sach along X, Y, Z axes  BS EN/EN62368-1, CCC 05(except for 48V) appro  2-FG:0.5KVAC 500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000	s CGB4943.1, BSMI CNS1550 oved  RH (CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 0-4-2 0-4-3 0-4-4 0-4-5 0-4-6 0-4-8	Test Level / Not Class B Class B Test Level / Not Level 3, 8KV air Level 3 Level 3 Level 4, 4KV/Line-level 3 Level 4	e e ; Level 2, 4KV contact Earth; Level 3, 2KV/Line-Li				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P; I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field Voltage Dips and Interpretations	Remote ON-OFF(pin1) rower supply turn of "Derating Curve") rower supply turn of "Derating Curve") RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV of of of the condense of the cond	sing  each along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approFG:0.5KVAC  500VDC / 25°C / 70% F  Standard  BS EN/EN55032  BS EN/EN55032  BS EN/EN61000	s GB4943.1, BSMI CNS1550 CISPR32), CNS15936 (CISPR32), CNS15936 (CISPR32), CNS15936 D-3-2 D-3-3 GB/T9254 CISPR32) CNS15936 D-4-2 D-4-5 D-4-6 D-4-8 D-4-11	Test Level / Not Class B Class B Level 3, 8KV air Level 3 Level 3 Level 4 >95% dip 0.5 pe >95% interruption	e e ; Level 2, 4KV contact Earth; Level 3, 2KV/Line-Li				
ENVIRONMENT  SAFETY & EMC	REMOTE ON-OFF CONTROL DC OK SIGNAL WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	Power on : short between The TTL signal out, p -30 ~ +70°C (Refer to 20 ~ 90% RH non-co -40 ~ +85°C, 10 ~ 95 ±0.03%/°C (0 ~ 50° 10 ~ 500Hz, 2G 10m UL62368-1, CSA C22. BIS IS13252(Part1): 2 I/P-O/P: 3KVAC I/F I/P-O/P; I/P-FG, O/P- Parameter Conducted Radiated Harmonic Current Voltage Flicker BS EN/EN55024, B: Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field Voltage Dips and Interpretations	Remote ON-OFF(pin1) rower supply turn of "Derating Curve") rower supply turn of "Derating Curve") RH non-condense C) in./1cycle, 60min. 6 2 No. 62368-1, TUV of 10/IEC 60950-1:20 P-FG:2KVAC O/F FG:100M Ohms / 5 S EN/EN61000-6-	sing  sach along X, Y, Z axes BS EN/EN62368-1, CCC 05(except for 48V) approx 2-FG:0.5KVAC 500VDC / 25°C/ 70% F  Standard BS EN/EN55032 BS EN/EN55032 BS EN/EN61000 BS EN/EN610000	SEC GB4943.1, BSMI CNS1550  RH  (CISPR32), CNS15936 (CISPR32), CNS15936 0-3-2 0-3-3 0-3-2 0-4-2 0-4-3 0-4-4 0-4-5 0-4-6 0-4-8 0-4-11	Test Level / Not Class B Class B Level 3, 8KV air Level 3 Level 3 Level 4 >95% dip 0.5 pe >95% interruption	e e ; Level 2, 4KV contact Earth; Level 3, 2KV/Line-Li				

#### NOTE

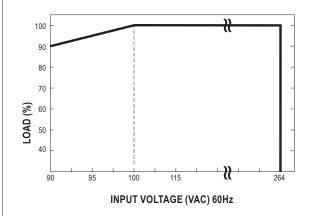
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1  $\mu$  F & 47  $\mu$  F parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- Derating may be needed under low input voltages. Please check the derating curve for more details.
   There is high possibility to trigger the floating over voltage protection when PV voltage is trimmed from a high voltage level to a lower voltage level at light load or no load condition. It is suggested that turn off the power supply and set PV voltage to the lowest level, then adjust output voltage to a desired value.
   Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-750-5)
- 7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm\*360mm metal plate with 1mm of thickness. 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 https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
  8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- 9. Products sourced from Taiwan do not have the BIS logo, please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



### ■ Block Diagram



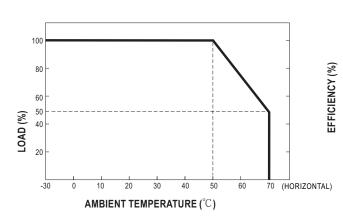
#### ■ Static Characteristics

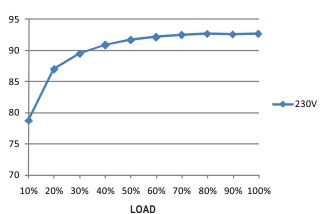


INPUT MODEL	5V	12V	15V
100~264VAC	500W	750W	750W
	100A	62.5A	50A
90VAC	450W	675W	675W
	90A	56.25A	45A
INPUT MODEL	24V	27V	48V
100~264VAC	751.2W	750.6W	753.6W
	31.3A	27.8A	15.7A
90VAC	676.08W	675.54W	678.24W
	28.17A	25.02A	14.13A

■ Efficiency vs Load (48V Model)

### ■ Derating Curve





※ The curve above is measured at 230VAC.



#### ■ Function Manual

#### 1.Remote Sense

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

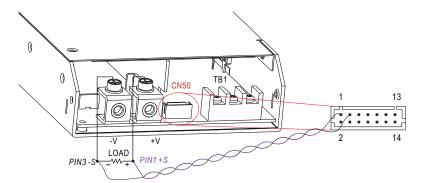


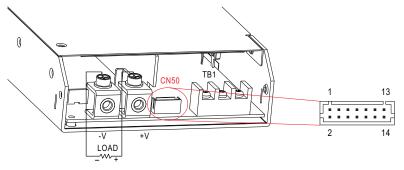


Fig 1.1

- ① The +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal.
- © By factory default, on CN50, Remote ON-OFF (pin13) and 12V-AUX (pin14), PV(pin5) and PS (pin6), and PC (pin7) and PO (pin8, respectively, are shorted when shipped. The power supply will have no output if the shorting connector is not assembled unless certain functin needs to be activated.

#### 2.Remote ON-OFF

※ The power supply can be turned ON/OFF by using the "Remote ON-OFF" function.



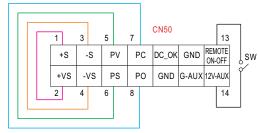


Fig 2.1

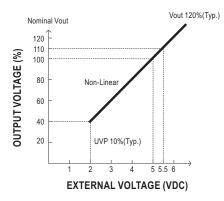
Between Remote ON-OFF(pin13) and 12V-AUX(pin14)	Power Supply Status
SW close (Short)	ON
SW open (Open)	OFF

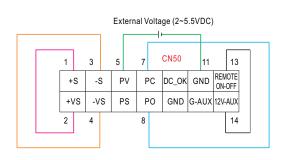
When multiple power supplies need to turn ON/OFF simultaneously by Remote ON-OFF control, -S & -V on CN50, as well as +S & +V, on each power supply should be connected.



#### 3. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 40∼110% of the nominal voltage by applying EXTERNAL VOLTAGE.





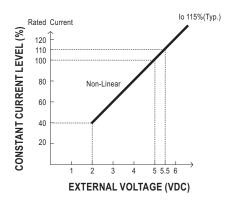
If EXTERNAL VOLTAGE (VDC) <0.5V, the power supply may enter under voltage protection; it needs to be restarted to work.

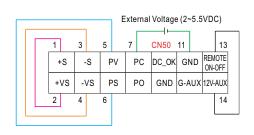
Fig 3.1

\*\* Caution: By factory default, the Output Voltage Programming is not activated, and PV (pin5) and PS(pin6) are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep PV (pin5) and PS(pin6) shorted; other wise, the power supply will have no output.

#### 4. Constant Current Level Programming (or, PC / remote current programming / dynamic current trim)

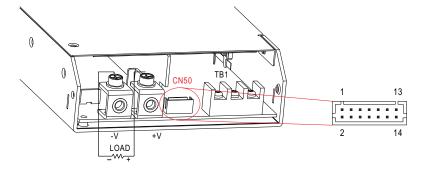
※ The constant current level can be trimmed to 40~110% of the rated current by applying EXTERNAL VOLTAGE.





Fia 4.1

X Caution: By factory default, the Output Current Programming is not activated, and PC(pin7) and PO(pin8) are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep PC(pin7) and PO(pin8) shorted; otherwise, the power supply will have no output.

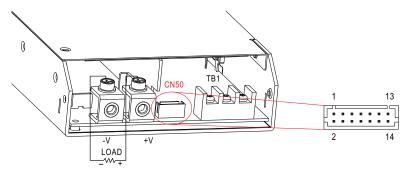




#### 5.DC\_OK signal

- \* "DC\_OK" is an open collector signal. It indicates the output status of the power supply. It can operate in two ways: One is sinking current from external TTL signal; the other is sending out a TTL voltage signal.
- © Sinking current from external TTL signal: The maximum sink current is 10mA and the maximum external voltage is 5.6V.
- O Sending out TTL voltage signal :

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



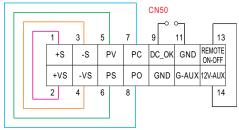


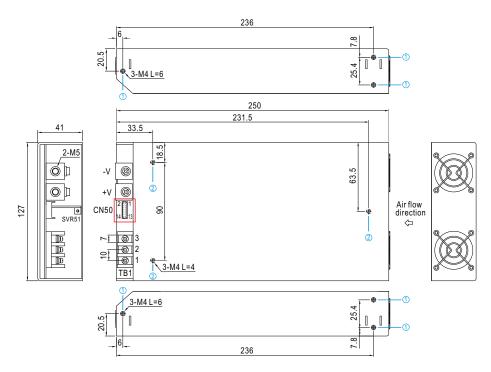
Fig 5.1



### ■ Mechanical Specification

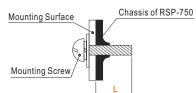
(Unit: mm , tolerance ± 1mm)

Case No.212A



#### ※ Mounting Instruction

Hole No.	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque
1	M4	6mm	7~11Kgf-cm
2	M4	4mm	7~11Kgf-cm



% Control Pin No. Assignment (CN50): HRS DF11-14DP-2DS or equivalent



Mating Housing	HRS DF11-14DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	+S	Positive sensing for remote sense.
2	+VS	+V Signal. The +VS should be connected to the +S to reduce the noise when "output voltage programming" function is in use.
3	-S	Negative sensing for remote sense.
4	-VS	-V Signal. The -VS should be connected to the -S to reduce the noise when "output voltage programming" function is in use.
5	PV	Connect to external DC voltage source for output voltage programming, referenced to pin 10,11 (GND).
6	PS	Reference pin regarding output voltage programming. Please refer to the Function Manual.
7	PC	Connect to external DC voltage source for output current programming.
8	PO	Reference pin regarding output current programming. Please refer to the Function Manual.
9		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		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".



### $\frak{\mathrm{MC}}$ Input Terminal Pin No. Assignment

Pin No.	Assignment	Diagram		Maximum mounting torque
1	AC/N		0-0-0-0	
2	AC/L			18Kgf-cm
3	FG ±			

### $\mbox{\em \%DC}$ Output Terminal Pin No. Assignment

Assignment	Diagram	Maximum mounting torque
+V, -V		10Kgf-cm

### ■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html



#### Dimension

41 (1U) mm 11.6 \* 5 \* 1.61(1U) inch































#### Features

- Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 90%
- · Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 4000W (3+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

### Applications

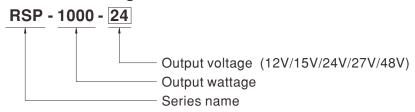
- · Factory control or automation apparatus
- · Test and measurement instrument
- · Laser related machine
- Burn-in facility
- RF application

#### ■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

### Description

RSP-1000 is a 1KW single output enclosed type AC/DC power supply with 1U low profile. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 60°C. Moreover, RSP-1000 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.





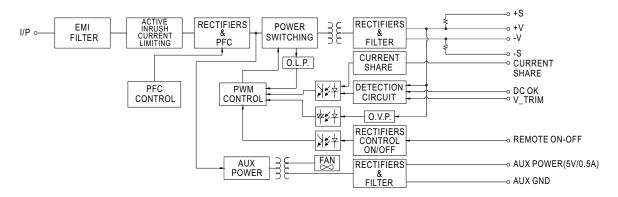
		RSP-1000-12	RSP-1000-15	RSP-1000-24 R	SP-1000-27	RSP-1000-48			
	DC VOLTAGE	12V	15V	24V 2	7V	48V			
	RATED CURRENT	60A	50A	40A 3	7A	21A			
	CURRENT RANGE	0 ~ 60A	0 ~ 50A	0 ~ 40A 0	~ 37A	0 ~ 21A			
	RATED POWER	720W	750W	960W 99	99W	1008W			
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p 15	50mVp-p	150mVp-p			
OUTPUT	VOLTAGE ADJ. RANGE	10 ~ 13.5V	13.5 ~ 16.5V		4 ~ 30V	43 ~ 55V			
,011 01	VOLTAGE TOLERANCE Note.3		±1.0%		1.0%	±1.0%			
	LINE REGULATION	±0.5%	±0.5%		= 0.5%	±0.5%			
	LOAD REGULATION	±0.5%	±0.5%		=0.5%	±0.5%			
				1 0.0 //	_ 0.5 /0	⊥0.5/0			
	SETUP, RISE TIME	300ms, 50ms at full load	(445) (40 ) ( 5 ) ( 1 )						
	HOLD UP TIME (Typ.)		16ms/230VAC 16ms/115VAC at full load						
			370VDC						
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	0.95/230VAC 0.98/1	15VAC at full load						
NPUT	EFFICIENCY (Typ.)	83%	85%	88%	8%	90%			
	AC CURRENT (Typ.)	12A/115VAC 6A/230	VAC						
	INRUSH CURRENT (Typ.)	25A/115VAC 40A/23	60VAC						
	LEAKAGE CURRENT	<2.0mA / 240VAC							
		105 ~ 125% rated output	power						
	OVERLOAD			automatically after fault condition	is removed				
ROTECTION		13.8 ~ 16.8V	17 ~ 20.5V		1 ~ 36.5V	56.6 ~ 66.2V			
KOILCHON	OVER VOLTAGE	Protection type : Shut dov	l		1 00.01	00.0 00.27			
	OVED TEMPEDATURE	71	1 0, 1						
	OVER TEMPERATURE	Shut down o/p voltage, re	•		as Diseas refer to	o the Eupetion Manual			
- t	OUTPUT VOLTAGE PROGRAMMABLE(PV)				ge. Please refer to	o the Function Manual.			
	CURRENT SHARING	Up to 4000W or (3+1) uni	ts. Please refer to the Fi	inction Manual.					
UNCTION	AUXILIARY POWER	5V @ 0.5A (+5%, -8%)							
	REMOTE ON-OFF CONTROL	Power ON: short Power OFF: open. Please refer to the Function Manual.							
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.5V. Please refer to the Function Manual.							
	DC OK SIGNAL	The TTL signal out, PSU t	The TTL signal out, PSU turn on = 0 ~ 1V; PSU turn off = 3.3 ~ 5.6V. Please refer to the Function Manual.						
	WORKING TEMP.	-20 ~ +60°C (Refer to "De	erating Curve")						
	WORKING HUMIDITY	20 ~ 90% RH non-conden	sing						
NVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT	±0.02%/°C (0 ~ 50°C)	-						
	VIBRATION	10 ~ 500Hz, 2G 10min./10	cycle, 60min, each along	IX. Y. Z axes					
		· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	EN/EN62368-1, CCC GB494	3 1 BSMI CNS15	598-1 AS/NZS62368 1			
	SAFETY STANDARDS				o, 20 o	, , , , , , , , , , , , , , , , , , , ,			
	WITHSTAND VOLTAGE	IS13252(Part1)/IEC60950-1, EAC TP TC 004 approved  I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:							
	ISOLATION RESISTANCE	_			Took Lovel	/ Nata			
		Parameter		dard	Test Level	/ Note			
		Conducted		N/EN55032 (CISPR32), CNS1					
	EMC EMISSION	Radiated		N/EN55032 (CISPR32), CNS1					
		Harmonic Current	BS E	N/EN61000-3-2					
SAFETY &		Voltage Flicker	BS E	N/EN61000-3-3					
EMC		BS EN/EN55035, BS EN	/EN61000-6-2, CCC G	B17625.1, GB/T9254, BSMI C	NS13438				
Note 5)		Parameter	Stan	dard	Test Level	/ Note			
		ESD	BSE	N/EN61000-4-2	Level 3, 8K	(V air ; Level 2, 4KV contact			
		Radiated	BSE	N/EN61000-4-3	Level 3				
		EFT / Burst	BSF	N/EN61000-4-4	Level 3				
	EMC IMMUNITY	Surge		N/EN61000-4-5		//Line-Earth ; Level 3, 2KV/Line-L			
		Conducted		N/EN61000-4-6	Level 3	TEMO Editir, Edvord, Ertv/Emo E			
					Level 4				
		Magnetic Field	B9 E	N/EN61000-4-8					
		Voltage Dips and Interrup	otions BS E	N/EN61000-4-11		0.5 periods, 30% dip 25 penio ruptions 250 periods			
	MTBF	939.4K hrs min. Telcor	dia SR-332 (Bellcore) ;	116.5K hrs min. MIL-HDBK-2		,			
	WIIDF								
OTHERS	DIMENSION	295*127*41mm (L*W*H)							

- Tolerance: includes set up tolerance, line regulation and load regulation.
   Derating may be needed under low input voltages. Please check the derating curve for more details.
   The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm\*360mm metal plate with 1mm of thickness. 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 https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- 6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

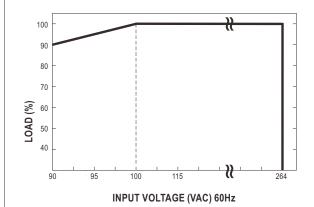




PFC fosc: 110KHz PWM fosc: 90KHz



#### ■ Static Characteristics

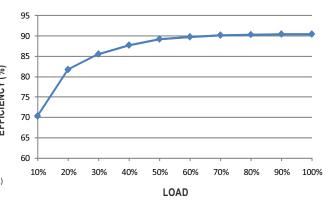


INPUT MODEL	12V	15V	24V	27V	48V
100~264VAC	720W	750W	960W	999W	1008W
	60A	50A	40A	37A	21A
90VAC	648W	675W	864W	899.1W	907.2W
	54A	45A	36A	33.3A	18.9A

### ■ Derating Curve

## 100 80 60 40 20 20 0 10 20 30 40 50 60 70 (HORIZONTAL) AMBIENT TEMPERATURE (°C)

#### ■ Efficiency vs Load (48V Model)



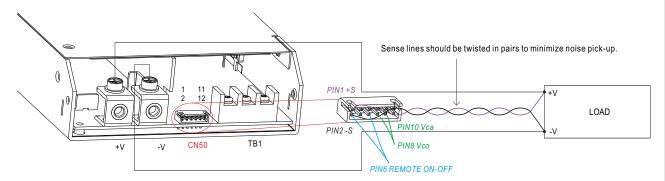
% The curve above is measured at 230VAC.



#### ■ Function Manual

#### 1.Remote Sense

※ The Remote Sense compensates voltage drop on the load wiring up to 0.5V



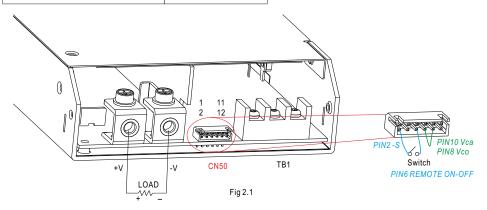
- This configuration is based on the assumption the Output Voltage Programming is not activated and power supply is ON.

Fig 1.1

#### 2.Remote ON-OFF Control

X The power supply can be turned ON-OFF indivicluaaly or along with other units by using the "Remote ON-OFF" function.

Between Remote ON-OFF (pin6) and -S(pin2)	Power Supply Status
Switch Short	ON
Switch Open	OFF



- When multiple power supplies need to turn ON/OFF simultaneously by Remote ON-OFF control, -S & -V, as well as +S & +V, on each power supply should be connected.

### 3.DC\_OK signal

- \* "DC\_OK" is an open collector signal. It indicates the output status of the power supply. It can operate in two ways: One is sinking current from external TTL signal; the other is sending out a TTL voltage signal.
- © Sinking current from external TTL signal: The maximum sink current is 10mA and the maximum external voltage is 5.6V.
- O Sending out TTL voltage signal :

Between DC- OK(pin5) and GND(pin11&12)	Output Status
0 ~ 1V	ON
3.3 ~ 5.6V	OFF

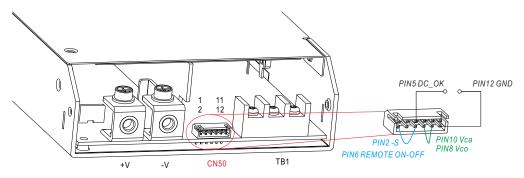


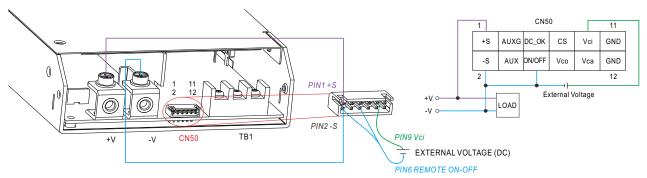
Fig 3.1



#### 4. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 40∼110% of the nominal voltage by applying either an EXTERNAL VOLTAGE or an EXTERNAL RESISTANCE.

(1)Applying EXTERNAL VOLTAGE between "Vci" (pin9) and "-S" (pin2) as shown in Fig4.1

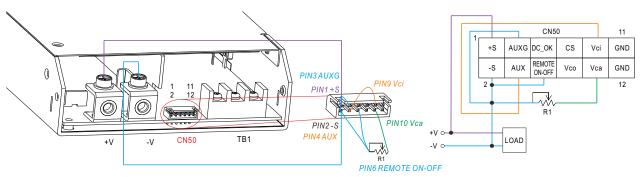


○+S & +V and -S & -V also need to be connected on CN50

Fig 4.1

(2) Applying EXTERANL RESISTANCE as shown in Fig4.2 &~Fig~4.3

(A) Output voltage goes down



 $\bigcirc$  +S & +V and -S & -V also need to be connected on CN50.

#### (B)Output voltage goes up

Vout

100

80

60

40

20

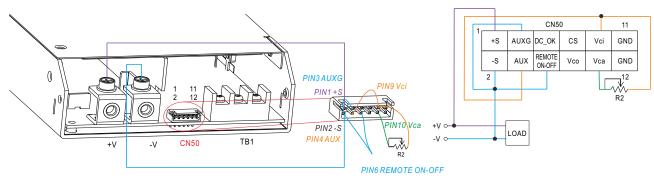
**EXTERNAL VOLTAGE (VDC)** 

Fig 4.1.1

OUTPUT VOLTAGE (%)

Fig 4.2

Fig 4.3



 $\bigcirc$  +S & +V and -S & -V also need to be connected on CN50.

OVP 120%(Typ.)

Vci(Referenced to -S)

OVP 120%(Typ.) 100 OUTPUT VOLTAGE (%) 90 OUTPUT VOLTAGE (%) 110 80 Non-Linear Non-Linear 70 105 60 50 100 → R2, 1/8W(Typ.) EXTERNAL RESISTANCE ( $\Omega$ ) EXTERNAL RESISTANCE ( $\Omega$ ) Fig 4.2.1 Fig 4.3.1

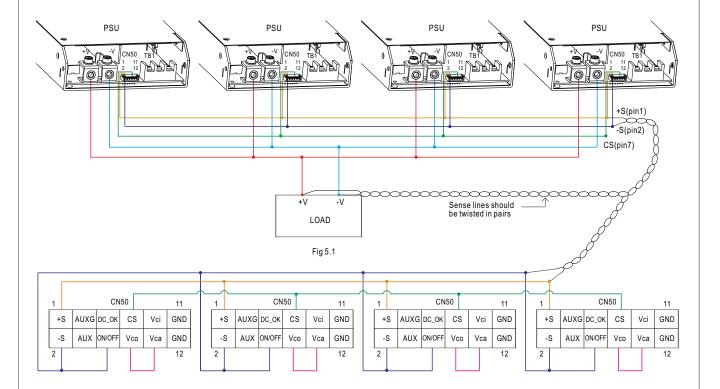
X Caution: By factory default, the Output Voltage Programming is not activated, and Vco (pin8) and Vca(pin10) are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep Vco(pin8) and Vca(pin10) shorted; other wise, the power supply will have no output.



#### 5. Current Sharing with Remote Sense

RSP-1000 has the built-in active current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below:

- \*\*The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- X Difference of output voltages among parallel units should be less than 0.2V.
- % The total output current must not exceed the value determined by the following equation: Maximum output current at parallel operation=(Rated current per unit) $\times$ (Number of unit) $\times$ 0.9
- When the total output current is less than 5% of the total rated current, or say (5% of Rated current per unit) × (Number of unit) the current shared among units may not be fully balanced.



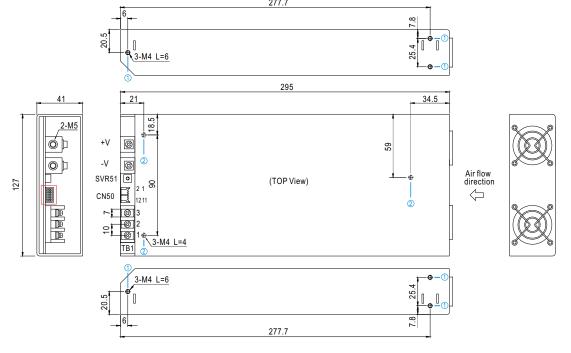
+S,-S and CS are connected mutually in parallel.



### ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5$ mm)

Case No. 952B



#### Mounting Instruction

	<u> </u>		
Hole No.	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque
1	M4	6mm	7~11Kgf-cm
2	M4	4mm	7~11Kgf-cm

Mounting Surface

Chassis of RSP-1000

Mounting Screw

\*\*Control Pin No. Assignment (CN50): HRS DF11-12DP-2DS or equivalent



Mating Housing	HRS DF11-12DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	+S	Positive sensing for remote sense.
2	-S	Negative sensing for remote sense.
3	G-AUX	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
4	5V-AUX	Auxiliary voltage output, 4.6~5.25V, referenced to pin 3(G-AUX).  The maximum load current is 0.5A. This output has the built-in oring diodes and is not controlled by the "remote ON/OFF control".
5	DC_OK	Open collector signal, referenced to pin11,12(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 5.6V.
6	Remote ON-OFF	Turns the output on and off by electrical or dry contact between pin 6 (Remote ON-OFF) and pin 2 (-S). Short: Power ON, Open: Power OFF.
7	CS	Current sharing signal. When units are connected in parallel, the CS pins of the units should be connected to allow current balance between units.
8	Vco	Short connecting between Vco (pin8) and Vca (pin10) if output voltage programming function is not activated.
9	Vci	Connect to external DC voltage source for output voltage programming, referenced to pin 2 (-S).
10	Vca	Connect to external resistor (1/8W) for output voltage programming.
11,12	GND	These pins connect to the negative terminal (-V). Return for DC_OK Signal output.



## $\frak{\mathrm{MC}}$ Input Terminal Pin No. Assignment

Pin No.	Assignment	Diagram		Maximum mounting torque
1	AC/N		D00	
2	AC/L			18Kgf-cm
3	FG ±			

## $\mbox{\em \%DC}$ Output Terminal Pin No. Assignment

Assignment	Diagram	Maximum mounting torque
+V, -V		10Kgf-cm

## ■ Installation Manual

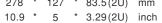
Please refer to: http://www.meanwell.com/manual.html



#### Dimension

W

127 \* 83.5(2U) mm





























#### Features

- Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 91%
- · Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 6000W (3+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power OK signal
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

## Applications

- · Factory control or automation apparatus
- · Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- · Digital broadcasting
- · RF application

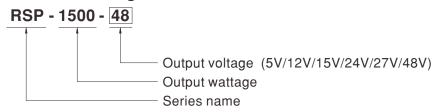
#### **GTIN CODE**

MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RSP-1500 is a 1.5KW single output enclosed type AC/DC power supply. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan working for the temperature up to 70°C. Moreover, RSP-1500 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information



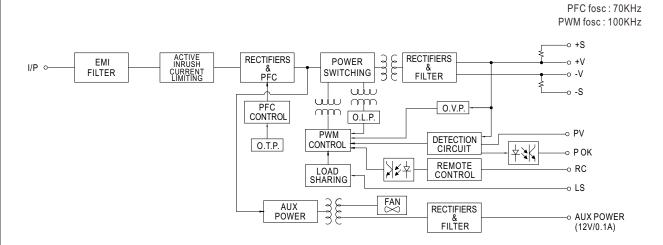


# SPECIFICATION

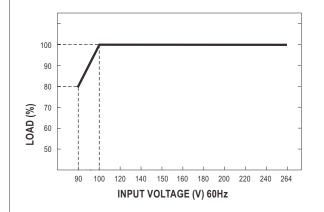
MODEL		RSP-1500-5	RSP-1500-12	RSP-1500-15	RSP-1500-24	RSP-1500-27	RSP-1500-48	
	DC VOLTAGE	5V	12V	15V	24V	27V	48V	
	RATED CURRENT	240A	125A	100A	63A	56A	32A	
	CURRENT RANGE	0 ~ 240A	0 ~ 125A	0 ~ 100A	0 ~ 63A	0 ~ 56A	0 ~ 32A	
	RATED POWER	1200W	1500W	1500W	1512W	1512W	1536W	
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	
OUTPUT	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	10 ~ 13.5V	13.5 ~ 16.5V	20 ~ 26.4V	24 ~ 30V	43 ~ 56V	
OUTPUT								
	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	1500ms, 100ms at fu	II load			I		
	HOLD UP TIME (Typ.)	10ms at full load		14ms at full load		16ms at full load		
	VOLTAGE RANGE	90 ~ 264VAC 12	27 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	0.95/230VAC 0.	98/115VAC at full load	d				
INPUT	EFFICIENCY (Typ.)	80%	87%	87%	90%	90%	91%	
	AC CURRENT (Typ.)	17A/115VAC 8A	/230VAC	•				
	INRUSH CURRENT (Typ.)	30A/115VAC 60	A/230VAC					
	LEAKAGE CURRENT	<2.0mA / 240VAC						
		105 ~135% rated out	nut nower					
	OVERLOAD Note.4			it will shut down o/n vo	oltage after 5sec. Re-pow	ver on to recover		
DDOTEOTION		5.75 ~ 6.75V	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	57.6 ~ 67.2V	
PROTECTION	OVER VOLTAGE				27.0~32.40	31~30.57	37.0 ~ 07.20	
	OVER TEMPERATURE		t down o/p voltage, re					
	OVER TEMPERATURE	1 0	e, recovers automatic		<u> </u>			
	OUTPUT VOLTAGE PROGRAMMABLE(PV)				ninal output voltage. Pl	ease refer to the F	unction Manual.	
	CURRENT SHARING		) units. Please refer to		l			
FUNCTION	AUXILIARY POWER	- , ,	Remote ON-OFF conti	rol)				
	REMOTE ON-OFF CONTROL	Please see the Funct						
	REMOTE SENSE				refer to the Function Ma	inual.		
	ALARM SIGNAL OUTPUT	Power OK signal. Ple	ase see the Function	Manual.				
	WORKING TEMP.	-20 ~ +70°C (Refer to	"Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing						
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95	% RH non-condensing	9				
	TEMP. COEFFICIENT	±0.05%/°C (0~50°C)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes						
	SAFETY STANDARDS	UL62368-1, CAN/CS	A C22.2 No. 62368-1,	TUV BS EN/EN62368	B-1, BSMI CNS15598-1,	AS/NZS62368.1, E	AC TP TC 004 approve	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-	FG:100M Ohms / 500	VDC / 25°C / 70% RH				
		Parameter		Standard		Test Level / Note		
		Conducted		BS EN/EN55032 (CIS	SPR32), BSMI CNS15936	Class B/Class A (c	only for BSMI)	
	EMC EMISSION	Radiated			SPR32), BSMI CNS15936		, , , , ,	
		Harmonic Current		BS EN/EN61000-3				
0.4.5551/.0		Voltage Flicker		BS EN/EN61000-3				
SAFETY &		BS EN/EN55035, B	2 EN/EN61000 6 2	B3 EN/EN01000-3	J-3			
EMC (Note 5)			5 EIN/EIN0 1000-0-2	Ctondond		Took Lovel / Note		
(Note 5)		Parameter		Standard	•	Test Level / Note		
		ESD		BS EN/EN61000-4			Level 2, 4KV contact	
		Radiated		BS EN/EN61000-4		Level 3		
	EMC IMMUNITY	EFT / Burst		BS EN/EN61000-4		Level 2		
		Surge		BS EN/EN61000-4	5	Level 3, 2KV/Line-Ea	arth ; Level 2, 1KV/Line-Line	
		Conducted		BS EN/EN61000-4	-6	Level 3		
		Magnetic Field		BS EN/EN61000-4	8	Level 4		
		Voltage Dips and Into	erruptions	BS EN/EN61000-4-11 >95% dip 0.5 periods, 30% dip >95% interruptions 250 period				
	MTBF	814.4K hrs min. Te	elcordia SR-332 (Bello	core); 90.4K hrs min.	MIL-HDBK-217F (25	s°C)		
OTHERS	DIMENSION	278*127*83.5mm (L*	W*H)					
	PACKING	3.0Kg; 4pcs/13Kg/1.						
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  2. 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. Derating may be needed under low input voltages. Please check the derating curve for more details.  5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. 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 https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)  6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).							



## ■ Block Diagram



#### ■ Static Characteristics

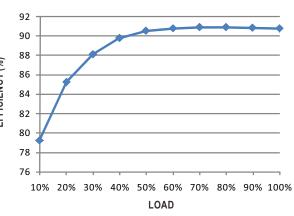


INPUT MODEL	5V	12V	15V
100~264VAC	1200W	1500W	1500W
	240A	125A	100A
90VAC	960W	1200W	1200W
	192A	100A	80A
INPUT MODEL	24V	27V	48V
100~264VAC	1512W	1512W	1536W
	63A	56A	32A
90VAC	1209.6W	1209.6W	1228.8W
	50.4A	44.8A	25.6A

## ■ Derating Curve

#### +12V,+15V 100 Others **EFFICIENCY (%)** 80 60 50 +5V (%) **GVO** 40 20 70 (HORIZONTAL) -20 10 20 30 60 AMBIENT TEMPERATURE (°C)

## ■ Efficiency vs Load (48V Model)



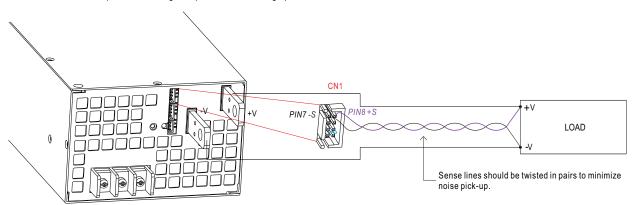
 $\bigcirc$  The curve above is measured at 230VAC.



#### ■ Function Manual

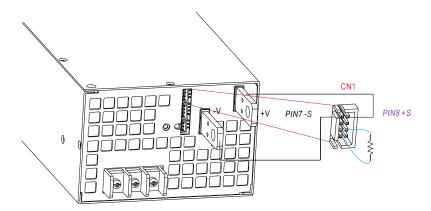
#### 1. Remote Sense

 $\ensuremath{\mathbb{X}}$  The Remote Sense compensates voltage drop on the load wiring up to 0.3V

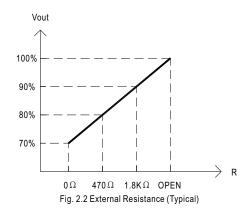


### 2. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 70~100%(Typ.) of the nominal voltage by applying EXTERNAL RESISTANCE



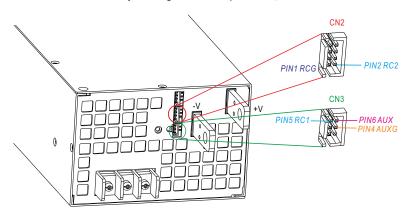
© Connect an external resistor with a 0.25W rating or above between TRIM(pin4) & -S(pin3 or pin5 or pin7) on CN1 or CN2, and +S & +V, -S & -V also need to be connected.



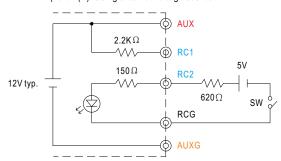


#### 3.Remote ON-OFF

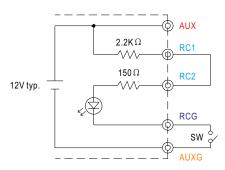
\* Remote ON-OFF is activated by the configuration with respect to CN1, CN2 and CN3 as shown in the following diagram.



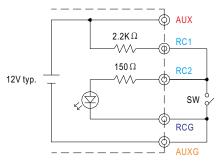
Example 3.2(A): Using external voltage source



Example 3.2(B): Using internal 12V auxiliary output



 ${\sf Example 3.2(C): Using internal 12V \ auxiliary \ output}$ 



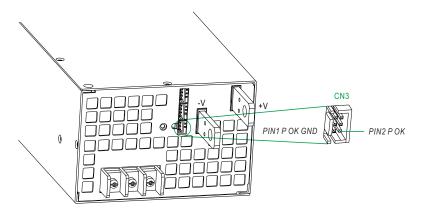
#### O Connection Method

		Fig. 3.2(A)	Fig. 3.2(B)	Fig. 3.2(C)
SW Logic	Output on	SW Open	SW Open	SW Close
3W Logic	Output off	SW Close	SW Close	SW Open



#### 4. Alarm Signal Output

\*\* Alarm signal is sent out through "P OK" & "P OK GND" and pins on CN3. Please acknowledge an external voltage source is required for this function.



Function	Description	Output of alarm(P OK)
P OK	The signal is "Low" when the power supply is above 65% of the rated output voltage, or say, Power OK	Low (0.5V max at 10mA)
PUR	The signal turns to be "High" when the power supply is under 65% of the rated output voltage, or say, Power Fail	High or open (External applied voltage 10mA max.)

Table 4.1 Explanation of alarm

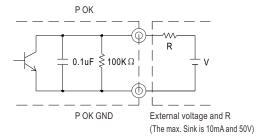


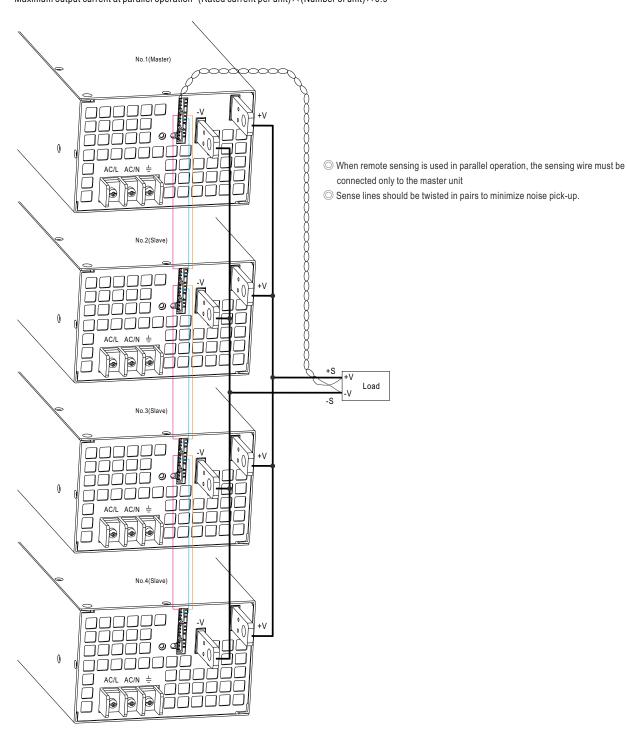
Fig. 4.1 Internal circuit of P OK (Open collector method)



#### 5. Current Sharing with Remote Sense

RSP-1500 has the built-in active current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below:

- 💥 The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- $\frak{\%}$  Difference of output voltages among parallel units should be less than 0.2V.
- The total output current must not exceed the value determined by the following equation:
   Maximum output current at parallel operation=(Rated current per unit) × (Number of unit) × 0.9

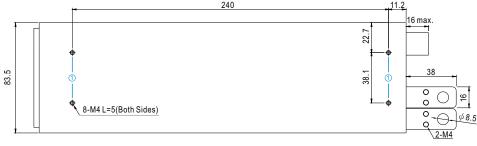


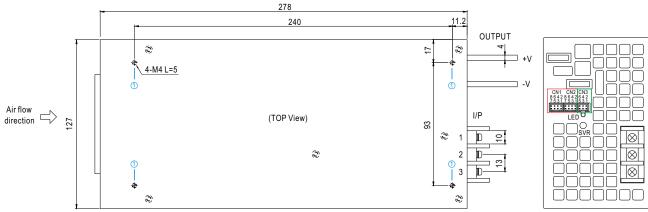
① +S,-S and CS are connected mutually in paralle.





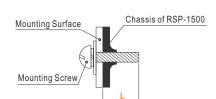
Case No.943A





### ※ Mounting Instruction

Hole No. R	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque
1	M4	5mm	7~10Kgf-cm



※ Control Pin No. Assignment (CN1,CN2): HRS DF11-8DP-2DS or equivalent

8	2
7	1

Mating Housing	HRS DF11-8DS or equivalent
Terminal	HRS DF11-**SC or equivalent

#### O CN1 and CN2 are connected internally.

Pin No.	Function	Description
1	RCG	Remote ON-OFF Ground
2	RC2	Remote ON-OFF
3,5,7	-S	Negative sensing for remote sense
4	TRIM	Connection for output voltage programming
6	LS(Current Share)	Current Share
8	+S	Postive sensing for remote sense



6 2



Mating Housing	HRS DF11-6DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	P OK GND	Power OK Ground
2	POK	Power OK Signal
3	RCG	Remote ON-OFF Ground
4	AUXG	Auxiliary Ground
5	RC1	Remote ON-OFF
6	AUX	Auxiliary Output

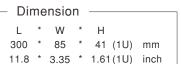
**XAC** Input Terminal Pin No. Assignment

Pin No.	Assignment	Diagram	Maximum mounting torque
1	FG ±		
2	AC/N		18Kgf-cm
3	AC/L		

## ■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html







































### Features

- Universal AC input / Full range
   (Withstand 300VAC surge input for 5 seconds)
- Built-in active PFC function
- High efficiency up to 93%
- · Forced air cooling by built-in DC fan
- · Output voltage and constant current level programmable
- Active current sharing up to 9600W (5+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal / OTP alarm signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional PMBus or CANBus protocol
- 5 years warranty

## Applications

- · Factory control or automation apparatus
- · Test and measurement instrument
- · Laser related machine
- · Aging facility
- Digital broadcasting
- · Constant current source
- Redundant system

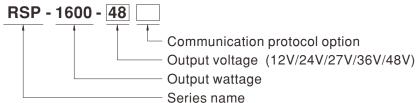
#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RSP-1600 is a 1.6KW single output enclosed type AC/DC power supply with a 1U low profile and a high power density up to 25W/inch³. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the thermostatically controlled fan. Moreover, RSP-1600 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information



Type	Communication Protocol	Note
Blank	None	In Stock
PM	PMBus protocol	By request
CAN	CANBus protocol	By request



#### **SPECIFICATION**

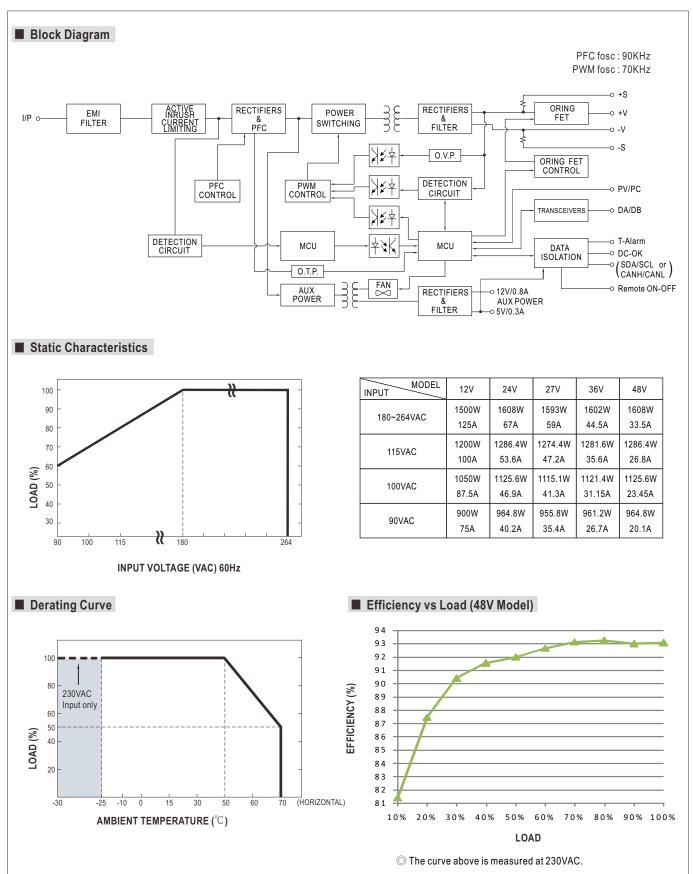
MODEL		RSP-1600-12	RSP-1600-24	RSP-1600-27	RSP-1600-36	RSP-1600-48			
	DC VOLTAGE	12V	24V	27V	36V	48V			
	RATED CURRENT	125A	67A	59A	44.5A	33.5A			
	CURRENT RANGE	0 ~ 125A	0 ~ 67A	0 ~ 59A	0 ~ 44.5A	0 ~ 33.5A			
	RATED POWER	1500W	1608W	1593W	1602W	1608W			
	RIPPLE & NOISE (max.) Note.2	150mVp-p	200mVp-p	200mVp-p	250mVp-p	300mVp-p			
DUTPUT	VOLTAGE ADJ. RANGE	11.5 ~ 15V	23.5 ~ 30V	26.5 ~ 33.5V	35.5 ~ 45V	47.5 ~ 58.8V			
	VOLTAGE TOLERANCE Note.4		±1.0%		±1.0%	±1.0%			
	LINE REGULATION	±0.5%	±0.5%		±0.5%	±0.5%			
	LOAD REGULATION	±0.5%	±0.5%		±0.5%	±0.5%			
	SETUP, RISE TIME	1500ms, 60ms/230VAC a		= 0.070	0.070	= 0.070			
	HOLD UP TIME (Typ.)	6ms / 230VAC at 10ll load 10ms / 230VAC at full load							
			370VDC	TVAO at full load					
			370000						
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	0.97/230VAC at full load	T = 1 = 11	1.00%					
NPUT	EFFICIENCY (Typ.)	89%	91.5%	92%	92%	93%			
		14A/115VAC 8A/230VAC		8.5A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 35A/230V	AC						
	LEAKAGE CURRENT	<2mA / 230VAC							
	01/501 040	105 ~ 115% rated curren	t						
	OVERLOAD	Protection type : Constar	nt current limiting, s	hut down O/P voltage after 5 sec. At	ter O/P voltage fall:	s, re-power on to recover			
PROTECTION		15.75 ~ 18.75V	31.5 ~ 37.5V	35.2 ~ 41.9V	47.2 ~ 56.3V	63 ~ 75V			
	OVER VOLTAGE	Protection type : Shut do	wn o/p voltage, re-p	ower on to recover		<u>'</u>			
	OVER TEMPERATURE	Protection type : Shut do	wn o/p voltage, rece	overs automatically after temperatu	re goes down				
	OUTPUT VOLTAGE	71	1 0,	<u> </u>		r 12V)			
	PROGRAMMABLE(PV) Note 6	Adjustment of output voltage is allowable to $40 \sim 125\%$ of nominal output voltage ( $60 \sim 125\%$ for $12V$ ). Please refer to the Function Manual.							
FUNCTION	OUTPUT CURRENT	Adjustment of constant current level is allowable to 20 ~ 100% of rated current. Please refer to the Function Manual.							
	AUXILIARY POWER	5V @ 0.3A, 12V @ 0.8A							
	REMOTE ON-OFF CONTROL	By electrical signal or dry contact Power ON:short Power OFF:open. Please refer to the Function Manual							
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.5V. Please refer to the Function Manual							
	ALARM SIGNAL	Isolated signal output for T-alarm and DC OK							
	WORKING TEMP.	-30 ~ +70°C (Refer to "D							
		,							
ENVIDONMENT	WORKING HUMIDITY STORAGE TEMP., HUMIDITY	20 ~ 90% RH non-condensing							
ENVIRONMENT	TEMP. COEFFICIENT	·	arritori-condensing						
		±0.03%/°C (0~50°C)		.l					
	VIBRATION	10 ~ 500Hz, 2G 10min./1	5500 4 40/417000	200 4 540 70 70 4					
	SAFETY STANDARDS			UV BS EN/EN62368-1, BSMI CNS1	5598-1, AS/NZS62	368.1, EAC 1P 1C 004 approv			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			T=				
		Parameter		Standard	Test Leve	I / Note			
		Conducted		BS EN/EN55032 (CISPR32), CNS	15936 Class B				
	EMC EMISSION	Radiated		BS EN/EN55032 (CISPR32), CNS	15936 Class A	Class A			
		Harmonic Current		BS EN/EN61000-3-2	Class A				
		Voltage Flicker		BS EN/EN61000-3-3					
SAFETY &		BS EN/EN55035, BS EN	N/EN61000-6-2, BS	SMI CNS13438					
EMC (X)		Parameter		Standard	Test Leve	I / Note			
Note 8)		ESD		BS EN/EN61000-4-2	Level 3, 8l	Level 3, 8KV air ; Level 2, 4KV contact			
		Radiated		BS EN/EN61000-4-3	Level 3				
		EFT / Burst		BS EN/EN61000-4-4	Level 3				
	EMC IMMUNITY	Surge		BS EN/EN61000-4-5		KV/Line-Line 4KV/Line-Earth			
		Conducted		BS EN/EN61000-4-6	Level 3	zo zo ./(v/z.mo zarti)			
		Magnetic Field		BS EN/EN61000-4-8	Level 4				
		wayneuc Field		DO LIN/LINU 1000-4-0		0.5 periods, 30% dip 25 period			
		Voltage Dips and Interru	ptions	BS EN/EN61000-4-11		rruptions 250 periods			
	MTBF	478.8K hrs min. Telco	rdia SR-332 (Bellco	re); 42.1K hrs min. MIL-HDBK-					
	DIMENSION	300*85*41mm (L*W*H)							
THERS									
OTHERS	PACKING	2.1Kg;6pcs/13.6Kg/1.25	CUFT						

#### NOTE

- All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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.
   Under parallel operation ripple of the output voltage may be higher than the SPEC at light load condition. It will go back to normal ripple level once the output load is more than 5%.

- Tolerance : includes set up tolerance, line regulation and load regulation.
   Derating may be needed under low input voltages. Please check the derating curve for more details.
   PV/PC functions when users are not operating on PMBus/CANBus. SVR functions when users are neither operating on PMBus/CANBus nor using PV/PC.
- 7. Output will shut down after O/P voltage is below < 80% of Vset for 5 sec, re-power on to recover.
- 8. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm\*360mm metal plate with 1mm of thickness. 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 https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- 9. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- \*\* Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

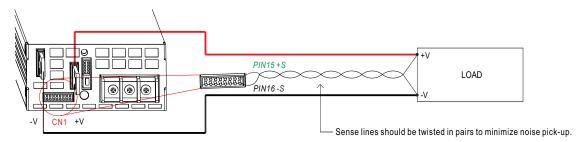






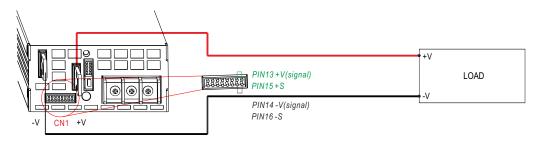
#### ■ Function Manual

- 1. Voltage Drop Compensation
  - 1.1 Remote Sense
  - $\frakk$  The Remote Sense compensates voltage drop on the load wiring up to 0.5V



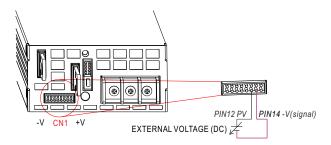
#### 1.2 Local Sense

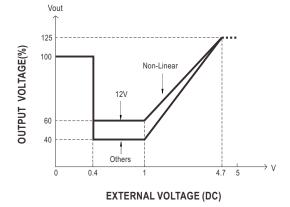
The +S,-S have to be connected to the +V(signal), -V(signal), respectively, as the following diagram, in order to get the correct output voltage if Remote Sense is not used.

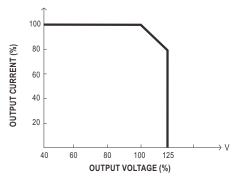


2. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

💥 In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed by applying EXTERNAL VOLTAGE.





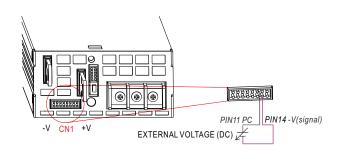


- $\hfill \bigcirc$  The rated current should change with the Output Voltage Programming accordingly.
- O For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation" section.

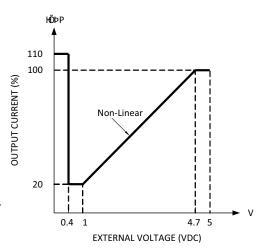


#### 3. Constant Current Level Programming (or, PC / remote current programming / dynamic current trim)

※ The constant current level can be trimmed to 20~100% of the rated current by applying EXTERNAL VOLTAGE.

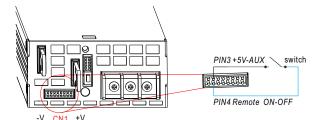


- © For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation" section.
- Output will shut down after O/P voltage is below < 80% of Vset for 5 sec, re-power on to recover.



#### 4. Remote ON-OFF Control

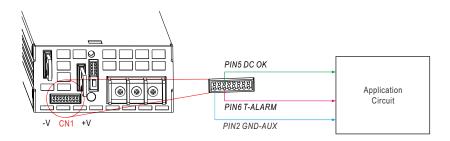
X The power supply can be turned ON/OFF individually or along with other units by using the "Remote ON-OFF" function.



Between Remote ON-OFF and +5V-AUX	Power Supply Status
Switch Short	ON
Switch Open	OFF

#### 5. Alarm Signal Output

※ There are 2 alarm signals, DC OK and T-ALARM, in TTL signal form, on CN1. These signals are isolated from output. The maximum sink current is 10mA.





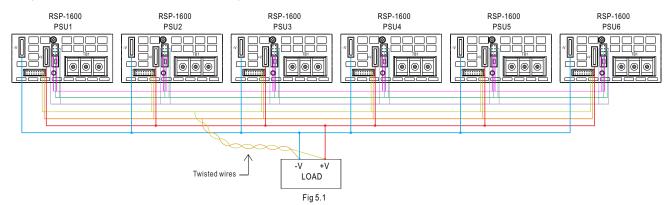
#### 6. Current Sharing with Remote Sense

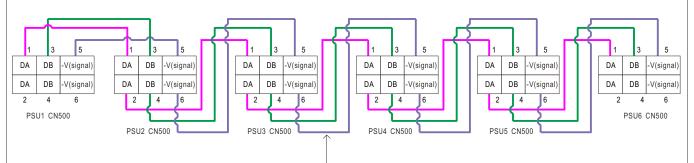
RSP-1600 has the built-in active current sharing function and can be connected in parallel, up to 6 units, to provide higher output power as exhibited below:

- ※ The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- X Difference of output voltages among parallel units should be less than 0.2V.
- \*\* The total output current must not exceed the value determined by the following equation: Maximum output current at parallel operation=(Rated current per unit) \* (Number of unit) \* 0.9
- When the total output current is less than 5% of the total rated current, or say (5% of Rated current per unit) × (Number of unit) the current shared among units may not be balanced.
- X Under parallel operation ripple of the output voltage may be higher than the SPEC at light load condition. It will go back to normal ripple level once the output load is more than 5%.
- ※ CN500/SW1 Function pin connection

Parallel	PSU1		PSU2		PSU3		PSU4		PSU5		PSU6	
Farallel	CN500	SW1										
1 unit	Х	ON	_	_	_	_		_	-	_	_	_
2 unit	V	ON	V	ON	_	_		_		_	_	_
3 unit	V	ON	V	OFF	V	ON		_			_	
4 unit	V	ON	V	OFF	V	OFF	V	ON		_	_	_
5 unit	V	ON	V	OFF	V	OFF	V	OFF	V	ON	_	_
6 unit	V	ON	V	OFF	V	OFF	V	OFF	V	OFF	V	ON

#### (V: CN500 connected; X: CN500 not connected.)

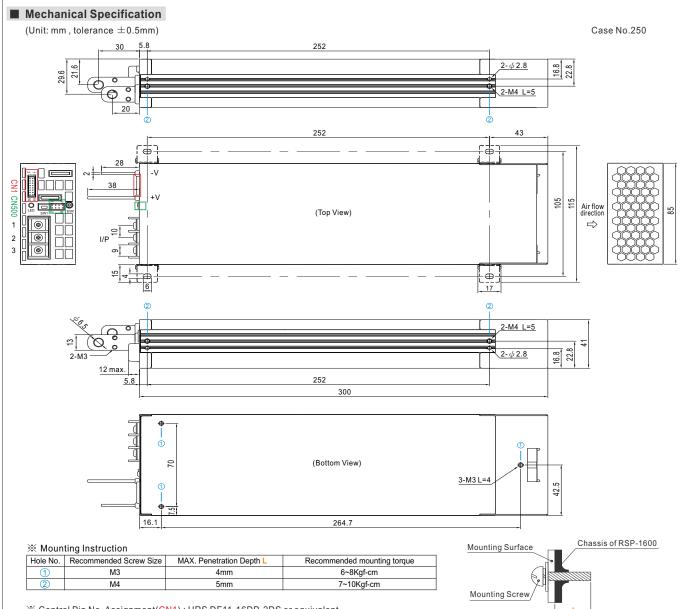




If the lines of CN500 are too long, they should be twisted in pairs to avoid the noise.

- O DA, DB and -V(signal) are connected mutually in parallel.
- $\bigcirc \ \, \text{For Remote Sense / Local Sense, please refer to "Voltage Drop Compensation"} \, \text{section}.$







Mating Housing	HRS DF11-16DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	+12V-AUX	Auxiliary voltage output, 10.6~13.2V, referenced to GND-AUX (pin2). The maximum load current is 0.8A. This output has the built-in "Oring diodes" and is not controlled by "Remote ON-OFF".
2	GND-AUX	Auxiliary voltage output GND. The signal return is isolated from the output terminals (+V & -V).
3	+5V-AUX	Auxiliary voltage output, 4.5~5.5V, referenced to GND-AUX (pin2). The maximum load current is 0.3A. This output has the built-in "Oring diodes" and is not controlled by "Remote ON-OFF
4	Remote ON-OFF	The unit can turn the output ON/OFF by electrical signal or dry contact between $Remote ON/OFF$ and $+5V-AUX$ . (Note.2) Short $(4.5 \sim 5.5V)$ : Power ON; Open $(-0.5 \sim 0.5V)$ : Power OFF; The maximum input voltage is 5.5V.
5	DC-OK	High (3.5 ~ 5.5V): When the Vout $\leq$ 77% ±5%. Low (-0.5 ~ 0.5V): When Vout $\geq$ 80% ±5%. The maximum sourcing current is 10mA and only for output. (Note.2)
6	T-ALARM	High (3.5 ~ 5.5V): When the internal temperature exceeds the limit of temperature alarm, or when Fan fails.  Low (-0.5 ~ 0.5V): When the internal temperature is normal, and when Fan normally works.  The maximum sourcing current is 10mA and only for output(Note.2)
700	NC	For standard model: Retain for future use.
7,8,9	A0,A1,A2	For PMBus / CANBus model: PMBus / CANBus interface address lines. (Note.1)
10	NC	Retain for future use.
11	PC	Connection for constant current level programming. (Note.1)
12	PV	Connection for output voltage programming. (Note.1)
13	+V (Signal)	Positive output voltage signal. It is for local sense; it cannot be connected directly to the load.
14	-V (Signal)	Negative output voltage signal. It is for local sense and certain function reference; it cannot be connected directly to the load.
15	+S	Positive sensing for remote sense.
16	-S	Negative sensing for remote sense.

Note.1: Non-isolated signal, referenced to [-V(signal)].

Note.2: Isolated signal, referenced to GND-AUX.



#### **X LED Status Indicators**

LED	Description
Green	The power supply functions normally.
Red	Abnormal status (Over temperature protection, Overload protection, Fan fail.)

### $\ensuremath{\mathbb{X}}$ AC Input Terminal Pin No. Assignment

Pin No.	Assignment	Diagram	Maximum mounting torque
1	FG ±		
2	AC/N		8Kgf-cm
3	AC/L		

※ Control Pin No. Assignment(CN500): HRS DF11-8DP-2DS or equivalent

1	7
0	000
2	8

Mating Housing	HRS DF11-8DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description			
1,2	DA	Differential digital signal for parallel control.			
3,4	DB	Differential digital signal for parallel control.			
5,6	-V (Signal)	Negative output voltage signal. It is for certain function reference; it cannot be connected directly to the load.			
	NC	For standard model: None.			
7	SDA	For PMBus model: Serial Data used in the PMBus interface. (Note)			
	CANH	For CANBus model: Data line used in CANBus interface. (Note)			
	NC	For standard model: None.			
8	SCL	For PMBus model: Serial Clock used in the PMBus interface. (Note)			
	CANL	For CANBus model: Data line used in CANBus interface. (Note)			

Note: Isolated signal, referenced to GND-AUX.

### % Control Pin No. Assignment(SW1)

Pin No.	Function	Description
1,2	Terminal resistance	SW1 is the selector of terminal resistor that is designed for DA/DB signals and parallel control function.

## ■ Installation Manual

Please refer to: http://www.meanwell.com/manual.html





#### Dimension

295 \* 127 \* 41 (1U) mm 11.6 \* 5 \* 1.61(1U) inch















2000W Power Supply with Single Output













## Features

- Universal AC input / Full range
- · Built-in active PFC function
- · High efficiency up to 92%
- · Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 8000W (3+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal / OTP alarm signal
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

## Applications

- · Factory control or automation apparatus
- · Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- · Digital broadcasting
- · RF application

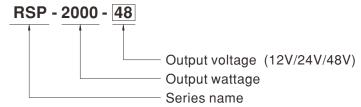
#### **GTIN CODE**

MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RSP-2000 is a 2KW single output enclosed type AC/DC power supply with 1U low profile. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-2000 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information





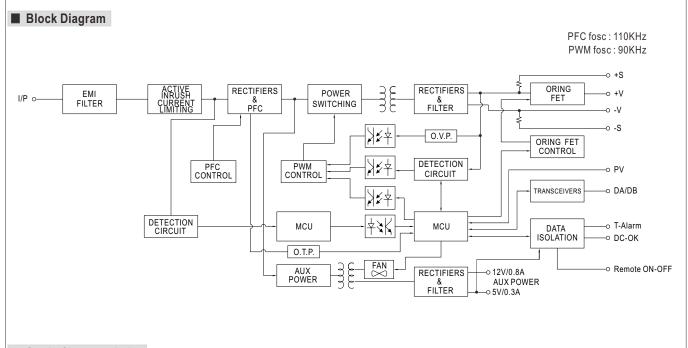
#### **SPECIFICATION**

MODEL		RSP-2000-12	RSP-2000-24	RSP-2000-48					
	DC VOLTAGE	12V	24V	48V					
	RATED CURRENT	100A	80A	42A					
	CURRENT RANGE	0 ~ 100A	0~80A	0 ~ 42A					
	RATED POWER	1200W	1920W	2016W					
	RIPPLE & NOISE (max.) Note.2	150mVp-p	200mVp-p	300mVp-p					
OUTPUT	VOLTAGE ADJ. RANGE	10.5 ~ 14V	21 ~ 28V	42 ~ 56V					
	VOLTAGE TOLERANCE Note.3		±1.0%	±1.0%					
	LINE REGULATION	±1.0%	±0.5%	±0.5%					
	LOAD REGULATION	±1.0%	±0.5%	±0.5%					
	SETUP, RISE TIME	1500ms, 60ms/230VAC at full load		_ 0.070					
	HOLD UP TIME (Typ.)	16ms/230VAC at 75% load 10ms/230VAC at full load							
	1 - 1	DLTAGE RANGE Note.4.5 90 ~ 264VAC 250 ~ 320VDC							
	,								
	FREQUENCY RANGE								
	POWER FACTOR (Typ.)	0.97/230VAC at full load	00.5%	000/					
NPUT	EFFICIENCY (Typ.)	87%	90.5%	92%					
	( 51 /	13A/115VAC 7A/230VAC	16A/115VAC 10A/230VAC	16A/115VAC 10A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 50A							
	LEAKAGE CURRENT	<2mA / 240VAC							
	OVERLOAD	105 ~ 125% rated output power							
	OVERLUAD	Protection type : Constant current limiting, u	unit will shut down o/p voltage after 5 sec. re	-power on to recover					
PROTECTION	OVER VOLTAGE	14.7 ~ 17.5V	29.5 ~ 35V	57.6 ~ 67.2V					
	OVER VOLIAGE	Protection type : Shut down o/p voltage, re-	power on to recover						
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatica	ally after temperature goes down						
	OUTPUT VOLTAGE PROGRAMMABLE(PV)	Adjustment of output voltage is allowable	to 40 ~ 115% of nominal output voltage. P	ease refer to the Function Manual.					
	CURRENT SHARING	Up to 8000W or (3+1) units. Please refer to the Function Manual.							
FUNCTION	AUXILIARY POWER	5V @ 0.3A, 12V @ 0.8A							
	REMOTE ON-OFF CONTROL	By electrical signal or dry contact Power ON:open Power OFF:short. Please refer to the Function Manual.							
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.5V. Please refer to the Function Manual.							
	DC OK SIGNAL	The isolated TTL signal out. Please refer to the Function Manual.							
	WORKING TEMP.	-35 ~ +70°C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing							
LINVINONIILLINI	TEMP. COEFFICIENT	±0.03%°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each	n along X Y 7 axes						
	SAFETY STANDARDS	UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, AS/NZS62368.1, BIS IS13252(Part1): 2010/IEC 60950-1:2005 (except 48V), EAC TP TC 004 approved							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC   I/P-FG:2KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P:3KVAC							
	IOOLATION REGISTANCE	Parameter	Standard	Test Level / Note					
		Conducted	BS EN/EN55032 (CISPR32), CNS15936	Class B					
	EMC EMISSION	Radiated	BS EN/EN55032 (CISPR32), CNS15936	Class A					
	LIVIC LIVII33ION	Harmonic Current	BS EN/EN61000-3-2						
		Voltage Flicker	BS EN/EN61000-3-2						
			D3 EIN/EIN01000-3-3						
			CMI CNIC40400						
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B		Total continue					
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B Parameter	Standard	Test Level / Note					
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD	Standard BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact					
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3	Level 3, 8KV air ; Level 2, 4KV contact Level 3					
EMC	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3					
EMC	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-L					
SAFETY & EMC (Note 6)	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge Conducted	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5  BS EN/EN61000-4-6	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-L Level 3					
EMC	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-L Level 3 Level 4					
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field Voltage Dips and Interruptions	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5  BS EN/EN61000-4-6  BS EN/EN61000-4-8  BS EN/EN61000-4-11	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-Li Level 3 Level 4 >95% dip 0.5 periods, 30% dip 25 periods >95% interruptions 250 periods					
EMC	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5  BS EN/EN61000-4-6  BS EN/EN61000-4-8  BS EN/EN61000-4-11	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-Li Level 3 Level 4 >95% dip 0.5 periods, 30% dip 25 periods >95% interruptions 250 periods					
EMC		BS EN/EN55035, BS EN/EN61000-6-2, B Parameter ESD Radiated EFT / Burst Surge Conducted Magnetic Field Voltage Dips and Interruptions	Standard  BS EN/EN61000-4-2  BS EN/EN61000-4-3  BS EN/EN61000-4-4  BS EN/EN61000-4-5  BS EN/EN61000-4-6  BS EN/EN61000-4-8  BS EN/EN61000-4-11	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-Li Level 3 Level 4 >95% dip 0.5 periods, 30% dip 25 periods >95% interruptions 250 periods					

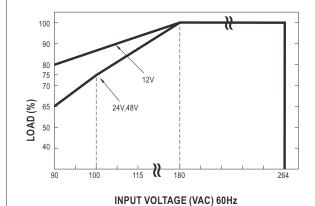
#### NOTE

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. 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. Derating may be needed under low input voltages. Please check the derating curve for more details.
- 5. Please contact MEANWELL for 320~370VDC application.
- 6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm\*360mm metal plate with 1mm of thickness. 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 https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
  7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



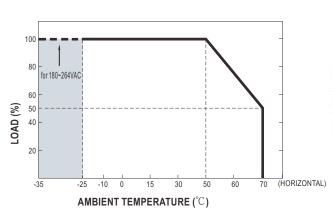


### ■ Static Characteristics

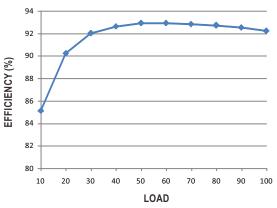


INPUT MODEL	12V	24V	48V
180~264VAC	1200W	1920W	2016W
	100A	80A	42A
115VAC	1080W	1632W	1713.6W
	90A	68A	35.7A
100VAC	1020W	1440W	1512W
	85A	60A	31.5A
90VAC	960W	1248W	1310.4W
	80A	52A	27.3A

### ■ Derating Curve



## ■ Efficiency vs Load (48V Model)



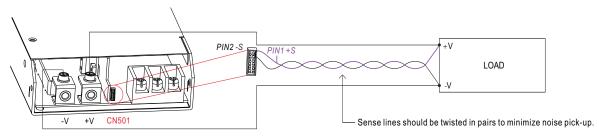
 $\bigcirc$  The curve above is measured at 230VAC.



#### **■** Function Manual

#### 1. Remote Sense

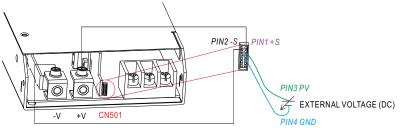
※ The Remote Sense compensates voltage drop on the load wiring up to 0.5V



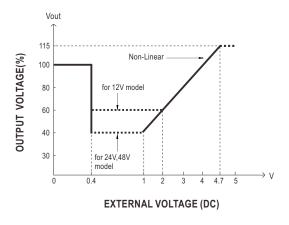
○ The +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal.

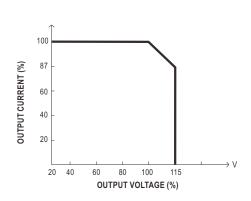
#### 2. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 40∼115% of the nominal voltage by applying EXTERNAL VOLTAGE.



○+S&+V, -S&-V also need to be connected on CN501.

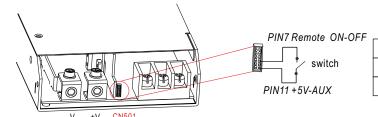




The rated current should change with the Output Voltage Programming accordingly.

#### 3. Remote ON-OFF Control

The power supply can be turned ON/OFF individually or along with other units by using the "Remote ON-OFF" function.



Between Remote ON-OFF and +5V-AUX	Power Supply Status
Switch Open	ON
Switch Short	OFF



#### 4. Current Sharing with Remote Sense

RSP-2000 has the built-in active current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below:

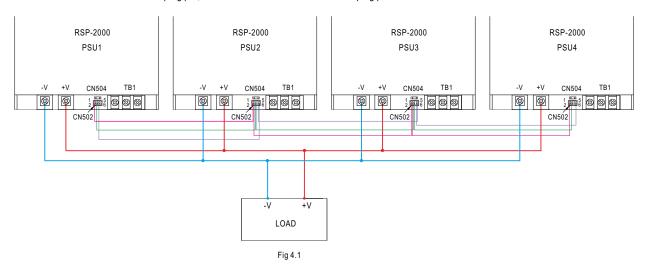
- ※ The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- X Difference of output voltages among parallel units should be less than 0.2V.
- \*\* The total output current must not exceed the value determined by the following equation: Maximum output current at parallel operation=(Rated current per unit) \* (Number of unit) \* 0.9
- ※ Under parallel operation, the minimum output load should be greater than 5% of total output load; otherwise, it is likely that only one unit operates whereas other units may enter standby mode or their LED status indicators may not turn on.
- ※ When the total output current is less than 5% of the total rated current, or say (5% of Rated current per unit) 

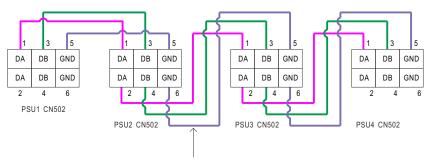
  × (Number of unit) 

  the current shared among units may not be fully balanced.
- ※ CN502/CN504 Function pin connection

Parallel	PSU1		PSU2		PSU3		PSU4	
i araner	CN502	CN504	CN502	CN504	CN502	CN504	CN502	CN504
1 unit	Х	V	_	_	_			_
2 unit	V	V	V	V	_	_		_
3 unit	V	V	V	Х	V	V	_	_
4 unit	V	V	V	Х	V	Х	V	V

○V is CN502/CN504 connected to plug pin, X is CN502/CN504 not connected to plug pin.





If the lines of CN502 are too long, they should be twisted in pairs to avoid the noise.

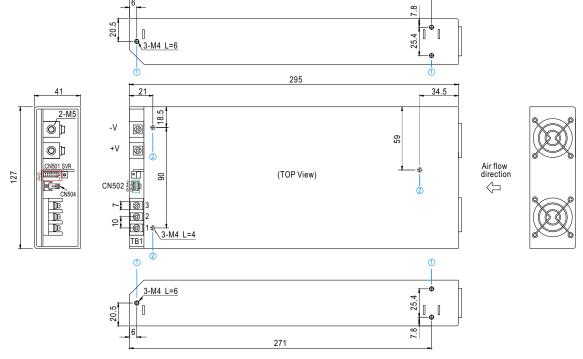
O DA, DB and GND are connected mutually in parallel.



## ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5$ mm)

Case No. 952D



Hole No.	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque	
1	M4	6mm	7~10Kgf-cm	
2	M4	4mm	7~10Kgf-cm	

Mounting Surface

Chassis of RSP-2000

Mounting Screw

★ Control Pin No. Assignment (CN501): HRS DF11-12DP-2DS or equivalent



Mating Housing	HRS DF11-12DS or equivalent	
Terminal	HRS DF11-**SC or equivalent	

Pin No.	Function	Description
1 +S Positive sensing for remote sense.		Positive sensing for remote sense.
2	-S	Negative sensing for remote sense.
3	PV	Connection for output voltage programming. (Note.1)
4	GND	This pin connect to the negative terminal(-V).
5	DC-OK	High (4.5 ~ 5.5V): When the Vout $\leq$ 80% ±6%. Low (0 ~ 0.5V): When Vout $\geq$ 80% ±6%. The maximum sourcing current is 10mA and only for output. (Note.2)
6	T-ALARM	High (4.5 ~ 5.5V): When the internal temperature (TSW1 or TSW2 open) exceeds the limit of temperature alarm.  Low (0 ~ 0.5V): When the internal temperature (TSW1 or TSW2 short) under the limit temperature. The maximum sourcing current is 10mA and only for output. (Note.2)
7	Remote ON-OFF	The unit can turn the output on and off by electrical signal or dry contact between Remote $ON$ - $OFF$ and $+5V$ - $AUX$ . (Note.2) Short $(4.5 \sim 5.5V)$ : Power OFF; Open $(0 \sim 0.5V)$ : Power ON; The maximum input voltage is $5.5V$ .
8,9,10	GND-AUX	Auxiliary voltage output GND. The signal return is isolated from the output terminals (+V & -V).
11	+5V-AUX	Auxiliary voltage output, 4.5~5.5V, referenced to <i>GND-AUX</i> .  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.
12	+12V-AUX	Auxiliary voltage output, 10.6~13.2V, referenced to <i>GND-AUX</i> .  The maximum load current is 0.8A. This output has the built-in "Oring diodes" and is not controlled by the Remote ON-OFF control.

Note1: Non-isolated signal, referenced to the output terminals (-V).

Note2: Isolated signal, referenced to GND-AUX.

## 2000W Power Supply with Single Output

#### **%LED Indicators & Corresponding Signal at Function Pins**

Function	LED	Description	* Signal	Power Supply Output
DC-OK	GREEN	When output voltage $\geq$ 80% $\pm$ 5% of Vo rated.	0 ~ 0.5V	ON
DC-NG	RED	When output voltage $\leq$ 80% $\pm$ 5% of Vo rated.	4.5 ~ 5.5V	ON
T-OK	GREEN	When the internal temperature (TSW1 & TSW2 short) is within safe limit	0 ~ 0.5V	ON
T-ALARM	RED	When the internal temperature (TSW1 or TSW2 open) exceeds the limit of temperature alarm	4.5 ~ 5.5V	OFF

<sup>\*</sup>Signal between function pin and "GND-AUX".

% Control Pin No. Assignment (CN502): HRS DF11-6DP-2DSA or equivalent



Mating Housing	HRS DF11-6DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1,2	DA	Differential digital signal for parallel control.
3,4	DB	Differential digital signal for parallel control.
5,6	GND	These pins connect to the negative terminal (-V).

#### ※Control Pin No. Assignment (CN504):

Pin No.	Function	Description
1,2	Terminal resistance	CN504 is the selector of terminal resistor that is designed for DA/DB signals and parallel control function.

#### **XAC Input Terminal Pin No. Assignment**

		0		
Pin No.	Assignment	Diagram		Maximum mounting torque
1	AC/N		D - O - O - O	
2	AC/L	0 0 0		18Kgf-cm
3	FG ±			

#### ※DC Output Terminal Pin No. Assignment

	•	
Assignment	Diagram	Maximum mounting torque
+V, -V		10Kgf-cm

### **■** Installation Manual

Please refer to : http://www.meanwell.com/manual.html



#### Dimension

L \* W \* H

278 \* 177.8 \* 63.5(2U) mm

10.9 \* 7 \* 2.5 (2U) inch





























#### Features

- · AC input 180~264VAC
- · Built-in active PFC function
- High efficiency up to 91.5%
- · Forced air cooling by built-in DC fan
- · Output voltage programmable
- Active current sharing up to 7200W (2+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power OK signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

## Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- · Digital broadcasting
- RF application

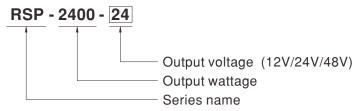
#### **■** GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RSP-2400 is a 2.4KW single output enclosed type AC/DC power supply. This series operates for 180~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-2400 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information





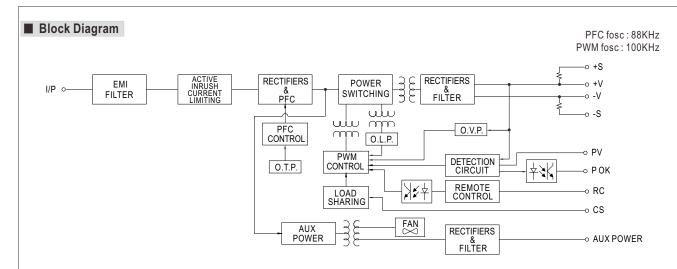
#### **SPECIFICATION**

MODEL		RSP-2400-12	RSP-2400-24	RSP-2400-48		
	DC VOLTAGE	12V 2	24V	48V		
	RATED CURRENT	166.7A 1	00A	50A		
	CURRENT RANGE	0 ~ 166.7A	) ~ 100A	0 ~ 50A		
	RATED POWER	2000.4W 2	2400W	2400W		
	RIPPLE & NOISE (max.) Note.2		50mVp-p	200mVp-p		
OUTPUT	VOLTAGE ADJ. RANGE		22 ~ 28V	43 ~ 56V		
7011 01	VOLTAGE TOLERANCE Note.3		±1.0%	±1.0%		
	LINE REGULATION		± 0.5%	±0.5%		
	LOAD REGULATION		± 0.5%	±0.5%		
	SETUP, RISE TIME	1000ms. 80ms at full load	± 0.070	2 0.070		
	HOLD UP TIME (Typ.)	12ms at full load				
	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	0.95/230VAC at full load				
NPUT	EFFICIENCY (Typ.)		90.5%	91.5%		
NFUI		15.5A/180VAC 12A/230VAC	90.5%	91.5%		
	AC CURRENT (Typ.) INRUSH CURRENT (Typ.)	60A/230VAC 12A/230VAC				
	LEAKAGE CURRENT	<2.0mA / 240VAC				
	LEARAGE CURRENT					
	OVERLOAD (OLP)	100 ~ 112% rated output power				
		User adjustable continuous constant current limi	<u> </u>			
PROTECTION	OVER VOLTAGE		28.8 ~ 33.6V	57.6 ~ 67.2V		
		Protection type: Shut down o/p voltage, re-po				
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically	, , ,	0.0 50/		
	OUTPUT VOLTAGE		1.8 ~ 28V	9.6 ~ 56V		
	PROGRAMMABLE(PV)	Please refer to the Function Manual.				
	CURRENT SHARING	Up to 7200W or (2+1) units. Please refer to the Function Manual.				
UNCTION	AUXILIARY POWER	12V@0.1A(Only for Remote ON-OFF control)				
	REMOTE ON-OFF CONTROL	Please refer to the Function Manual				
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.25V. Please refer to the Function Manual.				
	ALARM SIGNAL OUTPUT	Power OK signal. Please refer to the Function Manual				
	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing				
	TEMP. COEFFICIENT	$\pm 0.05\%^{\circ} \text{C} (0 \sim 50^{\circ} \text{C})$				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each a				
	SAFETY STANDARDS	UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, AS/NZS62368.1,IS13252(Part1)/IEC60950-1, EAC TP TC 004 approved				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VD	OC / 25°C / 70% RH			
		Parameter S	Standard	Test Level / Note		
		Conducted E	BS EN/EN55032 (CISPR32), CNS15936	Class B		
	EMC EMISSION	Radiated	BS EN/EN55032 (CISPR32), CNS15936	Class A		
		Harmonic Current E	BS EN/EN61000-3-2			
SAFETY &		Voltage Flicker E	BS EN/EN61000-3-3			
MC		BS EN/EN55035, BS EN/EN61000-6-2, BS	MI CNS13438			
Note 4)		Parameter	Standard	Test Level / Note		
		ESD E	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
		Radiated E	BS EN/EN61000-4-3	Level 3		
		EFT / Burst E	BS EN/EN61000-4-4	Level 3		
	EMC IMMUNITY	Surge E	BS EN/EN61000-4-5	Level 3, 2KV/Line-Earth; Level 2, 1KV/Line-L		
		-	BS EN/EN61000-4-6	Level 3		
		Magnetic Field E	BS EN/EN61000-4-8	Level 4		
		ů .	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 perio >95% interruptions 250 periods		
	MTBF	692.3K hrs min. Telcordia SR-332 (Bellcon	re); 83.9K hrs min. MIL-HDBK-217F (25			
THERS	DIMENSION	278*177.8*63.5mm (L*W*H)	6), 00.3K IIIS IIIII. WIL-HUDK-21/F (20	J C J		
ALUEK9		3.3Kg; 4pcs/14.2Kg/2.04CUFT				
	1 All parameters NOT special	0. 1	rated load and 25°C of ambient tomass	atura		
NOTE	<ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> <li>The power supply is considerable</li> </ol>	ly mentioned are measured at 230VAC input id at 20MHz of bandwidth by using a 12" twis tolerance, line regulation and load regulation. ered a component which will be installed into te with 1mm of thickness. The final equipmer	sted pair-wire terminated with a 0.1uf & 4 a final equipment. All the EMC tests are	7uf parallel capacitor. been executed by mounting the unit of		

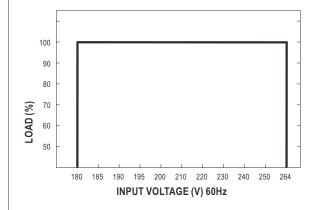
- a 720mm\*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
  (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)

  5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx





### ■ Static Characteristics



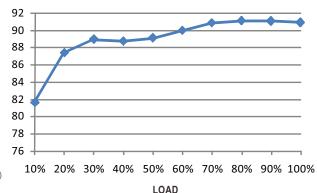
INPUT MODEL	12V	24V	48V
180~264VAC	2000.4W	2400W	2400W
160~264VAC	166.7A	100A	50A

### ■ Derating Curve

## 100 80 60 40 20 20 20 20 30 40 50 60 70 (HORIZONTAL) AMBIENT TEMPERATURE (°C)

O Load (%) typically represents the output power. However, when the PV function is involved, Load (%) changes to indicate the percentage of the output current. For example, with the PV function used for the RSP-2400-24, 80A corresponds to 80% of the load.

### **■** Efficiency vs Load (48V Model)



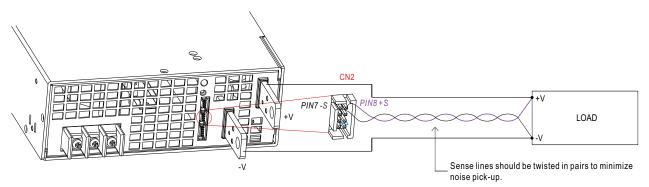
The curve above is measured at 230VAC.



#### ■ Function Manual

#### 1. Remote Sense

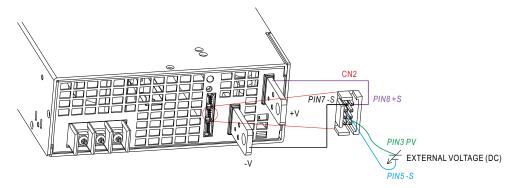
 $\frak{\%}$  The Remote Sense compensates voltage drop on the load wiring up to 0.25V



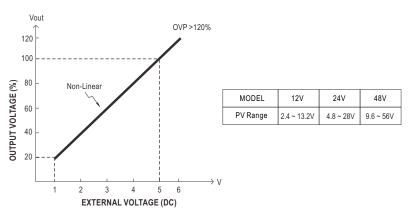
X Caution: The power supply, by factory default(also the assumption for other sections), is shipped with, -S & -V on CN2, as well as +S & +V, shorted by connector. When activating the Remote Sense, the +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal of the load.

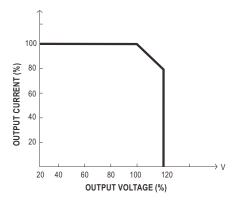
### 2. Output Voltage Programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 20∼110%(Typ.) of the nominal voltage by applying EXTERNAL VOLTAGE.



Ocnnecting an external DC source between PV & -S on CN2, and +S &+V, -S & -V also need to be connected as exhibited above.





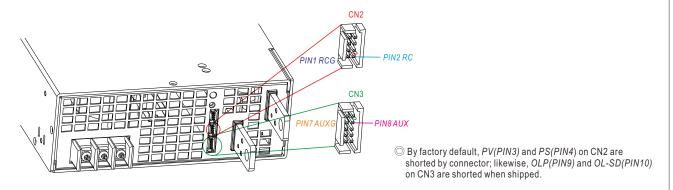
O Please do not adopt PWM signal as the EXTERNAL VOLTAGE.

- The rated current should change with the Output Voltage Programming accordingly.
- - (2) PV(PIN3) and PS(PIN4) of CN1 or CN2 must be disconnected if "Output Voltage Programming" function is used; otherwise, the internal electrical components may be damaged, and the power supply unit may thus be out of order.

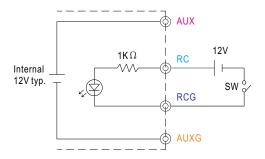


#### 3.Remote ON-OFF

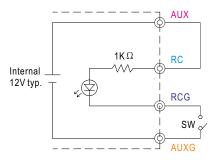
\* Remote ON-OFF is activated by the configuration with respect to CN1,CN2 and CN3 as shown in the following diagram.



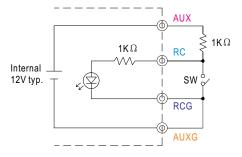
Example 3.2(A): Using external voltage source



Example 3.2(B): Using internal 12V auxiliary output



Example 3.2(C): Using internal 12V auxiliary output



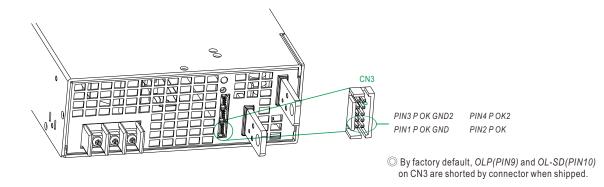
O Connection Method

		Example 3.2(A)	Example 3.2(B)	Example 3.2(C)
SW Logic	Power supply output ON	SW Open	SW Open	SW Close
3W Logic	Power supply output OFF	SW Close	SW Close	SW Open



#### 4. Alarm Signal Output

X Alarm signal is sent out through "P OK" & "P OK GND" and P OK2 & P OK GND2 pins on CN3. Please acknowledge an external voltage source is required for this function.



Function	Description	Output of alarm(P OK, Relay Contact)	Output of alarm(P OK2, TTL Signal)
P OK	The signal is "Low" when the power supply is above 80% of the rated output voltage, or, say, Power OK	Low (0.5V max at 500mA)	Low (0.5V max at 10mA)
PUK	The signal turns to be "High" when the power supply is under 80% of the rated output voltage, or, say, Power Fail	High or open (External applied voltage, 500mA max.)	High or open (External applied voltage, 10mA max.)

Table 4.1 Explanation of alarm

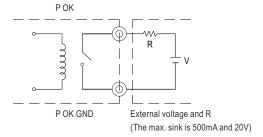


Fig. 4.1 Internal circuit of P OK (Relay, total is 10W)

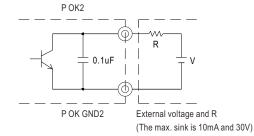


Fig. 4.2 Internal circuit of P OK2 (Open collector method)



#### 5. Select Overload Protection Type

(1)Insert the shorting connector on CN3 that is shown in Fig 5.1, the Overload Protection Type will be "constant current limiting with delay shutdown after 5 seconds, re-power on to recover". This is the factory default.

(2)Remove the shorting connector on CN3 that is shown in Fig 5.2, the Overload Protection Type will be "continuous constant current limiting".



Fig. 5.1 Insert the CN3

Overload Protection Type: constant current limiting with delay shutdown after 5 seconds

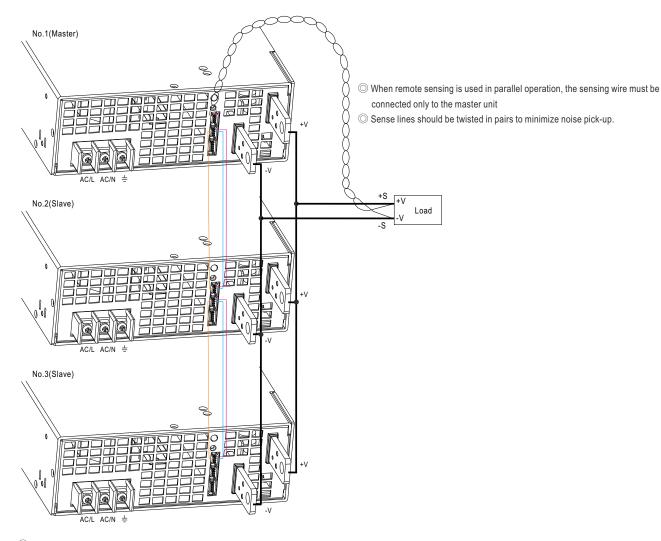
#### Fig. 5.2 Remove the CN3

Overload Protection Type: constant current limiting

#### 6. Current Sharing with Remote Sense

RSP-2400 has the built-in active current sharing function and can be connected in parallel, up to 3 units, to provide higher output power as exhibited below:

- X The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- X Difference of output voltages among parallel units should be less than 0.2V.
- \*\* The total output current must not exceed the value determined by the following equation: Maximum output current at parallel operation=(Rated current per unit) \( \times \) (Number of unit) \( \times 0.9 \)
- When the total output current is less than 3% of the total rated current, or say (3% of Rated current per unit) × (Number of unit) the current shared among units may not be fully balanced.



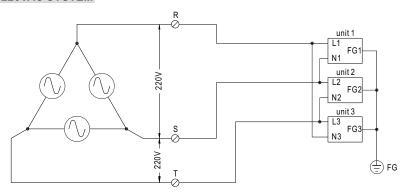
- $\bigcirc$  +S,-S and CS on CN1 or CN2are connected mutually in parallel.
- O Under parallel operation, the "output voltage programming" function is not available.



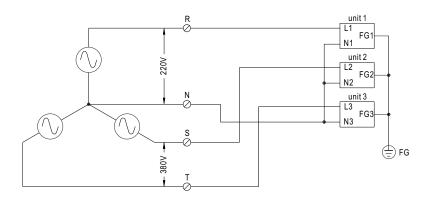
#### 7. Three Phase Connect

Users can exploit three units of RSP-2400 (unit 1 , unit 2, unit 3) to work with 3  $\psi$  power system. Please refer to following diagrams for configuration.

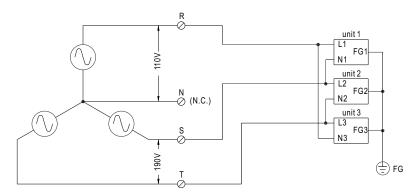
### % FIG. A: 3 $\psi$ 3 wire 220VAC SYSTEM



### % FIG. B: 3 $\psi$ 4 wire 220/380VAC SYSTEM



## % FIG. C: 3 $\psi$ 4 wire 190/110VAC SYSTEM

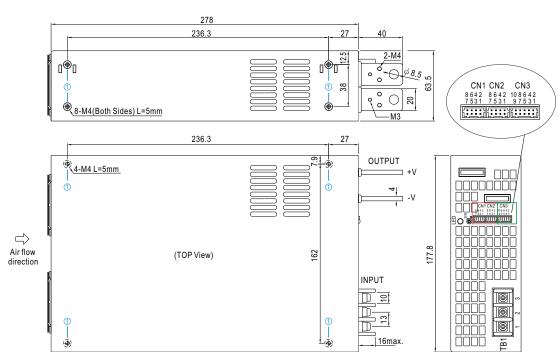




## ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5$ mm)

Case No.982B



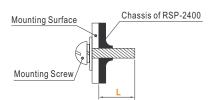
### ※ Mounting Instruction

Hole No.	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque
1	M4	5mm	7~10Kgf-cm

※ Control Pin No. Assignment (CN1, CN2): HRS DF11-8DP-2DS or equivalent



3 3	IRS DF11-8DS or equivalent
Terminal H	RS DF11-**SC or equivalent



## $\hfill \bigcirc$ CN1 and CN2 are connected internally.

Pin No.	Function	Description
1	RCG	Remote ON-OFF Ground
2	RC	Remote ON-OFF
3	PV	Connection for output voltage programming
4	PS	Reference Voltage Terminal
5,7	-S	Negative sensing for remote sense
6	CS(Current Share)	Current Share
8	+S	Postive sensing for remote sense





Mating Housing	HRS DF11-10DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	P OK GND	Power OK Ground
2	POK	Power OK Signal (Relay Contact)
3	P OK GND2	Power OK Ground
4	P OK2	Power OK Signal (TTL Signal)
5	RCG	Remote ON-OFF Ground
6	RC	Remote ON-OFF
7	AUXG	Auxiliary Ground
8	AUX	Auxiliary Output
9	OLP	Quarland/QLD) turn colort
10	OL-SD	Overload(OLP) type select

※AC Input Terminal Pin No. Assignment

Pin No.	Assignment	Diagram	Maximum mounting torque
1	AC/L		
2	AC/N		18Kgf-cm
3	FG ±		

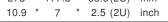
## ■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html



Dimension

278 \* 177.8 \* 63.5(2U) mm































#### Features

- · AC input 180~264VAC
- · Built-in active PFC function
- High efficiency up to 91.5%
- · Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 9000W (2+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power OK signal
- · Protections: Short circuit / Overload / Over voltage / Over temperature
- · Optional conformal coating
- 5 years warranty

## Applications

- · Factory control or automation apparatus
- Test and measurement instrument
- · Laser related machine
- · Burn-in facility
- · Digital broadcasting
- · RF application

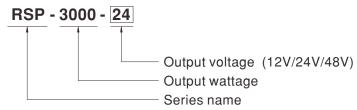
#### **GTIN CODE**

MW Search: https://www.meanwell.com/serviceGTIN.aspx

## Description

RSP-3000 is a 3KW single output enclosed type AC/DC power supply. This series operates for 180~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-3000 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information





#### **SPECIFICATION**

MODEL		RSP-3000-12	RSP-3000-24	RSP-3000-48		
	DC VOLTAGE	12V	24V	48V		
	RATED CURRENT	200A	125A	62.5A		
	CURRENT RANGE	0 ~ 200A	0 ~ 125A	0 ~ 62.5A		
	RATED POWER	2400W	3000W	3000W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	200mVp-p		
OUTPUT	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	22 ~ 28V	43 ~ 56V		
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%		
	LOAD REGULATION	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIME	1000ms, 80ms at full load				
	HOLD UP TIME (Typ.)	10ms at full load				
	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	0.95/230VAC at full load				
NPUT	EFFICIENCY (Typ.)	87.5%	90%	91.5%		
	AC CURRENT (Typ.)	20A/180VAC 16A/230VAC	3070	31.370		
	INRUSH CURRENT (Typ.)	60A/230VAC				
	LEAKAGE CURRENT	<2.0mA / 240VAC				
	LEARAGE CURRENT					
	OVERLOAD	100 ~ 112% rated output power	imiting or constant oursest limiting with delevel	utdown after 5 cocondo re nower en te		
			imiting or constant current limiting with delay sh			
PROTECTION	OVER VOLTAGE	13.8 ~ 16.8V	28.8 ~ 33.6V	57.6 ~ 67.2V		
		Protection type : Shut down o/p voltage, re-	<u>'</u>			
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatica	· · · · · · · · · · · · · · · · · · ·	0.0 501/		
	OUTPUT VOLTAGE	2.4 ~ 13.2V	4.8 ~ 28V	9.6 ~ 56V		
	PROGRAMMABLE(PV)	Please refer to the Function Manual.	0 F C M			
	CURRENT SHARING	Up to 9000W or (2+1) units. Please refer to the Function Manual.				
FUNCTION	AUXILIARY POWER(AUX)	12V@0.1A(Only for Remote ON/OFF control)				
	REMOTE ON-OFF CONTROL	Please refer to the Function Manual				
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.25V. Please refer to the Function Manual.				
	ALARM SIGNAL OUTPUT	Power OK signal. Please refer to the Function Manual				
	WORKING TEMP.	$-20 \sim +70^{\circ}\text{C}$ (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
ENVIRONMENT	STORAGE TEMP., HUMIDITY	$-40 \sim +85^{\circ}$ C, $10 \sim 95\%$ RH non-condensing	9			
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. eac				
	SAFETY STANDARDS	UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, AS/NZS62368.1, IS13252(Part1)/IEC60950-1, EAC TP TC 004 approved				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500	VDC / 25°C / 70% RH			
		Parameter	Standard	Test Level / Note		
		Conducted	BS EN/EN55032 (CISPR32), CNS15936	Class B		
	EMC EMISSION	Radiated	BS EN/EN55032 (CISPR32), CNS15936	Class A		
		Harmonic Current	BS EN/EN61000-3-2			
SAFETY &		Voltage Flicker	BS EN/EN61000-3-3			
EMC		BS EN/EN55035, BS EN/EN61000-6-2, E	BSMI CNS13438			
Note 4)		Parameter	Standard	Test Level / Note		
,		ESD	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
		Radiated	BS EN/EN61000-4-3	Level 3		
		EFT / Burst	BS EN/EN61000-4-4	Level 3		
	EMC IMMUNITY	Surge	BS EN/EN61000-4-5	Level 3, 2KV/Line-Earth; Level 2, 1KV/Line-Li		
		Conducted	BS EN/EN61000-4-6	Level 3		
		Oonaaotea		Level 4		
		Magnetic Field	BS EN/EN61000_4_8			
		Magnetic Field  Voltage Dips and Interruptions	BS EN/EN61000-4-8 BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 period		
	МТРЕ	Voltage Dips and Interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 period >95% interruptions 250 periods		
	MTBF	Voltage Dips and Interruptions 677.3K hrs min. Telcordia SR-332 (Bello	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 period >95% interruptions 250 periods		
OTHERS	MTBF DIMENSION PACKING	Voltage Dips and Interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 period >95% interruptions 250 periods		

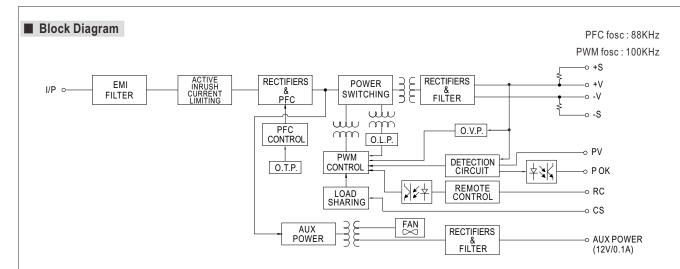
3. Tolerance : includes set up tolerance, line regulation and load regulation.

- 4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm\*360mm metal plate with 1mm of thickness. 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."

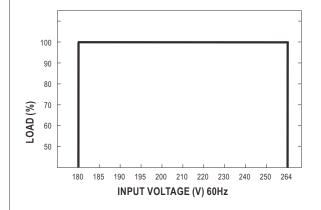
  (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)

  5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).
- \*\* Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx





#### ■ Static Characteristics

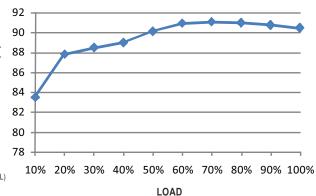


INPUT MODEL	12V	24V	48V
180~264VAC	2400W	3000W	3000W
	200A	125A	62.5A

### ■ Derating Curve

# 100 80 60 50 40 20 -20 0 10 20 30 40 50 60 70 (HORIZONTAL) AMBIENT TEMPERATURE (°C)

## **■** Efficiency vs Load (48V Model)



The curve above is measured at 230VAC.

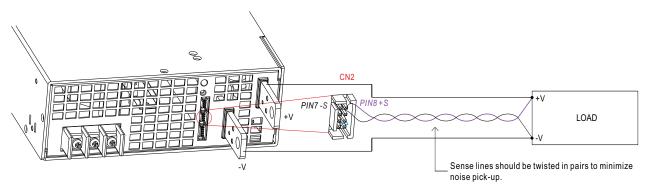
Coad (%) typically represents the output power. However, when the PV function is involved, Load (%) changes to indicate the percentage of the output current. For example, with the PV function used for the RSP-3000-24, 100A corresponds to 80% of the load.



#### ■ Function Manual

#### 1. Remote Sense

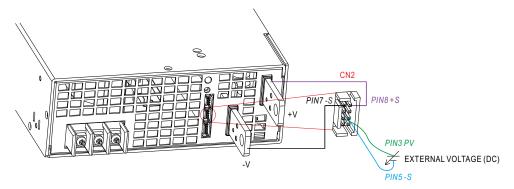
※ The Remote Sense compensates voltage drop on the load wiring up to 0.25V



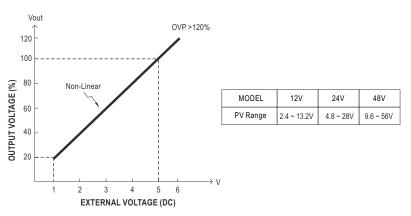
X Caution: The power supply, by factory default(also the assumption for other sections), is shipped with, -S & -V on CN2, as well as +S & +V, shorted by connector. When activating the Remote Sense, the +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal of the load.

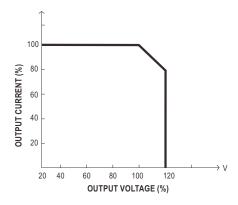
### 2. Output Voltage Programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 20∼110%(Typ.) of the nominal voltage by applying EXTERNAL VOLTAGE.



O Connecting an external DC source between PV & -S on CN2, and +S & +V, -S & -V also need to be connected.





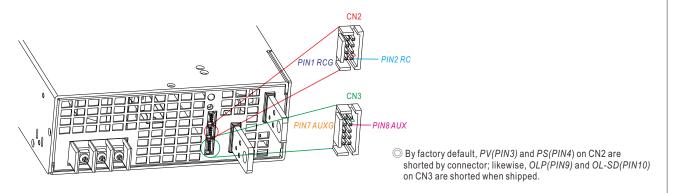
O Please do not adopt PWM signal as the EXTERNAL VOLTAGE.

- The rated current should change with the Output Voltage Programming accordingly.
- - (2) PV(PIN3) and PS(PIN4) of CN1 or CN2 must be disconnected if "Output Voltage Programming" function is used; otherwise, the internal electrical components may be damaged, and the power supply unit may thus be out of order.

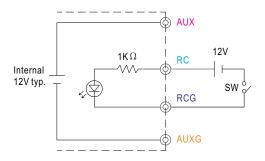


#### 3.Remote ON-OFF

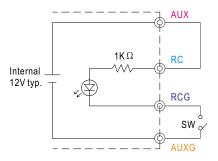
\* Remote ON-OFF is activated by the configuration with respect to CN1,CN2 and CN3 as shown in the following diagram.



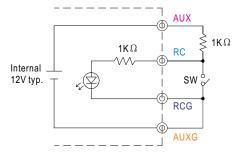
Example 3.2(A): Using external voltage source



Example 3.2(B): Using internal 12V auxiliary output



Example 3.2(C): Using internal 12V auxiliary output



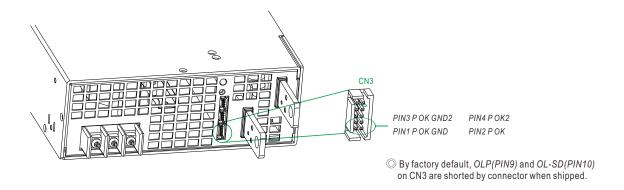
O Connection Method

		Example 3.2(A)	Example 3.2(B)	Example 3.2(C)
SW Logic	Power supply output ON	SW Open	SW Open	SW Close
	Power supply output OFF	SW Close	SW Close	SW Open



#### 4. Alarm Signal Output

X Alarm signal is sent out through "P OK" & "P OK GND" and P OK2 & P OK GND2 pins on CN3. Please acknowledge an external voltage source is required for this function.



Function	Description	Output of alarm(P OK, Relay Contact)	Output of alarm(P OK2, TTL Signal)
D OK	The signal is "Low" when the power supply is above 80% of the rated output voltage, or, say, Power OK	Low (0.5V max at 500mA)	Low (0.5V max at 10mA)
POK	The signal turns to be "High" when the power supply is under 80% of the rated output voltage, or, say, Power Fail	High or open (External applied voltage, 500mA max.)	High or open (External applied voltage, 10mA max.)

Table 3.1 Explanation of alarm

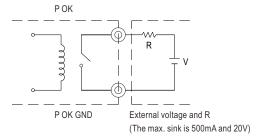


Fig. 4.2 Internal circuit of P OK (Relay, total is 10W)

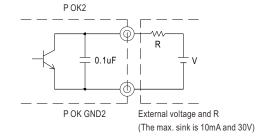


Fig. 4.3 Internal circuit of P OK2 (Open collector method)



#### 5. Select Overload Protection Type

(1)Insert the shorting connector on CN3 that is shown in Fig 5.2, the Overload Protection Type will be "constant current limiting with delay shutdown after 5 seconds, re-power on to recover". This is the factory default.

(2)Remove the shorting connector on CN3 that is shown in Fig 5.1, the Overload Protection Type will be "continuous constant current limiting".



Fig. 5.1 Insert the CN3

Overload Protection Type: constant current limiting with delay shutdown after 5 seconds

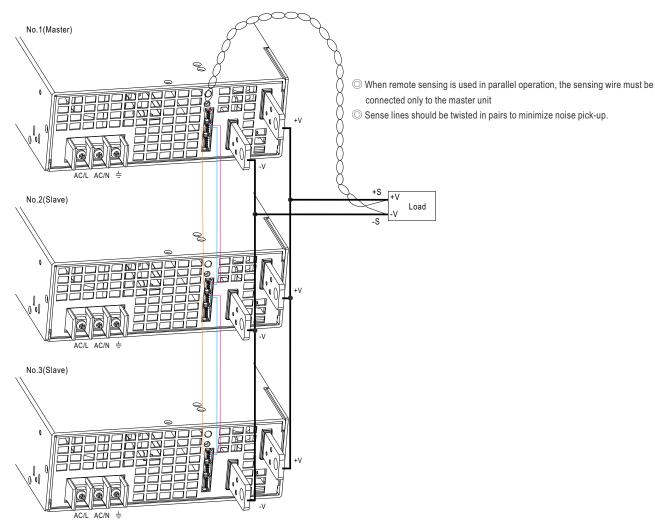
#### Fig. 5.2 Remove the CN3

Overload Protection Type: constant current limiting

#### 6. Current Sharing with Remote Sense

RSP-3000 has the built-in active current sharing function and can be connected in parallel, up to 3 units, to provide higher output power as exhibited below:

- ※ The power supplies should be paralleled using short and large diameter wiring and then connected to the load.
- X Difference of output voltages among parallel units should be less than 0.2V.
- \*\* The total output current must not exceed the value determined by the following equation: Maximum output current at parallel operation=(Rated current per unit) × (Number of unit) × 0.9
- When the total output current is less than 3% of the total rated current, or say (3% of Rated current per unit) 
   ★ (Number of unit) the current shared among units may not be fully balanced.



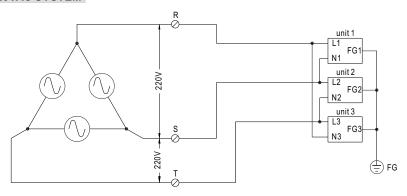
- O+S,-S and CS on CN1 or CN2are connected mutually in parallel.
- O Under parallel operation, the "output voltage programming" function is not available.



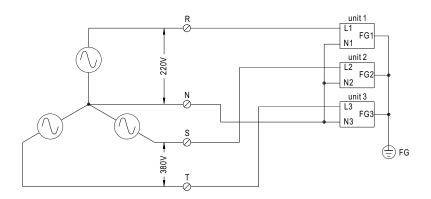
#### 7. Three Phase Connect

Users can exploit three units of RSP-3000(unit 1 , unit 2, unit 3) to work with 3  $\psi$  power system. Please refer to following diagrams for configuration.

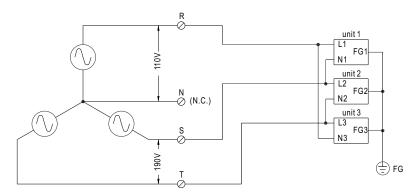
## **I** FIG. A: $3 \psi$ 3W 220VAC SYSTEM



### $\blacksquare$ FIG. B: 3 $\psi$ 4W 220/380VAC SYSTEM



## ■ FIG. C: 3 \( \psi \) 4W 190/110VAC SYSTEM

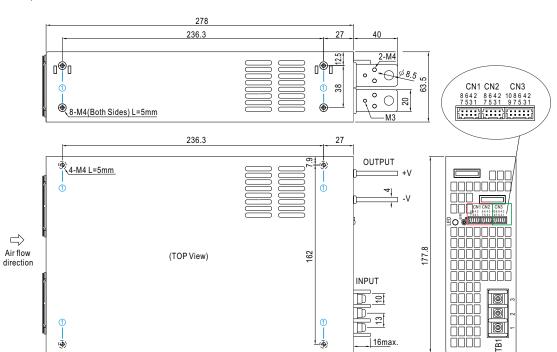




## ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5$ mm)

Case No.982B



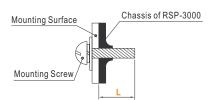
### Mounting Instruction

// ···					
Hole No.	Recommended Screw Size	MAX. Penetration Depth L	Recommended mounting torque		
1	M4	5mm	7~10Kgf-cm		

※ Control Pin No. Assignment (CN1, CN2): HRS DF11-8DP-2DS or equivalent



Mating Housing	HRS DF11-8DS or equivalent
Terminal	HRS DF11-**SC or equivalent



## $\hfill \bigcirc$ CN1 and CN2 are connected internally.

Pin No.	Function	Description
1	RCG	Remote ON-OFF Ground
2	RC	Remote ON-OFF
3	PV	Connection for output voltage programming
4	PS	Reference Voltage Terminal
5,7	-S	Negative sensing for remote sense
6	CS(Current Share)	Current Share
8	+S	Postive sensing for remote sense





Mating Housing	HRS DF11-10DS or equivalent
Terminal	HRS DF11-**SC or equivalent

Pin No.	Function	Description
1	P OK GND	Power OK Ground
2	POK	Power OK Signal (Relay Contact)
3	P OK GND2	Power OK Ground
4	P OK2	Power OK Signal (TTL Signal)
5	RCG	Remote ON-OFF Ground
6	RC	Remote ON-OFF
7	AUXG	Auxiliary Ground
8	AUX	Auxiliary Output
9	OLP	Overland/OLD) type calcot
10	OL-SD	Overload(OLP) type select

**XAC Input Terminal Pin No. Assignment** 

Pin No.	Assignment	Diagram	Maximum mounting torque
1	AC/L		
2	AC/N		18Kgf-cm
3	FG ±		

### ■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html