



# 1000W Single Output Power Supply

# SE-1000 series



### ■ Features :

- AC input active surge current limiting
- AC input range selected by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC ball bearing fan
- High power density 7.3w/inch<sup>3</sup>
- With DC\_OK signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- UL / CUL approved
- Low cost
- 2 years warranty

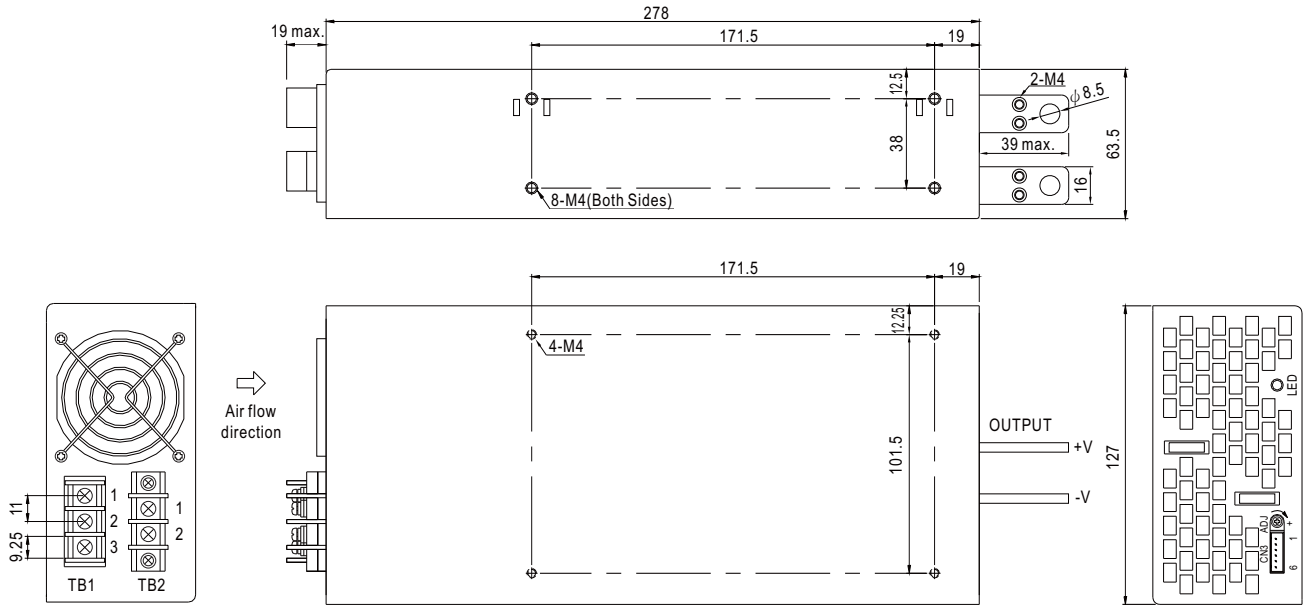


### SPECIFICATION

MODEL	SE-1000-5	SE-1000-9	SE-1000-12	SE-1000-15	SE-1000-24	SE-1000-48	
OUTPUT	DC VOLTAGE	5V	9V	12V	15V	24V	48V
	RATED CURRENT	150A	100A	83.3A	66.7A	41.7A	20.8A
	CURRENT RANGE	0 ~ 150A	0 ~ 100A	0 ~ 83.3A	0 ~ 66.7A	0 ~ 41.7A	0 ~ 20.8A
	RATED POWER	750W	900W	999.6W	1000.5W	1000.8W	998.4W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	3.3 ~ 5.5V	7.5 ~ 10V	10 ~ 13.5V	13.5 ~ 16.5V	22 ~ 27.5V	43 ~ 56V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 50ms/230VAC    1500ms, 50ms/115VAC at full load					
HOLD UP TIME (Typ.)	20ms/230VAC    15ms/115VAC at full load						
INPUT	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264VAC selected by TB2    254 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	81%	84%	85%	86%	88%	89%
	AC CURRENT (Typ.)	17.5A/115VAC    10A/230VAC					
	INRUSH CURRENT (Typ.)	35A/115VAC    55A/230VAC					
	LEAKAGE CURRENT	<2.5mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Shut down o/p voltage, re-power on to recover					
	OVER VOLTAGE	5.75 ~ 6.75V	10.4 ~ 12.2V	13.8 ~ 16.2V	18 ~ 21V	28 ~ 32.4V	57.6 ~ 67.2V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	DC_OK SIGNAL	PSU turn on:3.3V ~ 5.6V    PUS turn off:0 ~ 1V					
	REMOTE CONTROL	RC+/RC-: 0 ~ 0.8V power on; 4 ~ 10V power off					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY	SAFETY STANDARDS	UL62368-1, BSMI CNS14336-1, EAC TP TC 004 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH					
OTHERS	MTBF	251.6K hrs min.    MIL-HDBK-217F (25°C)					
	DIMENSION	278*127*63.5mm (L*W*H)					
	PACKING	2.5Kg; 6pcs/16Kg/1.38CUFT					
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. By using UVP circuit, PSU will not turn on direct by in AC continue ON/OFF condition within 5 sec.</li> <li>5.The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol>						

**Mechanical Specification**

Case No. 935B Unit:mm



TB1:AC input terminal

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

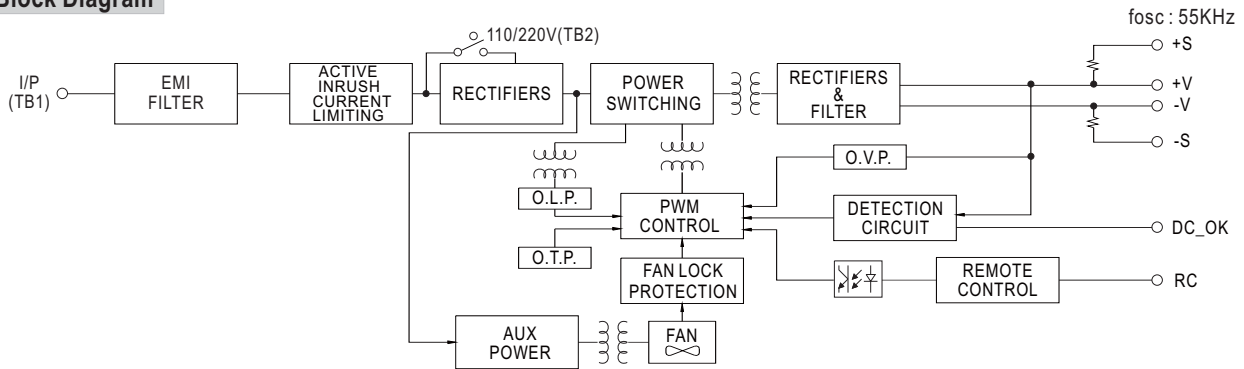
TB2:110/220V Change

Pin No.	110V	220V
1	Short	Open
2		

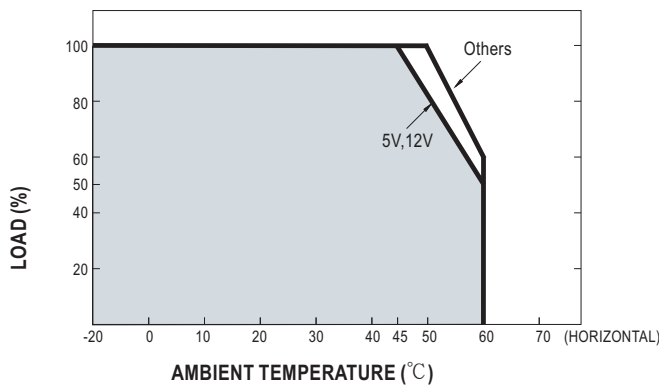
Control Pin (CN3) : JST B6B-XH or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	DC_OK Signal	4	+S	JST XHP or equivalent	JST SXH-001T or equivalent
2	DC_OK GND	5	RC-		
3	-S	6	RC+		

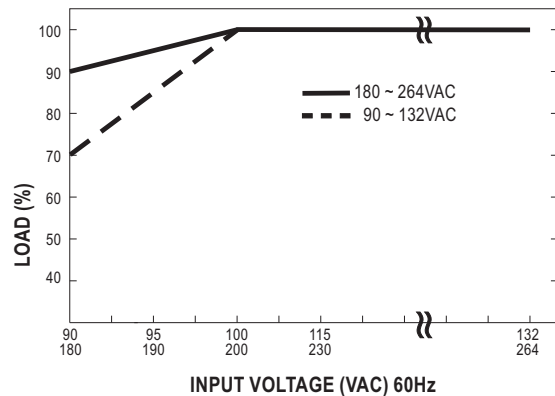
**Block Diagram**



**Derating Curve**



**Static Characteristics**



**Mechanical Specification**

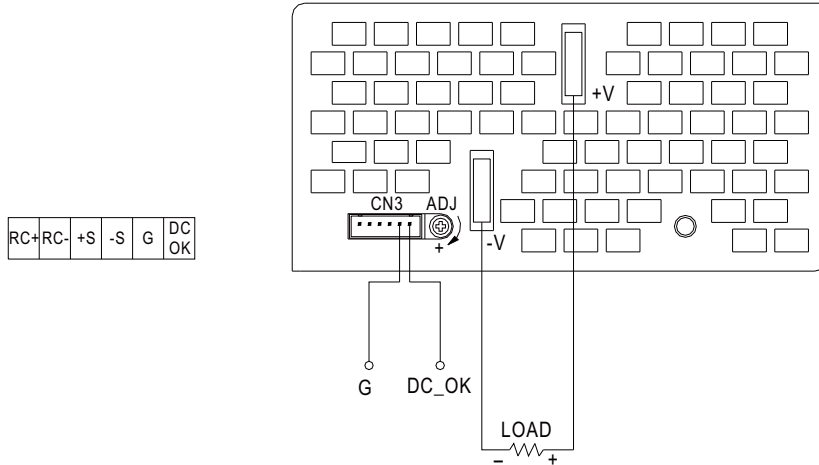
**DC\_OK Signal**

DC\_OK Signal is the voltage difference between "DC\_OK" and "G" pin output

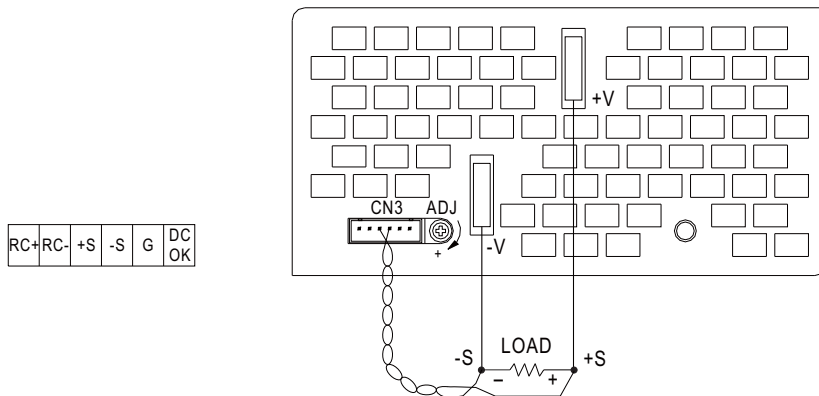
DC\_OK Signal is a TTL level signal

PSU turn on: 3.3 ~ 5.6V

PSU turn off: 0 ~ 1V



**Remote Sensing**



**Remote Control**

Between RC+ and RC-	Output
SW OFF(0 ~ 0.8V)	ON
SW ON(4 ~ 10V)	OFF

