



- Universal AC Input
- Protections: Short Circuit/Over Load/Over Voltage/Over Temperature
- Built-In Active PFC Function
- Forced Air Cooling by Built-In DC Fan
- Current Sharing up to 2000W (3+1)
- With DC OK Signal Output
- Built-In Remote ON-OFF Control
- Built-In Remote Sense Function
- Fixed Switching Frequency at PFC: 88KHz PWM: 100KHz



Model Number	Output Volts	Output Amps	OVP	Min Load	DC Volt Adjust	Load Reg	Efficiency
<b>SINGLE OUTPUT</b>							
PSP600-5	5 Volts(DC)	80 Amps	5.75~6.75Volt(DC)	0~80Amps	4.75~5.5Volt(DC)	±1.0%	79%
PSP600-12	12 Volts(DC)	50 Amps	13.8~16.2Volt(DC)	0~50Amps	10~13.2Volt(DC)	±0.5%	84%
PSP600-13.5	13.5 Volts(DC)	44.5 Amps	15.5~18.2Volt(DC)	0~44.5Amps	12~15Volt(DC)	±0.5%	85%
PSP600-15	15 Volts(DC)	40 Amps	18~21Volt(DC)	0~40Amps	13.5~18Volt(DC)	±0.5%	85%
PSP600-24	24 Volts(DC)	25 Amps	27.6~32.4Volt(DC)	0~25Amps	20~26.4Volt(DC)	±0.5%	86%
PSP600-27	27 Volts(DC)	22.2 Amps	31~36.5Volt(DC)	0~22.2Amps	24~30Volt(DC)	±0.5%	86%
PSP600-48	48 Volts(DC)	12.5 Amps	57.6~67.2Volt(DC)	0~12.5Amps	41~56Volt(DC)	±0.5%	87%



600W with PFC and Parallel Function

# PSP600 series

## INPUT SPECIFICATIONS

Input Voltage Range (Note 3)	90 ~ 264VAC 124~370 Volts(DC)
Frequency Range	47-63Hz
Inrush Current, typ: (cold start)	20Amps/115VAC; 40Amps/230VAC
Input Current	6.8 Amps@115VAC 3.4 Amps@230VAC
Leakage current	< 1.3mAmps / 240VAC
Min Load	See Selection Chart
Power Factor (typ.) @ FL	0.95/230VAC; 0.99/100VAC

## OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±0.5%
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	±2.0%: 5Volts(DC) ±1.0%: 12~48Volts(DC)
Ripple/Noise (Note 1)	180mVpk-pk: 5Volts(DC) 240mVpk-pk: 12~27Volts(DC) 300mVpk-pk: 48Volts(DC)
Hold Up Time @ FL	20mS
Setup, Rise Time @ FL	1500mS, 50mS
Over Voltage Protection	See Selection Chart Shutdown o/p voltage, re-power
Over Current Protection	105~135% rated output power Constant Current limiting, auto-recov
Over Temperature Protection	+5Volts(DC): 95°C(TSW1) detect on heatsink of power transistor; 95°C(TSW51) detect on heatsink of power diode +12~48Volts(DC): 85°C(TSW1) detect on heatsink of power transistor; 80°C(TSW51) detect on heatsink of power diode shutdown o/p voltage, re-power after cool down
DC Voltage Adjust	See Selection Chart

## GENERAL SPECIFICATIONS

Safety	UL60950-1, TUV EN60950-1 Approved
Insulation Resistance	≥100MΩ/500Volts(DC)/25°C/70%RH

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

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-: Short=Power ON Open=Power Off
Pok Signal	PSU turn on: 3.3~5.6Volts(DC) PSU turn off: 0~1Volts(DC)

## ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20°C to +60°C (See Derate Curve)
Storage Temperature	-40°C to +85°C, 10~95% RH
Relative Humidity	20~90% RH, non cond
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	116.4KHrs min, MIL-HDBK-217F(25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

## PHYSICAL SPECIFICATIONS

Size	170 x 120 x 93 mm (6.69"x 4.72"x 3.66")
Weight	67.02 oz (1900g)

## NOTE

1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
2. Tolerance : includes set up tolerance, line regulation and load regulation.
3. Derating may be needed under low input voltages. Please check the derating curve for more details.

### Mechanical Specification

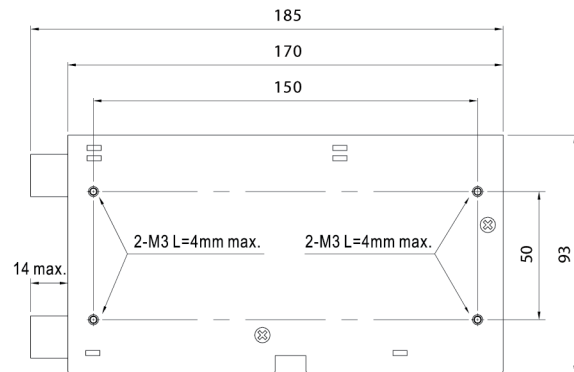
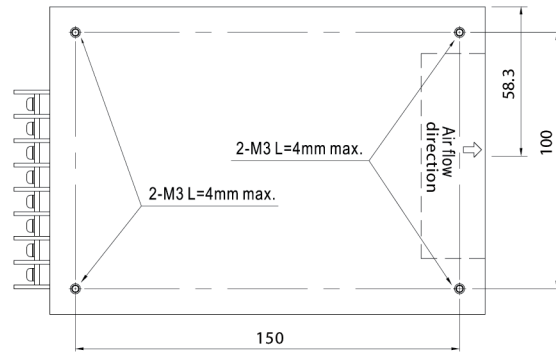
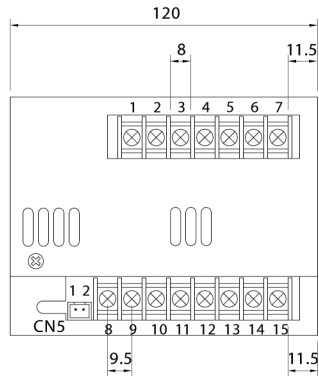
Case No.910A Unit:mm

RS Connector(CN5) : JST B-XH or equivalent

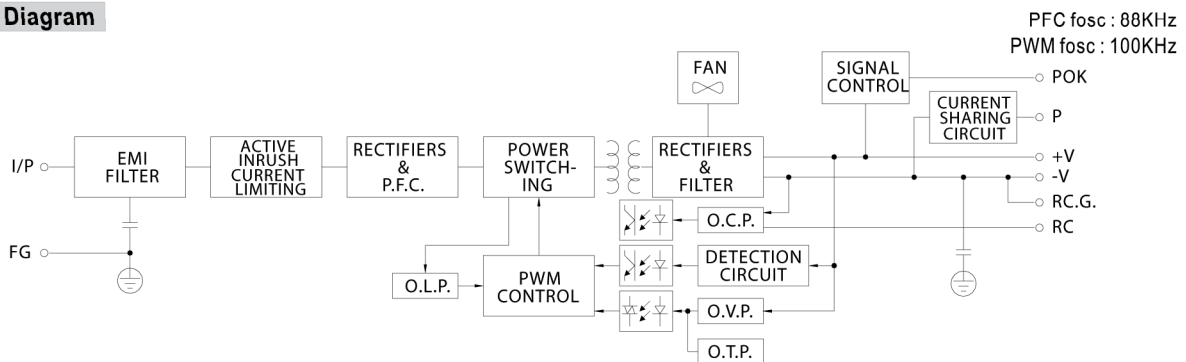
Pin No.	Assignment	Mating Housing	Terminal
1	RS+	JST XHP or equivalent	JST SXH-001T or equivalent
2	RS-		

Terminal Pin No. Assignment

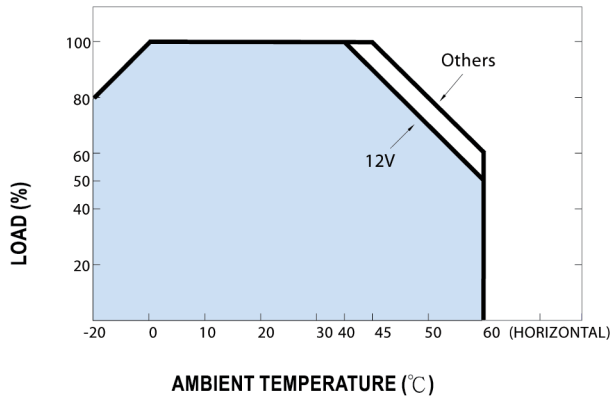
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG $\perp$
4	P(Current Share)
5	POK
6	R.C. G
7	R.C.
8~11	DC OUTPUT +V
12~15	DC OUTPUT -V



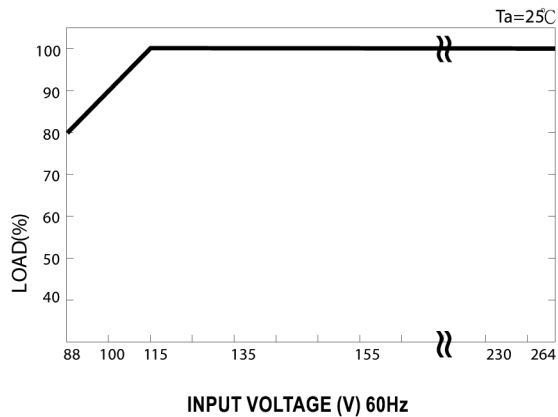
### Block Diagram



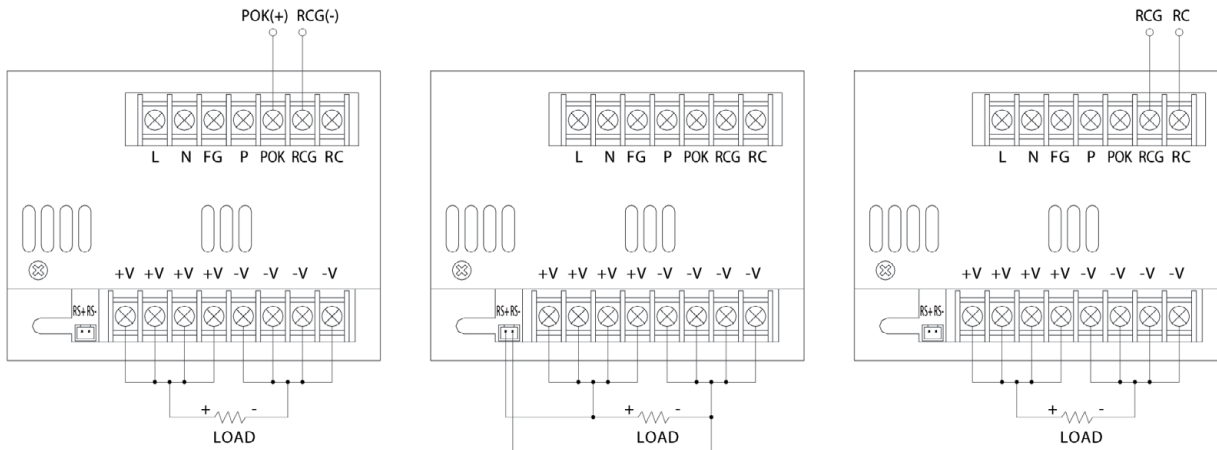
### Derating Curve



### Output Derating VS Input Voltage



### Control Terminal Instruction Manual



#### POK Signal

POK Signal is the voltage difference between "RCG" and "POK" pin output POK Signal for TTL level signal  
 PSU turn on: 3.3V ~ 5.6V  
 PSU turn off: 0V ~ 1V

#### Remote Sensing

#### Remote Control

Power ON: RCG and RC for short  
 Power OFF: RCG and RC for open

### Parallel Operation with Remote Sensing

- (1) Parallel operation is available by connecting the units shown as below (+S, -S and P are connected mutually in parallel):
- (2) The voltage difference among each output should be minimized that less than  $\pm 2\%$  is required.
- (3) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)  

$$= (\text{The rated current per unit}) \times (\text{Number of unit}) \times 0.9.$$
- (4) In parallel operation 4 units is the maximum, please consult the manufacture for other applications.
- (5) When remote sensing is used in parallel operation, the sensing wire must be connected only to the master unit.
- (6) When in parallel operation, the minimum output load should be greater than 3% of total output load.  
 (Min. load > 3% rated current per unit x number of unit)

