300W Single Output Battery Charger

PB-300 series

■ Features :

- Charger for lead-acid batteries (flooded, Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese) (Note.1)
- 3 stage charging
- AC 115/230VAC selected by switch
- Built-in passive PFC function compliance to EN61000-3-2 Class A (option)
- Protection: Short circuit / Reverse polarity / Over voltage / Over temperature
- Cooling by free air convection
- 2 color LED loading indicator
- Low cost, High reliability
- 3 years warranty

c UL us CB (except for 48V) CE (P type only)

PB − 300 [P] − 12

P:With Passive PFC
N:Without Passive PFC

12:14.4V
24:28.8V
48:57.6V

SPECIFICATION

MODEL		PB-300□-12	PB-300□-24	PB-300□-48
OUTPUT	BOOST CHARGE VOLTAGE Vboost	14.4V	28.8V	57.6V
	FLOAT CHARGE VOLTAGE Vfloat	13.6V	27.2V	54.4V
	VOLTAGE ADJUSTABLE RANGE	13 ~ 14.7V	26 ~ 28.8V	52 ~ 58.6V
	RECOMMENDED BATTERY CAPACITY(AMP HOURS) Note 6	60 ~ 200Ah	30 ~ 100Ah	15 ~ 50Ah
	BATTERY TYPE	Open & Sealed Lead Acid		
	MAX. OUTPUT CURRENT(Typ.) Note 8	20.85A	10.5A	5.3A
	CONTINUOUS OUTPUT CURRENT (Typ.) Note 7	12.5A	6.25A	3.2A
INPUT	VOLTAGE RANGE	90 ~ 132VAC / 180 ~ 264VAC selected by switch 127 ~ 187VDC / 254 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	>0.65 (with P type) at 230VAC		
	EFFICIENCY (Typ.)	85%	86%	88%
	AC CURRENT (Typ.)	6A/115VAC 3A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 60A		
	LEAKAGE CURRENT	<3.5mA / 240VAC		
PROTECTION	SHORT CIRCUIT	O/P Built in fuse (FS100) to protect short circuit condition, shut down o/p voltage and can not re-power on		
	REVERSE POLARITY	By internal fuse		
	OVER VOLTAGE	16 ~ 18V	31 ~ 35V	59 ~ 64V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	Protection type : Automatically derate charge current until zero		
FUNCTION	REMOTE CONTROL (CN5)	Open: Normal work Short: Stop Charging		
ENVIRONMENT	WORKING TEMP.	-10 ~ +50℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH non-condensing		
	TEMP. COEFFICIENT	±0.05%/℃ (0 ~ 45℃)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 5)	SAFETY STANDARDS	IEC60335-2-29 CB approved by TUV(except for 48V), UL60950-1 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℃/ 70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3 (only P type)		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A		
OTHERS	MTBF	115.8Khrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	253*135*48.5mm(L*W*H)		
	PACKING	1.45Kg; 6pcs/9.7Kg/0.95CUFT		

NOTE

1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.
2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
4. Tolerance : includes set up tolerance, line regulation and load regulation.
5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
6. This is Mean Well's suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.
7. Test condition is at 25℃, charging current will change under different temperature.
8. Maximum charging current will be in the range of 90~110% rated output current.

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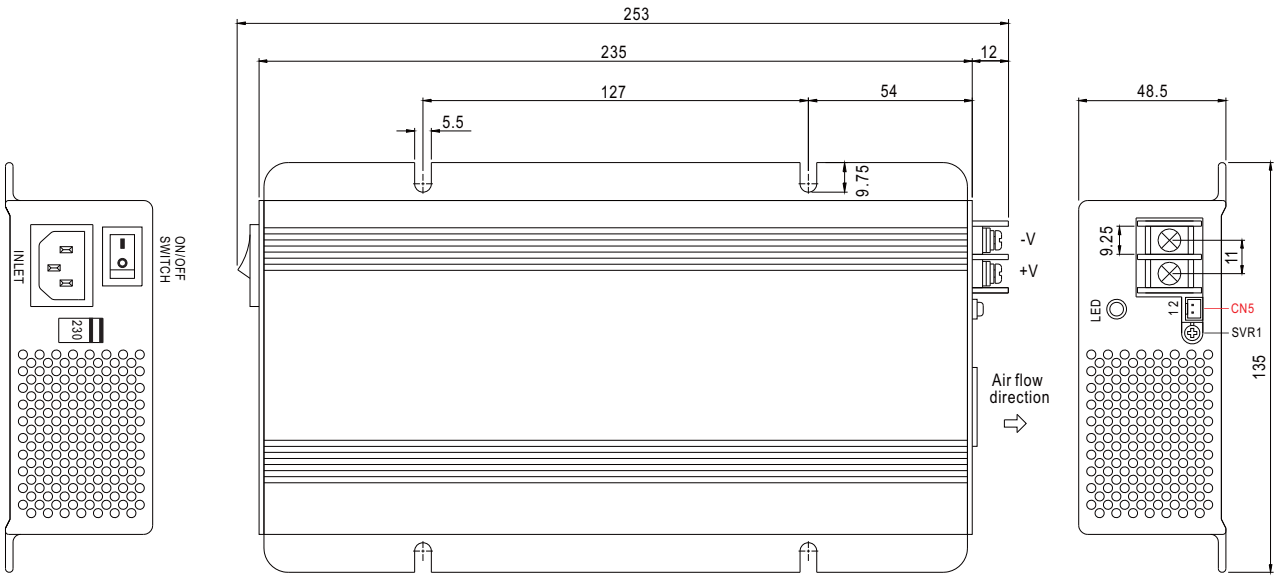
■ Mechanical Specification

Case No.801B Unit:mm

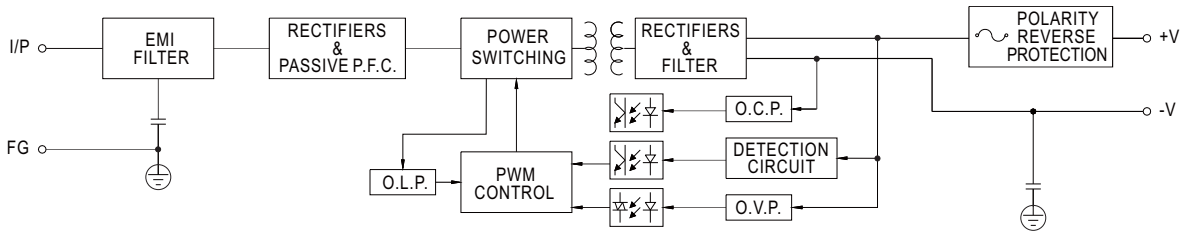


Remote Control(CN5) : JST B2B-XH or equivalent

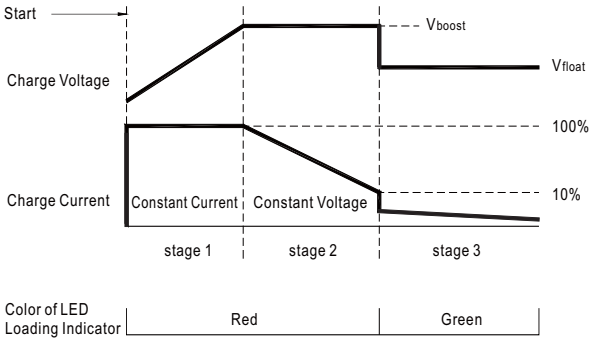
Assignment	Mating Housing	Terminal
PIN1,2 Open: Normal work	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
PIN1,2 Short: Stop Charging		

■ Block Diagram

fosc : 70KHz



■ Charging Curve



State	PB-300-12	PB-300-24	PB-300-48
Vboost	14.4V	28.8V	57.6V
Vfloat	13.6V	27.2V	54.4V

■ Output Load VS Temperature