



# Power Supply PSU48-1000



## ■ Features :

- Universal AC input / Full range
- AC input active surge current limiting
- Built-in active PFC function, PF>0.95
- 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



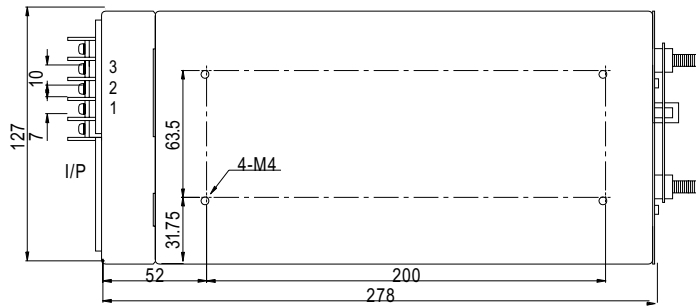
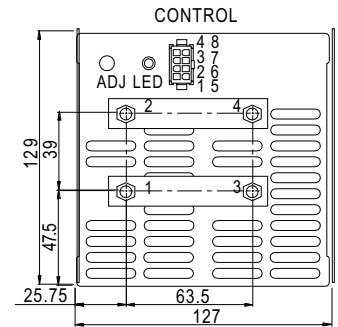
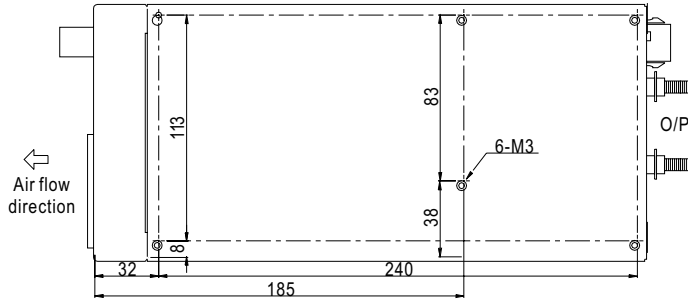
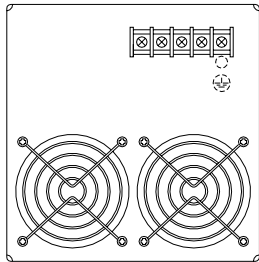
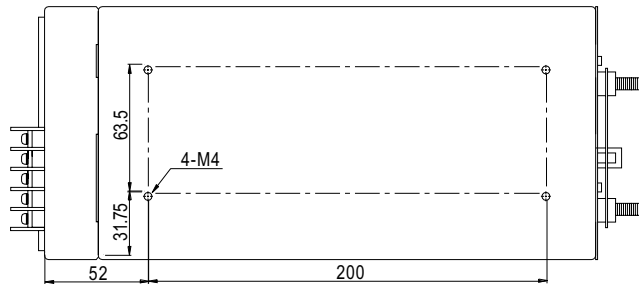
## SPECIFICATION

MODEL		PSU48-1000	
OUTPUT	DC VOLTAGE	48V	
	RATED CURRENT	19A	
	CURRENT RANGE	0 ~ 19A	
	RATED POWER	912W	
	PEAK LOAD <small>Note.4</small>	1000W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	200mVp-p	
	VOLTAGE ADJ. RANGE	41 ~ 56V	
	VOLTAGE TOLERANCE <small>Note.3</small>	± 1.0%	
	LINE REGULATION	± 0.2%	
	LOAD REGULATION	± 0.5%	
SETUP, RISE, HOLD TIME	1.5s, 50ms, 15ms/230VAC	1.5s, 50ms, 1.5ms/115VAC at full load	
INPUT	VOLTAGE RANGE <small>Note.6</small>	90 ~ 264VAC	127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR	PF>0.95/230VAC	PF>0.95/115VAC at full load
	EFFICIENCY (Typ.)	86%	
	AC CURRENT	14A/115AVC	7A/230VAC
	INRUSH CURRENT (max.)	40A/115VAC	70A/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	57.6 ~ 67.2V Protection type : Shut down o/p voltage, re-power on to recover	
	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 ~ +65°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 (Note 5)	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	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. 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.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 10% Duty cycle maximum within every 30 seconds(max.). Average output power should not exceed the rated power.</p> <p>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.</p> <p>6. Derating may be needed under low input voltages. Please check the derating curve for more details.</p>		



## Mechanical Specification

Case No. 924 Unit:mm



AC Input Terminal Pin. No. Assignment

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

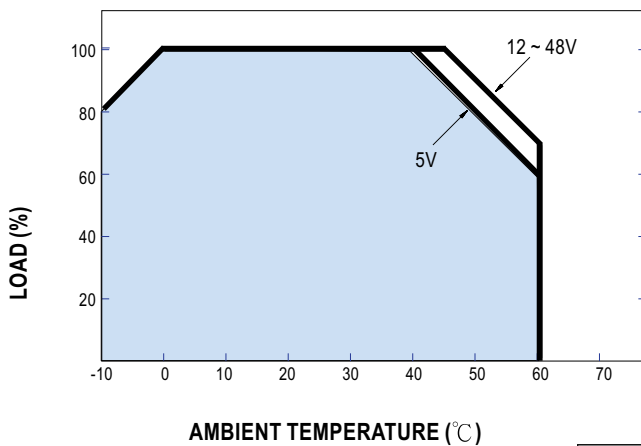
DC Output Terminal Pin. No Assignment

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

