



1000W Power Supply with Single Output

RSP-1000 series



Dimension

L	*	W	*	H	
295	*	127	*	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

■ Certificates

- Safety: UL/EN/IEC 60950-1
- EMC: EN 55022 / 55024

■ Applications

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

■ 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.

■ Model Encoding / Order Information

RSP - 1000 - 24

- Output voltage (12V/15V/24V/27V/48V)
- Output wattage
- Series name

SPECIFICATION

MODEL		RSP-1000-12	RSP-1000-15	RSP-1000-24	RSP-1000-27	RSP-1000-48	
OUTPUT	DC VOLTAGE	12V	15V	24V	27V	48V	
	RATED CURRENT	60A	50A	40A	37A	21A	
	CURRENT RANGE	0 ~ 60A	0 ~ 50A	0 ~ 40A	0 ~ 37A	0 ~ 21A	
	RATED POWER	720W	750W	960W	999W	1008W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	
	VOLTAGE ADJ. RANGE	10 ~ 13.5V	13.5 ~ 16.5V	20 ~ 26.4V	24 ~ 30V	43 ~ 55V	
	VOLTAGE TOLERANCE Note.3	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LINE REGULATION	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	
	LOAD REGULATION	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	
	SETUP, RISE TIME	300ms, 50ms at full load					
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load					
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	0.95/230VAC 0.98/115VAC at full load					
	EFFICIENCY (Typ.)	83%	85%	88%	88%	90%	
	AC CURRENT (Typ.)	12A/115VAC 6A/230VAC					
	INRUSH CURRENT (Typ.)	25A/115VAC 40A/230VAC					
	LEAKAGE CURRENT	<2.0mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	56.6 ~ 66.2V	
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down					
		Protection type : Shut down o/p voltage, re-power on to recover					
FUNCTION	OUTPUT VOLTAGE PROGRAMMABLE(PV)	Adjustment of output voltage is allowable to 40 ~ 110% of nominal output voltage. Please refer to the Function Manual.					
	CURRENT SHARING	Up to 4000W or (3+1) units. Please refer to the Function Manual.					
	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 turn on = 0 ~ 1V ; PSU turn off = 3.3 ~ 5.6V. Please refer to the Function Manual.					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃ , 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	± 0.02%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1 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 / 500VDC / 25℃/ 70% RH					
	EMC EMISSION	Parameter	Standard			Test Level / Note	
		Conducted	EN55032 (CISPR32) / EN55011 (CISPR11)			Class B	
		Radiated	EN55032 (CISPR32) / EN55011 (CISPR11)			Class A	
		Harmonic Current	EN61000-3-2			-----	
		Voltage Flicker	EN61000-3-3			-----	
	EMC IMMUNITY	En55024 , EN61204-3, EN61000-6-2, CCC GB17625.1, GB/T9254, BSMI CNS13438					
		Parameter	Standard			Test Level / Note	
		ESD	EN61000-4-2			Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN61000-4-3			Level 3	
		EFT / Burst	EN61000-4-4			Level 3	
		Surge	EN61000-4-5			Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-Line	
Conducted		EN61000-4-6			Level 3		
Magnetic Field		EN61000-4-8			Level 4		
Voltage Dips and Interruptions		EN61000-4-11			>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	MTBF	313.1K hrs min. Telcordia SR-332 (Bellcore) ; 116.75K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	295*127*41mm (L*W*H)					
	PACKING	1.95Kg; 6pcs/12.7Kg/1.15CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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 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 http://www.meanwell.com) 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).						