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^3
- With DC_OK signal output
- Built-in remote ON-OFF control
- Built-in remote sense function
- UL / CUL approved
- Low cost
- 2 years warranty

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GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

R33100 RoHS — UL62368-1 TPTC004 IEC62368-1

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
		Protection type : Shut down o/p voltage, re-power on to recover					
	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℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.05%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, BSMI CNS15598-1, EAC TP TC 004 approved; Design refer to BS EN/EN62368-1					
	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℃/ 70% RH					
	EMC EMISSION	**Parameter**		**Standard**		**Test Level / Note**	
		Conducted		BS EN/EN55032 (CISPR32),CNS15936		Class A	
		Radiated		BS EN/EN55032 (CISPR32),CNS15936		Class A	
		Harmonic Current		BS EN/EN61000-3-2		-----	
		Voltage Flicker		BS EN/EN61000-3-3		-----	
	EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2					
		Parameter		**Standard**		**Test Level / Note**	
		ESD		BS EN/EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated		BS EN/EN61000-4-3		Level 3	
		EFT / Burst		BS EN/EN61000-4-4		Level 3	
		Surge		BS EN/EN61000-6-2		1KV/Line-Line 2KV/Line-Earth	
		Conducted		BS EN/EN61000-4-6		Level 3	
		Magnetic Field		BS EN/EN61000-4-8		Level 4	
		Voltage Dips and Interruptions		BS EN/EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	
OTHERS	MTBF	1273.6K hrs min. Telcordia SR-332 (Bellcore) ; 251.6K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	278*127*63.5mm (L*W*H)					
	PACKING	2.5Kg; 6pcs/16Kg/1.38CUFT					

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
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. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
5. By using UVP circuit, PSU will not turn on direct by in AC continue ON/OFF condition within 5 sec.
6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).
7. This power supply does not meet the harmonic current requirements outlined by EN61000-3-2. Please do not use this power supply under the following conditions:
   a) the end-devices is used within the European Union, and
   b) the end-devices is connected to public mains supply with 220Vac or greater rated nominal voltage, and
   c) the power supply is:
   - installed in end-devices with average or continuous input power greater than 75W, or
   - belong to part of a lighting system

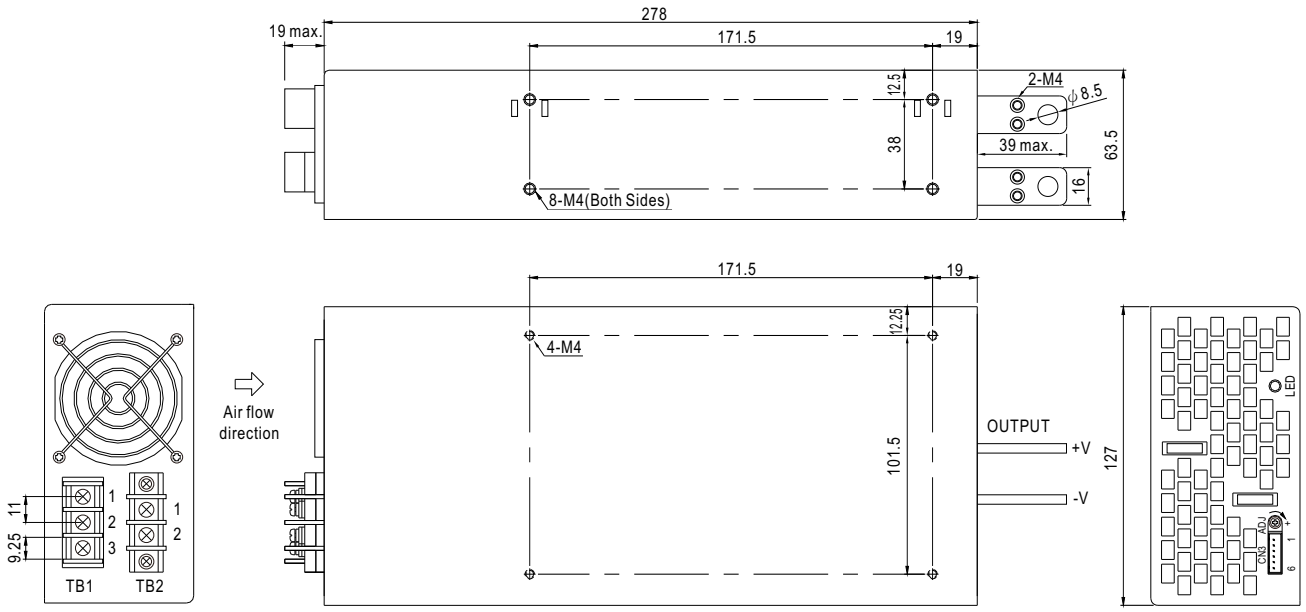
   Exception:
   Power supplies used within the following end-devices do not need to fulfill EN61000-3-2
   a) professional equipment with a total rated input power greater than 1000W;
   b) symmetrically controlled heating elements with a rated power less than or equal to 200W

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Mechanical Specification

Case No. 935B Unit:mm Tolerance:±1



TB1:AC input terminal

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

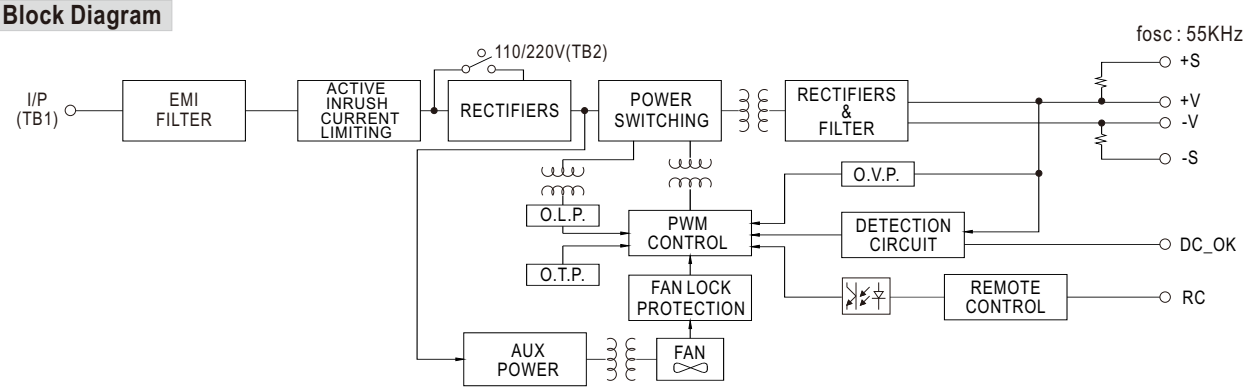
TB2:110/220V Change

Pin No.	110V	220V
1	Short	Open
2		

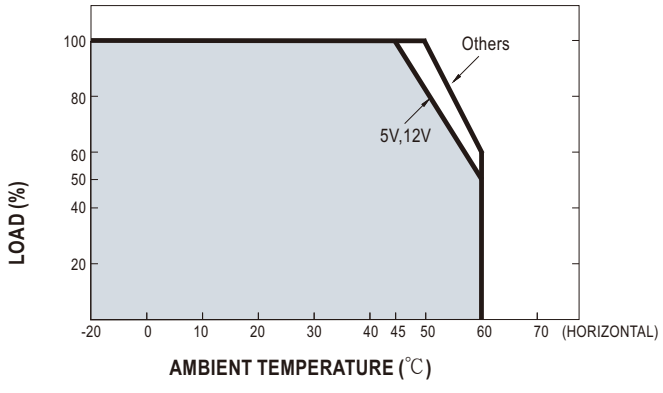
Control Pin (CN3) : JST B6B-XH or equivalent

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+		

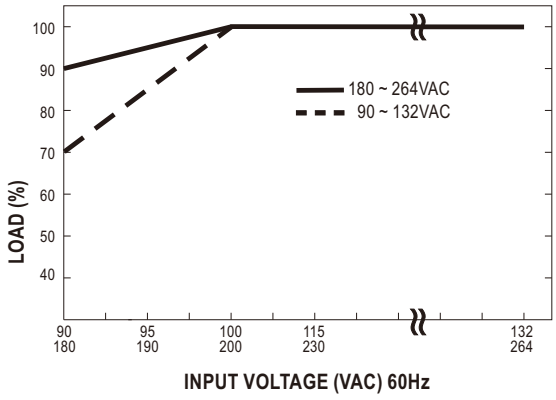
■ Block Diagram



■ Derating Curve



■ Static Characteristics

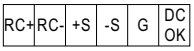


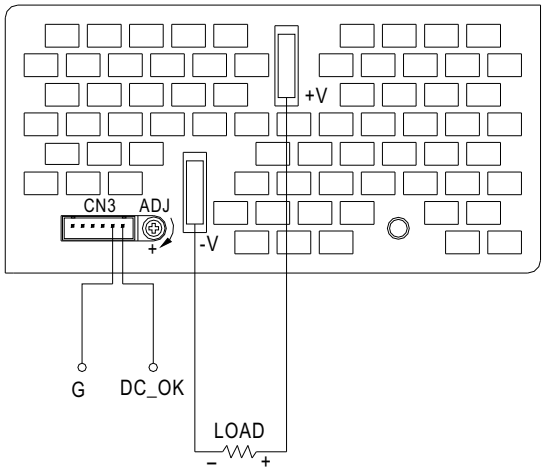
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■ Mechanical Specification

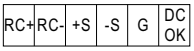
DC_OK Signal

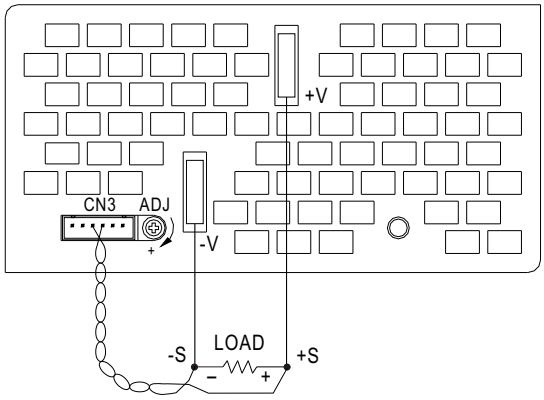
DC_OK Signal is the voltage difference between "DC_OK" and "G" pin output
DC_OK Signal is a TTL level signal
PSU turn on: 3.3 ~ 5.6V
PSU turn off: 0 ~ 1V





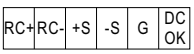
Remote Sensing





Remote Control

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



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