



1000W with PFC and Parallel Function

# PSPA-1000 series



## ■ Features

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Current sharing up to 4000W(3+1)
- With DC OK Signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- 5 years warranty

## ■ Applications

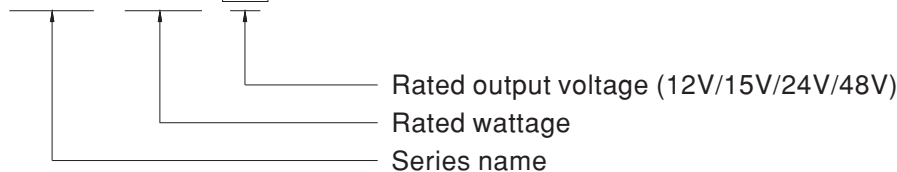
- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Burn-in facility
- RF application

## ■ Description

PSPA-1000 series is a 1KW single output enclosed type AC/DC power supply. This series operates from 90~264VAC input voltage and offers models with different rated voltage ranging between 12V and 48V. Thanks to high efficiency up to 94% and built-in fan, the entire series is able to work for -20°C ~ +70°C ambient temperature. PSPA-1000 is equipped with various built-in functions, such as current sharing, remote ON-OFF control and remote sense, providing great design flexibility for different types of applications.

## ■ Model Encoding

PSPA - 1000 - 12





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**PSPA-1000 series**

**SPECIFICATION**

MODEL	PSPA-1000-12		PSPA-1000-15		PSPA-1000-24		PSPA-1000-48			
OUTPUT	DC VOLTAGE	12V		15V		24V		48V		
	RATED CURRENT	80A		64A		42A		21A		
	CURRENT RANGE	0 ~ 80A		0 ~ 64A		0 ~ 42A		0 ~ 21A		
	RATED POWER	960W		960W		1008W		1008W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p		150mVp-p		200mVp-p		250mVp-p		
	VOLTAGE ADJ. RANGE	11 ~ 14V		14 ~ 17V		22 ~ 28V		46 ~ 56V		
	VOLTAGE TOLERANCE Note.3	±2.0%		±1.5%		±1.0%		±1.0%		
	LINE REGULATION	±0.5%		±0.5%		±0.5%		±0.5%		
	LOAD REGULATION	±2.0%		±1.5%		±0.5%		±0.5%		
	SETUP, RISE TIME	1000ms,50ms/115VAC		1000ms,50ms/230VAC						
HOLD UP TIME (Typ.)	16ms at full load									
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC(300VAC for 5 sec.)		127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	0.95/230VAC		0.99/115VAC at full load						
	EFFICIENCY(Typ.)	92%		93%		93.5%		94%		
	AC CURRENT (Typ.)	8.5A/115VAC		5A/230VAC						
	INRUSH CURRENT (Typ.)	20A/115VAC		40A/230VAC						
	LEAKAGE CURRENT	<0.5mA/240VAC								
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	14.5 ~ 16.5V		18.2 ~ 20.6V		29 ~ 33V		58 ~ 65V		
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover								
FUNCTION	CURRENT SHARING	Up to 4000W or (3+1) units. Please refer to the Function Manual.								
	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.								
	POK SIGNAL	The TTL signal out, PSU turn on = 2.4 ~ 5V ; PSU turn off = 0 ~ 0.4V. Please refer to the Function Manual.								
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL62368-1, TUV EN62368-1, EAC TP TC 004, 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°C / 70% RH								
	EMC EMISSION	Parameter	Standard		Test Level / Note					
		Conducted	EN55032 (CISPR32) / EN55011 (CISPR11)		Class B					
		Radiated	EN55032 (CISPR32) / EN55011 (CISPR11)		Class B					
		Harmonic Current	EN61000-3-2		Class A					
		Voltage Flicker	EN61000-3-3		-----					
	EMC IMMUNITY	EN55024, EN61000-6-2, 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, 2KV/Line-Line 4KV/Line-Earth						
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	274.3K hrs min. Telcordia SR-332 (Bellcore) ; 94.4K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	170*120*93mm (L*W*H)								
	PACKING	1.93Kg ; 8pcs/16.4Kg/1.53CUFT								
NOTE	<ol style="list-style-type: none"> <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 0.1uf &amp; 47uf 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>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</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>									