



■ Features :

- Charger for lead-acid batteries (flooded, Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese) (Note.1)
- 3 stage charging characteristic
- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protection: Short circuit / Overload / Over voltage / Over temperature
- Built-in cooling Fan ON-OFF control
- Built-in remote ON-OFF control
- 2 color LED loading indicator
- Low cost, high reliability
- 2 years warranty



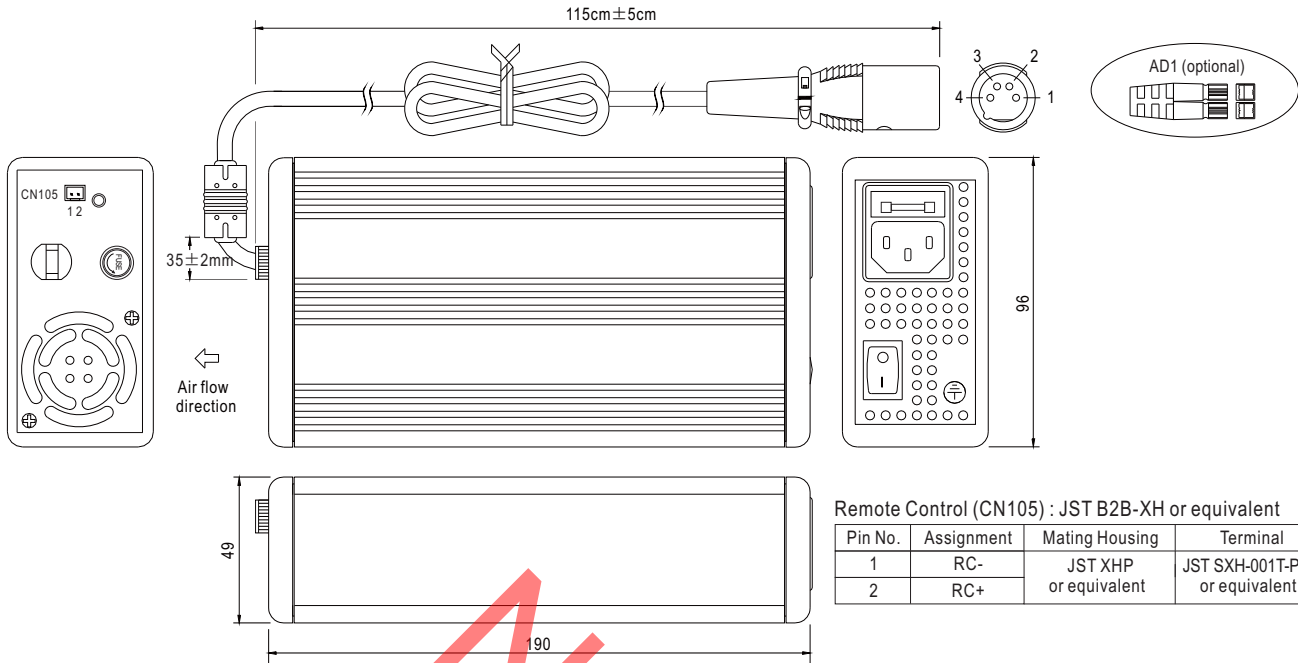
ORDER NO.	OUTPUT CONNECTOR	SAFETY
PB-230-xx (standard model)	4pin power din	TUV / CE
PB-230-xxAD1 (optional model)	Anderson connector	UL / EAC
PB-230-xx□ xx=12,24,48 ; □ =Blank, AD1		

SPECIFICATION

MODEL	PB-230-12 □	PB-230-24 □	PB-230-48 □	
OUTPUT	BOOST CHARGE VOLTAGE	14.4V	28.8V	57.6V
	FLOAT CHARGE VOLTAGE	13.6V	27.2V	54.4V
	RECOMMENDED BATTERY CAPACITY(AMP HOURS)(Note 5)	50 ~ 160Ah	24 ~ 80Ah	12 ~ 40Ah
	BATTERY TYPE	Open & Sealed Lead Acid		
	OUTPUT CURRENT	16A	8A	4A
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.95/230VAC	PF>0.98/115VAC at full load	
	EFFICIENCY (Typ.)	81.5%	85.5%	86%
	AC CURRENT (Typ.)	3A/115VAC 1.5A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 50A		
	LEAKAGE CURRENT	<3.5mA / 240VAC		
PROTECTION	OVERLOAD	90 ~ 110% rated output current Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	16 ~ 18V	31 ~ 35V	59 ~ 64V
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover		
FUNCTION	REMOTE CONTROL (CN105)	Open: Normal work Short: Stop Charging		
	FAN CONTROL	RTH3 ≥ 50°C Fan ON, ≤ 45°C Fan OFF (Typ.)		
	TEMPERATURE SENSE	By NTC		
ENVIRONMENT	WORKING TEMP.	-20 ~ +50°C (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)		
SAFETY & EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
	SAFETY STANDARDS	UL1012, EAC TP TC 004 (for PB-230-xxAD1 only), TUV EN60950-1, PSE J60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020		
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A, EAC TP TC 020		
	MTBF	244.5Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	190*96*49mm(L*W*H)		
CONNECTOR	PACKING	1.21Kg; 12pcs/15.5Kg/1.29CUFT		
	PLUG	See page 2 ; Other type available by customer requested		
	CABLE	See page 2 ; Other type available by customer requested		
NOTE	<p>1. Modification for charger specification may be required for different battery specification. Please contact MEAN WELL for details.</p> <p>2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>4. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>6. This is Mean Well's suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.</p> <p>7. 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).</p>			

Mechanical Specification

Case No. PB-230A Unit: mm



Plug Assignment

DC output connector (standard)

4pin XLR
UNICABLE 89M103-4P or equivalent

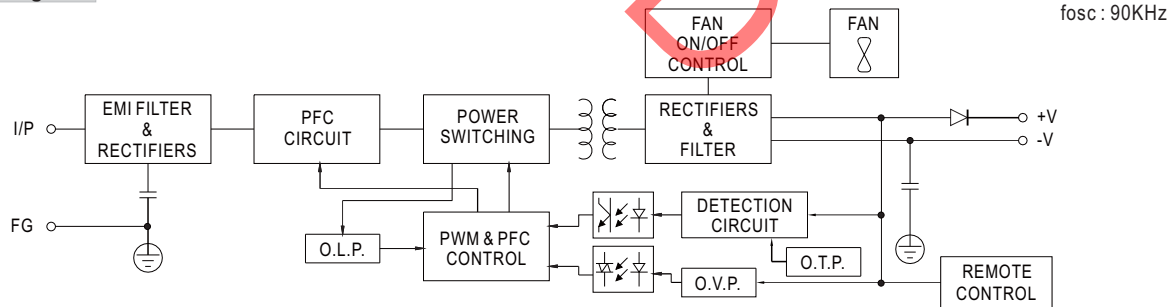
PIN NO.	OUTPUT
1,2	+V
3,4	-V

DC output connector (optional)

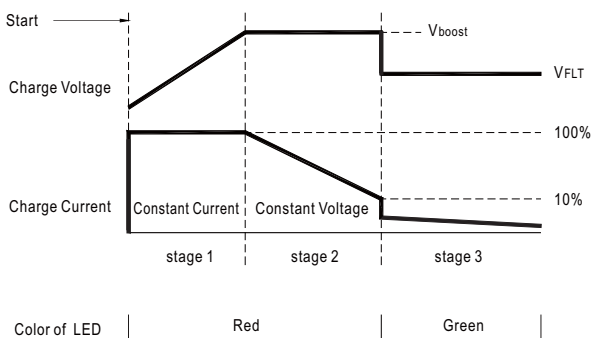
AD1
[housing: Anderson 1327FP(red), 1327G6FP(black)
contacts: Anderson 261G2 (45A) or equivalent]

Red(+V) [Red] Black(-V) [Black]

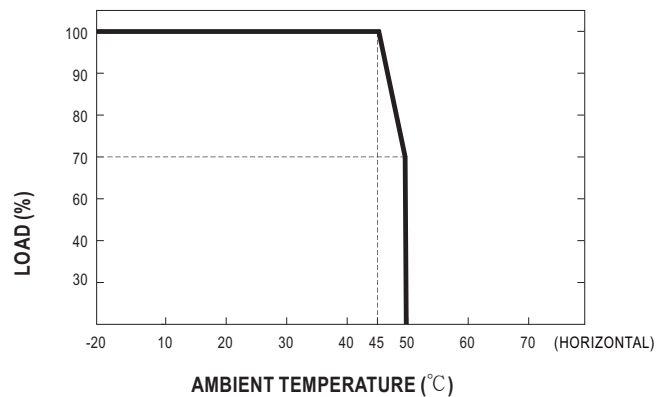
Block Diagram



Charging Curve



Derating Curve



State	PB-230-12□	PB-230-24□	PB-230-48□
V _{boost}	14.4V	28.8V	57.6V
V _{FLT}	13.6V	27.2V	54.4V