

- Universal AC input
- Protections: Short circuit / Overload / Over voltage
- Built-in active PFC function
- PWM control and regulated
- High power density 6.117W/cubic inch
- Built-in remote sense function
- 125W with 18CFM FAN
- 5"x3" compact size



Model Number	Output Volts	Output Amps	OVP	DC Volt Adjust	Min Load(Convection)	Min Load(18CFM FAN)
TRIPLE OUTPUT						
PPS125-3.3	3.3 Volts(DC)	20 Amps	3.63~4.45Volts(DC)	3.13~3.46Volts(DC)	0~20Amps	0~25Amps
PPS125-5	5 Volts(DC)	20 Amps	5.5~6.75Volts(DC)	4.75~5.25Volts(DC)	0~20Amps	0~25Amps
PPS125-12	12 Volts(DC)	8.5 Amps	13.8~16.2Volts(DC)	11.40~12.60Volts(DC)	0~8.5Amps	0~10.5Amps
PPS125-13.5	13.5 Volts(DC)	7.5 Amps	15.5~20.25Volts(DC)	12.82~14.17Volts(DC)	0~7.5Amps	0~9.3Amps
PPS125-15	15 Volts(DC)	6.7 Amps	17.25~20.25Volts(DC)	14.25~15.75Volts(DC)	0~6.7Amps	0~8.4Amps
PPS125-24	24 Volts(DC)	4.2Amps	27.6~32.4Volts(DC)	22.80~25.20Volts(DC)	0~4.2Amps	0~5.2Amps
PPS125-27	27 Volts(DC)	3.8 Amps	31.05~36.45Volts(DC)	25.65~28.35Volts(DC)	0~3.8Amps	0~4.6Amps
PPS125-48	48 Volts(DC)	2.1 Amps	57.6~67.2Volts(DC)	45.60~50.40Volts(DC)	0~2.1Amps	0~2.6Amps



125W Single Output with PFC Function

PPS125 series

INPUT SPECIFICATIONS

Input Voltage Range	90-264VAC / 127-370 Volts(DC)
Frequency Range	47-63 Hz
Inrush Current, typ: (cold start)	24Amps / 230VAC
Input Current	
	3.3Volts(DC): 1.2Amps / 115VAC; 0.6Amps / 230VAC
	5Volts(DC): 1.7Amps / 115VAC; 0.75 Amps / 230VAC
Leakage current	< 2mA / 240 VAC
Power Factor	PF >0.93 / 230VAC
	>0.98 / 115VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±0.5%
Load Regulation	±1.0%
Voltage Tolerance (Note 2)	±0.2%: 3.3~15Volts(DC)
	±1.0%: 24~48Volts(DC)
Ripple/Noise (Note 1)	100mVpk-pk: 3.3~15Volts (DC)
	150mVpk-pk: 24~27Volts(DC)
	250mVpk-pk: 48Volts(DC)
Hold Up Time @ FL	24mS @ 230VAC
	24mS @ 115VAC
Setup, Rise Time @ FL	1000mS, 30mS/230VAC
	2000mS, 30mS/115VAC
Over Voltage Protection	5.75~6.75Volts: 5Volts(DC) (PPS125B/C/D)
	3.6~4.45Volts: 3.3Volts(DC) (PPS125A)
	Hiccup mode, auto recover
Over Current Protection	130~160% rated output power
	Fold back current limiting, auto-recover
DC Voltage Adjust	4.75~5.25Volts: 5Volts(DC) (PPS125B/C/D)
	3.13~3.46Volts: 3.3Volts(DC) (PPS125A)

GENERAL SPECIFICATIONS

Safety	UL60950-1
	TUV EN60950-1 approved

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

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Insulation Resistance	≥ 100MΩ / 500Volts(DC) / 25°C / 70%RH
EMI	Compliance to EN55011B (CISPR11B)
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	70% (PPS-125-3.3)
	79% (PPS-125-5)
	80% (PPS-125-12~15)
	83% (PPS-125-24/27)
	84% (PPS-125-48)
Isolation	3000VAC Input - Output
	1500VAC Input - Ground
	500VAC Output - Ground
EMS	Compliance to
	EN61000-4-2,3,4,5,6,8,11;
	ENV50204, EN55024,
	light industry level, criteria A

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20°C to +70°C (See Derate Curve)
Storage Temperature	-40°C to +85°C, 10~95% RH
Relative Humidity	20 to +90% RH
Temperature Coefficient	±0.05% / °C (0-50°C)
MTBF	111.7KHrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for
	60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size		
	Millimeters	127 x 76.2 x 34.6
	Inches	5" x 3" x 1.36"
Weight		13.05 oz (370g)

NOTE

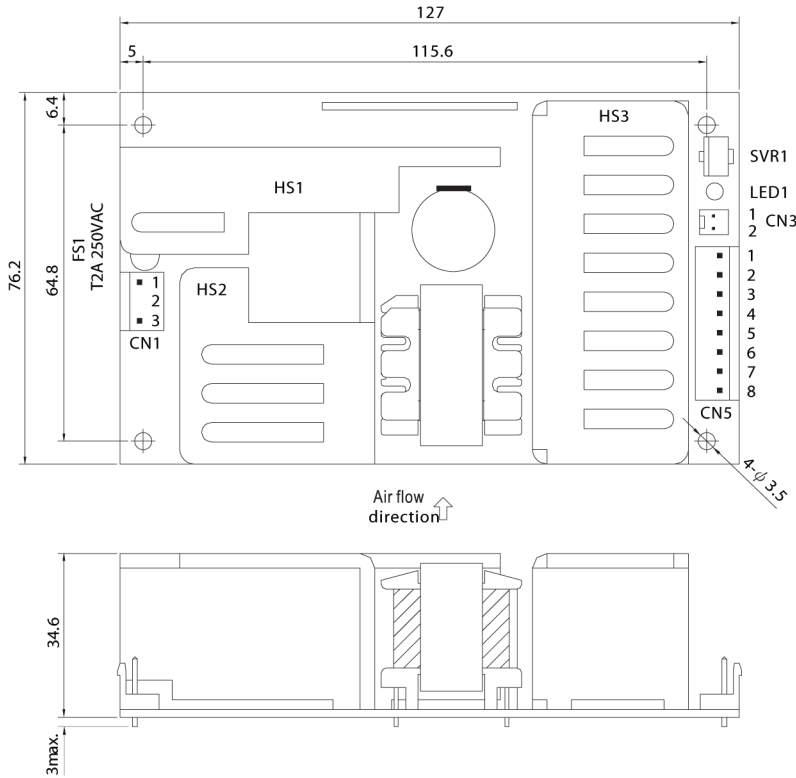
1. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regula-

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.

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

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/N		

DC Output Connector (CN5) : JST B8P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1~4	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5~8	+V		

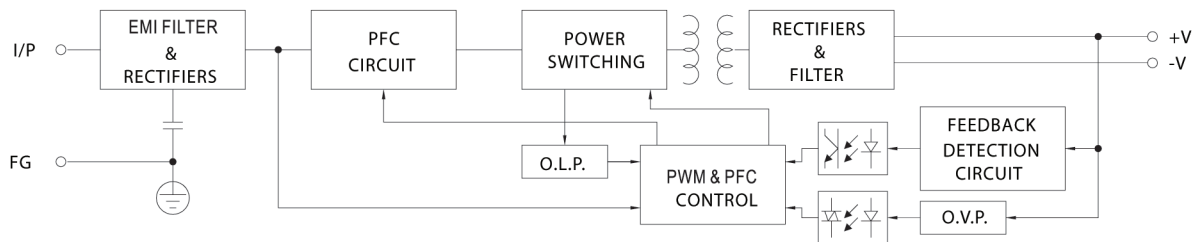
Remote Sense(CN3) : Molex 5045-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	RS+	Molex 5051 or equivalent	Molex 4809 or equivalent
2	RS-		

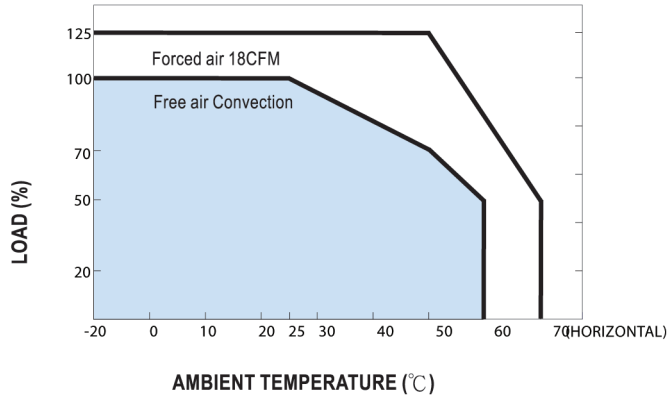
⚠ HS1, HS2 & HS3 can not be shorted

Block Diagram

fosc : 100KHz



■ Derating Curve



■ Output Derating VS Input Voltage

