



Technical Data Sheet
PS-1000W-12V
 Enclosed AC-to-DC Power Supply
 with PFC and Parallel Function

UNIT CODE	DESCRIPTION
PS-1000W-12V	1000W 12VDC Single Output with PFC Function AC-to-DC Power Supply (Transformer)

SPECIFICATIONS		
Input	Output	Agency approvals
Universal AC input 90~264VAC; 127~370VDC	+24VDC@0~75.0A	UL / CUL / TUV / CB / CE

Features at a Glance:

- Universal AC input / Full range
- AC input active surge current limiting
- Built-in active current sharing and parallel function - Current sharing up to 2000W (1+1)
- Built-in active PFC function
PF>0.98@115VAC; >0.95@230VAC
- Built-in remote sense function
- Built-in remote ON/OFF control
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Forced air cooling by built-in DC fans
- DC adjustment range: 10%
- Overload protection: 115%~140% constant current limiting, auto-recovery
- Over voltage protection: 115%~140% rated output voltage
- Working temperature: -10~60°C (refer to output derating curve)
- Safety standards: UL60950-1 and TUV EN60950-1 approved
- EMC standards: EN55022 class B, EN61000-3-2,3, EN61000-4-2,3,4,5,6,8,11, ENV50204
- Efficiency: 84%
- MTBF hours: 59.6K hrs min MIL-HDBK-217F (25)
- Weight: 11.4 lbs. (5.2Kg;.)
- Dimensions: 10.94"L X 5.0"W X 4.99"H
(CASE: 924) 278 X 129 X 127mm (L*W*H)



The PS-1000 series are 1000Watt enclosed type switching power supplies with power factor correction (PFC) and parallel function that target at the growing demand of high wattage applications. Built-in active current sharing and parallel function allows current sharing up to 2 units or 2000W. Applications include front-end power system, factory automation, instrumentation, moving sign, telecom/datacom, laser-carving machine and the like.

Pricing:	1 +	\$ 784.50
	10 +	\$ 723.00
	100 +	\$ 689.00
electracool.com		



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■ Features :

- Universal AC input / Full range
- AC input active surge current limiting
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Built-in constant current limiting circuit
- Current sharing up to 2 units or 2000W
- Built-in remote ON-OFF control
- Built-in remote sense function
- Built-in active current sharing and parallel function
- 3 years warranty

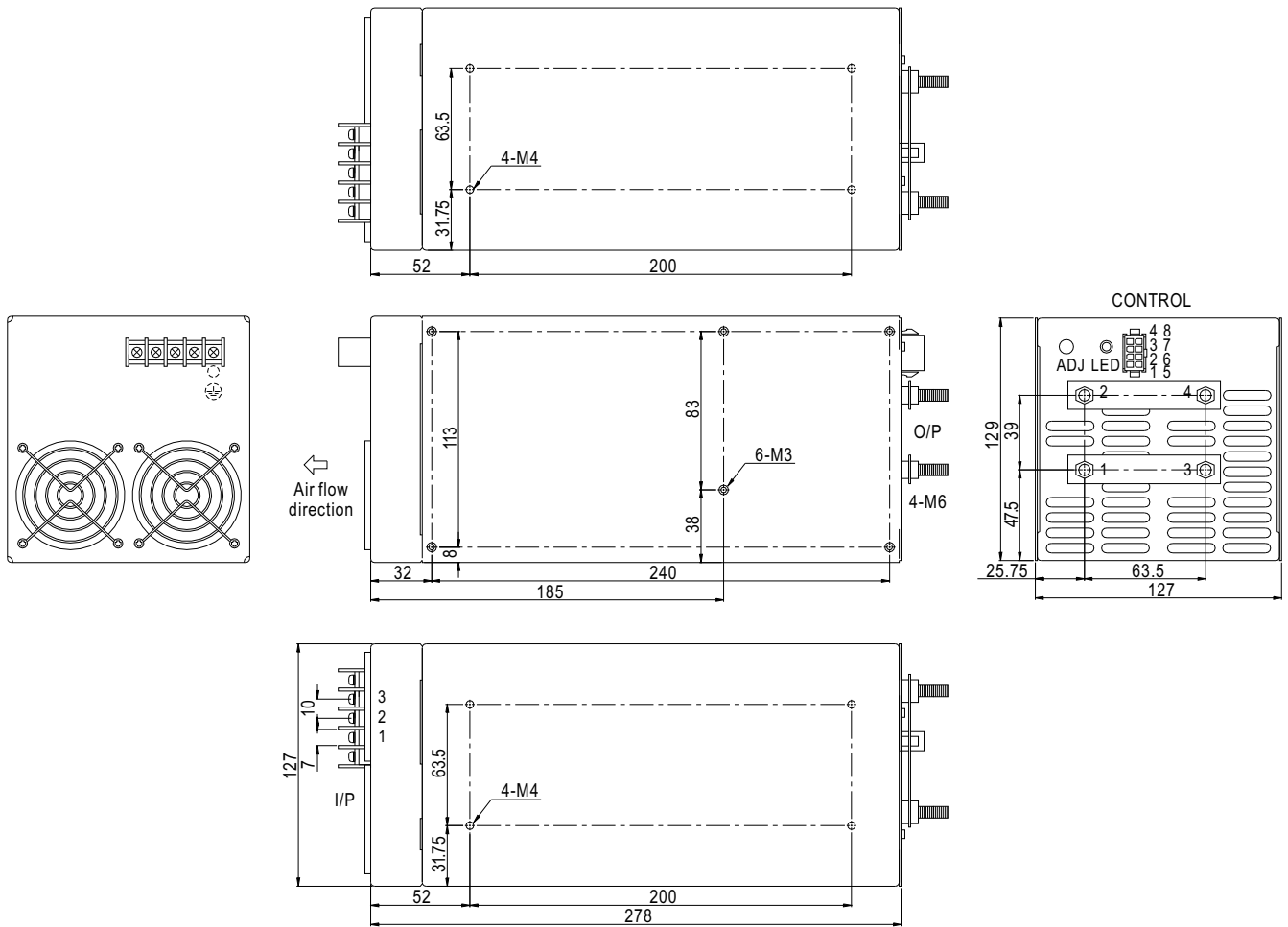


SPECIFICATION

MODEL		PSP-1000-5	PSP-1000-12	PSP-1000-13.5	PSP-1000-15	PSP-1000-24	PSP-1000-27	PSP-1000-48	
OUTPUT	DC VOLTAGE	5V	12V	13.5V	15V	24V	27V	48V	
	RATED CURRENT	145A	75A	67A	60A	37.6A	33.6A	19A	
	CURRENT RANGE	0 ~ 145A	0 ~ 75A	0 ~ 67A	0 ~ 60A	0 ~ 37.6A	0 ~ 33.6A	0 ~ 19A	
	RATED POWER	725W	900W	904.5W	900W	902.4W	907.2W	912W	
	PEAK LOAD <small>Note.4</small>	800W	1000W	1000W	1000W	1000W	1000W	1000W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10 ~ 13.2V	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	24 ~ 30V	41 ~ 56V	
	VOLTAGE TOLERANCE <small>Note.3</small>	±6.0%	±3.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	
	LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1500ms, 50ms/230VAC 1500ms, 50ms/115VAC at full load							
	HOLD TIME (Typ.)	24ms/230VAC 24ms/115VAC at full load							
INPUT	VOLTAGE RANGE <small>Note.6</small>	90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	0.96/230VAC 0.96/115VAC at full load							
	EFFICIENCY (Typ.)	77%	84%	84%	84%	86%	86%	86%	
	AC CURRENT (Typ.)	11.2A/115AVC 5.6A/230VAC							
	INRUSH CURRENT (Typ.)	32A/115VAC 63A/230VAC							
LEAKAGE CURRENT	<2mA / 240VAC								
PROTECTION	OVER LOAD	115 ~ 140% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	15.5 ~ 18.2V	18 ~ 21V	27.6 ~ 32.4V	31 ~ 36.5V	57.6 ~ 67.2V	
	OVER TEMPERATURE	95°C (TSW1) Detect on the heatsink of PFC MOSFET 90°C (TSW2) Detect the winding of output choke Protection type : Shut down o/p voltage, recovers automatically after temperature goes down							
FUNCTION	REMOTE CONTROL	RC+/RC-: 0 ~ 0.8V=power on ; 4 ~ 10V=power off sink current <20mA							
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC <small>(Note 5)</small>	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC							
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3							
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A							
	MTBF	59.6K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	278*129*127mm (L*W*H)							
	PACKING	5.2Kg; 3pcs/16.3Kg/1.42CUFT							
NOTE	<ol style="list-style-type: none"> 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. 10% Duty cycle maximum within every 30 seconds(max.). Average output power should not exceed the rated power. 5. 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. 6. Derating may be needed under low input voltages. Please check the derating curve for more details. 								

Mechanical Specification

Case No. 924A Unit:mm



AC Input Terminal Pin. No. Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG \perp

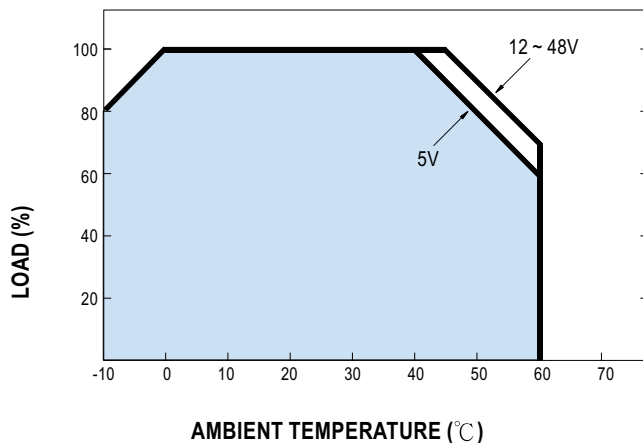
DC Output Terminal Pin. No Assignment

Pin No.	Assignment
1,3	DC OUTPUT +V
2,4	DC OUTPUT -V

Control Pin. No Assignment : MOLEX 5559-NP uses 5558male crimp terminal

Pin No.	Assignment	Pin No.	Assignment	Mating connector	Terminal
1	P(Current share)	5	NC	MOLEX 5557-NR	MOLEX 5556 Female crimp Terminal receptacle
2	-S	6	NC		
3	G	7	+S		
4	RC-	8	RC+		

Derating Curve



Output Derating VS Input Voltage

