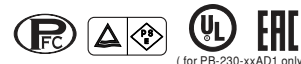




### ■ Features :

- 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



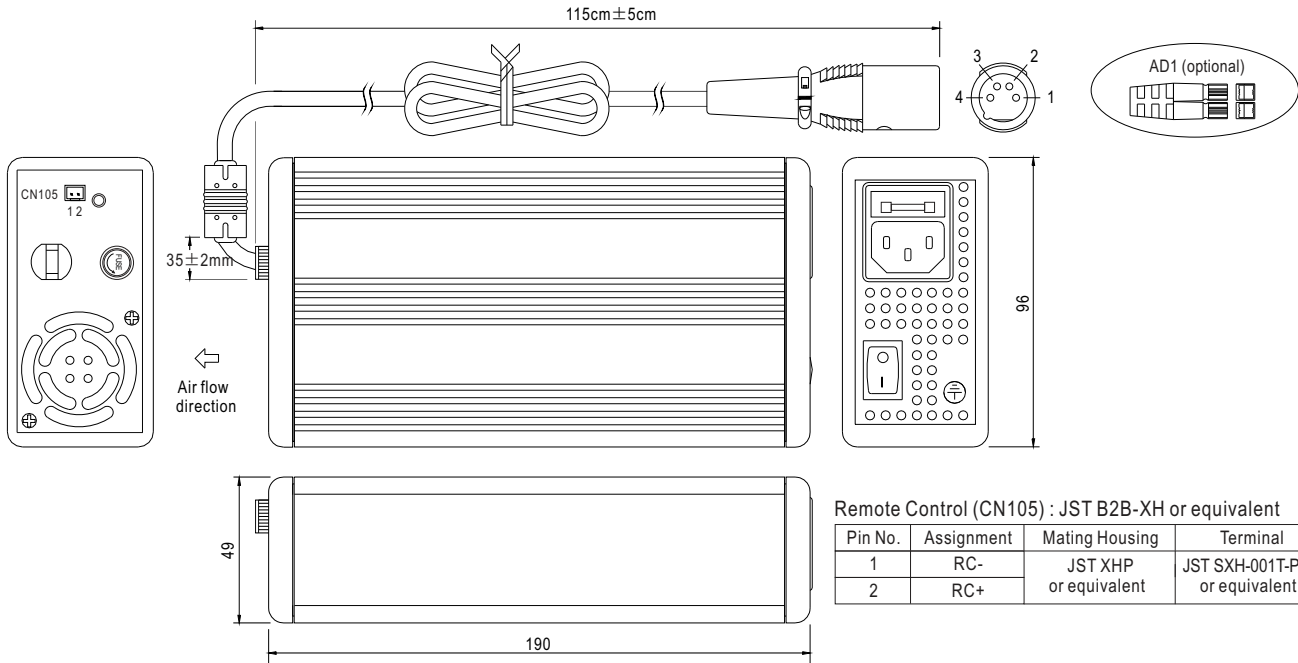
ORDER NO.	OUTPUT CONNECTOR	SAFETY
PB-230-xx (standard model)	4pin power din	
PB-230-xxAD1 (optional model)	Anderson connector	UL / EAC
PB-230-xx <input type="checkbox"/> xx=12,24,48 ; <input type="checkbox"/> =Blank, AD1		

### SPECIFICATION

MODEL	PB-230-12 <input type="checkbox"/>	PB-230-24 <input type="checkbox"/>	PB-230-48 <input type="checkbox"/>	
OUTPUT	<b>BOOST CHARGE VOLTAGE</b>	14.4V	28.8V	57.6V
	<b>FLOAT CHARGE VOLTAGE</b>	13.6V	27.2V	54.4V
	<b>RECOMMENDED BATTERY CAPACITY(AMP HOURS)(Note 5)</b>	50 ~ 160Ah	24 ~ 80Ah	12 ~ 40Ah
	<b>BATTERY TYPE</b>	Open & Sealed Lead Acid		
	<b>OUTPUT CURRENT</b>	16A	8A	4A
INPUT	<b>VOLTAGE RANGE</b>	90 ~ 264VAC 127 ~ 370VDC		
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz		
	<b>POWER FACTOR (Typ.)</b>	PF>0.95/230VAC PF>0.98/115VAC at full load		
	<b>EFFICIENCY (Typ.)</b>	81.5%	85.5%	86%
	<b>AC CURRENT (Typ.)</b>	3A/115VAC 1.5A/230VAC		
	<b>INRUSH CURRENT (Typ.)</b>	COLD START 50A		
	<b>LEAKAGE CURRENT</b>	<3.5mA / 240VAC		
PROTECTION	<b>OVERLOAD</b>	90 ~ 110% rated output current Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	<b>OVER VOLTAGE</b>	16 ~ 18V	31 ~ 35V	59 ~ 64V
	<b>OVER TEMPERATURE</b>	Protection type : Shut down o/p voltage, re-power on to recover		
FUNCTION	<b>REMOTE CONTROL (CN105)</b>	Open: Normal work Short: Stop Charging		
	<b>FAN CONTROL</b>	RTH3 ≥ 50°C Fan ON, ≤ 45°C Fan OFF (Typ.)		
	<b>TEMPERATURE SENSE</b>	By NTC		
ENVIRONMENT	<b>WORKING TEMP.</b>	-20 ~ +50°C (Refer to "Derating Curve")		
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing		
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +85°C, 10 ~ 95% RH		
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)		
SAFETY & EMC (Note 4)	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
	<b>SAFETY STANDARDS</b>	UL1012, EAC TP TC 004 (for PB-230-xxAD1 only), PSE J60950-1 approved		
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	<b>EMC EMISSION</b>	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020		
OTHERS	<b>EMC IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A, EAC TP TC 020		
	<b>MTBF</b>	244.5Khrs min. MIL-HDBK-217F (25°C)		
	<b>DIMENSION</b>	190*96*49mm(L*W*H)		
CONNECTOR	<b>PACKING</b>	1.21Kg; 12pcs/15.5Kg/1.29CUFT		
	<b>PLUG</b>	See page 2 ; Other type available by customer requested		
NOTE	<b>CABLE</b>	See page 2 ; Other type available by customer requested		
	<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 &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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>			

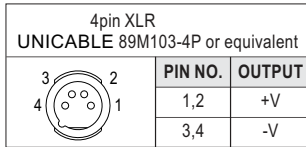
**Mechanical Specification**

Case No. PB-230A Unit:mm



**Plug Assignment**

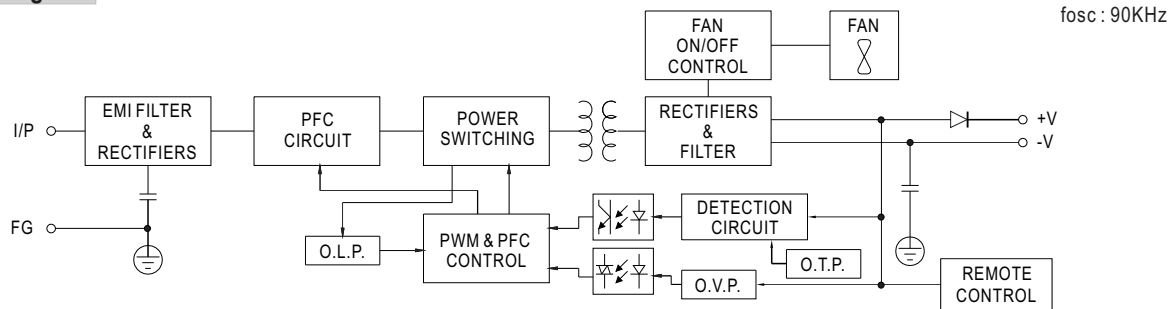
DC output connector (standard)



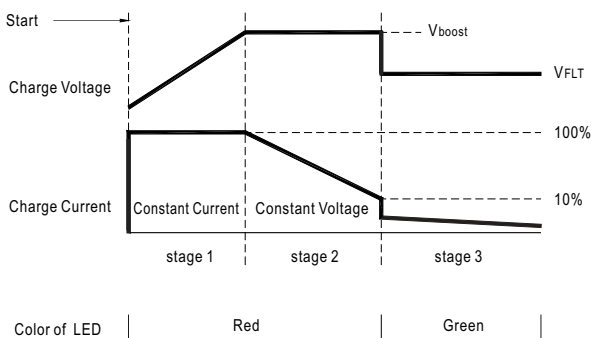
DC output connector (optional)



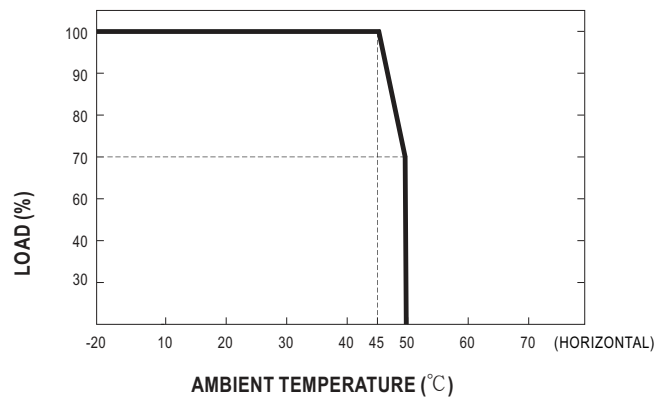
**Block Diagram**



**Charging Curve**



**Derating Curve**



State	PB-230-12□	PB-230-24□	PB-230-48□
Vboost	14.4V	28.8V	57.6V
VFLT	13.6V	27.2V	54.4V