



1000W Single Output with PFC Function

PSP1000 series



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



Model Number	Output Volts	Output Amps	OVP	Min Load	DC Volt Adjust	Load Reg	Efficiency
SINGLE OUTPUT							
PSP1000-5	5 Volts(DC)	145 Amps	5.75~6.75Volt(DC)	0~145Amps	4.75~5.5Volt(DC)	±2.0%	77%
PSP1000-12	12 Volts(DC)	75Amps	13.8~16.2Volt(DC)	0~75Amps	10~13.2Volt(DC)	±0.5%	84%
PSP1000-13.5	13.5 Volts(DC)	67 Amps	15.5~18.2Volt(DC)	0~67Amps	12~15Volt(DC)	±0.5%	84%
PSP1000-15	15 Volts(DC)	60 Amps	18~21Volt(DC)	0~60Amps	13.5~18Volt(DC)	±0.5%	84%
PSP1000-24	24 Volts(DC)	37.6 Amps	27.6~32.4Volt(DC)	0~37.6Amps	20~26.4Volt(DC)	±0.5%	85%
PSP1000-27	27 Volts(DC)	33.6 Amps	31~36.5Volt(DC)	0~33.6Amps	24~30Volt(DC)	±0.5%	86%
PSP1000-48	48 Volts(DC)	19 Amps	57.6~67.2Volt(DC)	0~19Amps	41~56Volt(DC)	±0.5%	86%



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INPUT SPECIFICATIONS

Input Voltage Range (Note 4)	90 ~ 264VAC 127~370 Volts(DC)
Frequency Range	47-63Hz
Inrush Current, typ: (cold start)	32Amps/115VAC; 63Amps/230VAC
Input Current	11.2 Amps@115VAC 5.6 Amps@230VAC
Leakage current	< 2mAmps / 240VAC
Min Load	See Selection Chart
Power Factor (typ.) @ FL	0.96/230VAC; 0.96/115VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±0.5%: 5Volts(DC) ±0.3%: 12~15Volts(DC) ±0.2%: 24~48Volts(DC)
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	±6.0%: 5Volts(DC) ±3.0%: 12Volts(DC) ±2%: 13.5~15Volts(DC) ±1%: 24~48Volts(DC)
Ripple/Noise (Note 1)	100mVpk-pk: 5Volts(DC) 150mVpk-pk: 12~27Volts(DC) 200mVpk-pk: 48Volts(DC)
Hold Up Time @ FL	24mS/230VAC, 24ms/115VAC
Setup, Rise Time @ FL	1500mS, 50mS/230VAC 1500mS, 50ms/115VAC
Over Voltage Protection	See Selection Chart Shutdown o/p voltage, re-power
Over Current Protection	115~140% rated output power Constant current limiting, auto-recov
Over Temperature Protection	95°C detect on heatsink of PFC MOSFET 90°C detect the winding of output choke Shutdown o/p voltage auto-recover after cool down
DC Voltage Adjust	See Selection Chart
Peak Load (Note 3)	5Volts(DC): 800W 12~48Volts(DC): 1000W

GENERAL SPECIFICATIONS

Safety	UL60950-1, TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022B (CISPR22B)
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	See Selection Chart
Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11 ENV50204, light Industry Level, Criteria A
Remote Control	RC+/RC-: 0~0.8Volts(DC) =Power ON 4~10Volts(DC) =Power Off sink current <20mA

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-20°C to +85°C, 10~95% RH
Relative Humidity	20~90% RH non cond
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	59.6KHrs min, MIL-HDBK-217F(25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	278 x 129 x 127 mm (10.95"x 5.08"x 5")
Weight	183.42 oz (5200g)

NOTE

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.
6. Derating may be needed under low input voltages. Please check the derating curve for more details.

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

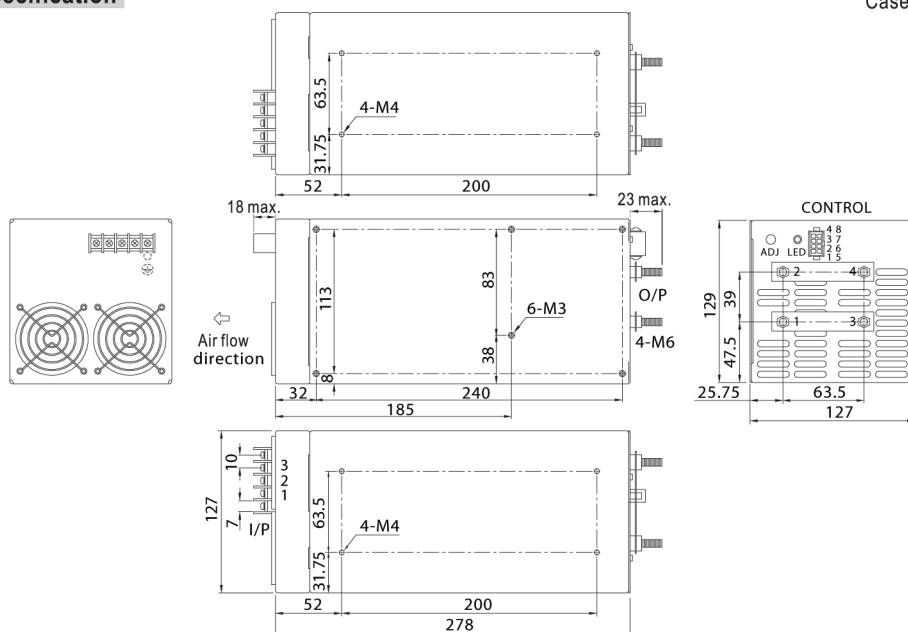
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

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**ASTRODYNE USA: 1-800-823-8082
ASTRODYNE PACIFIC: 886-2-26983458**

Mechanical Specification

Case No. 924A Unit:mm



AC Input Terminal Pin No. Assignment

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

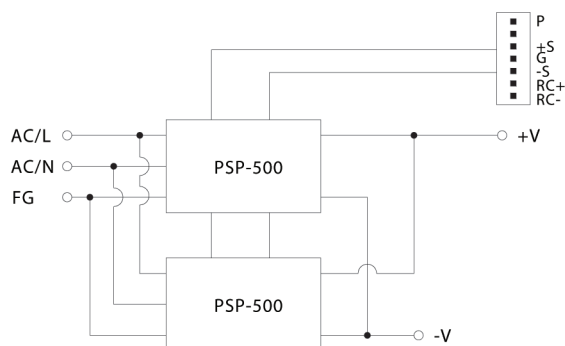
DC Output Terminal Pin No. Assignment

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+		

Block Diagram

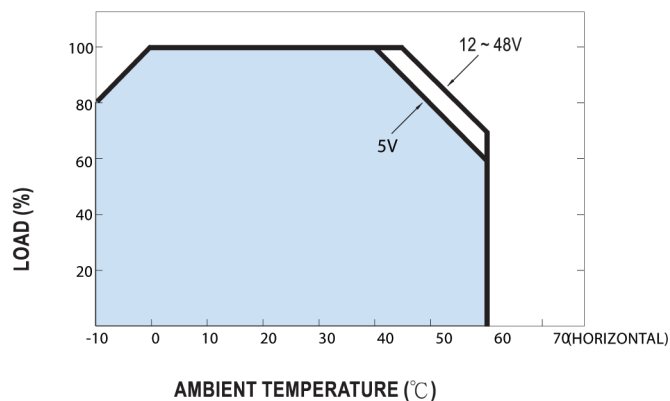




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■ Derating Curve



■ Output Derating VS Input Voltage

