



■ 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



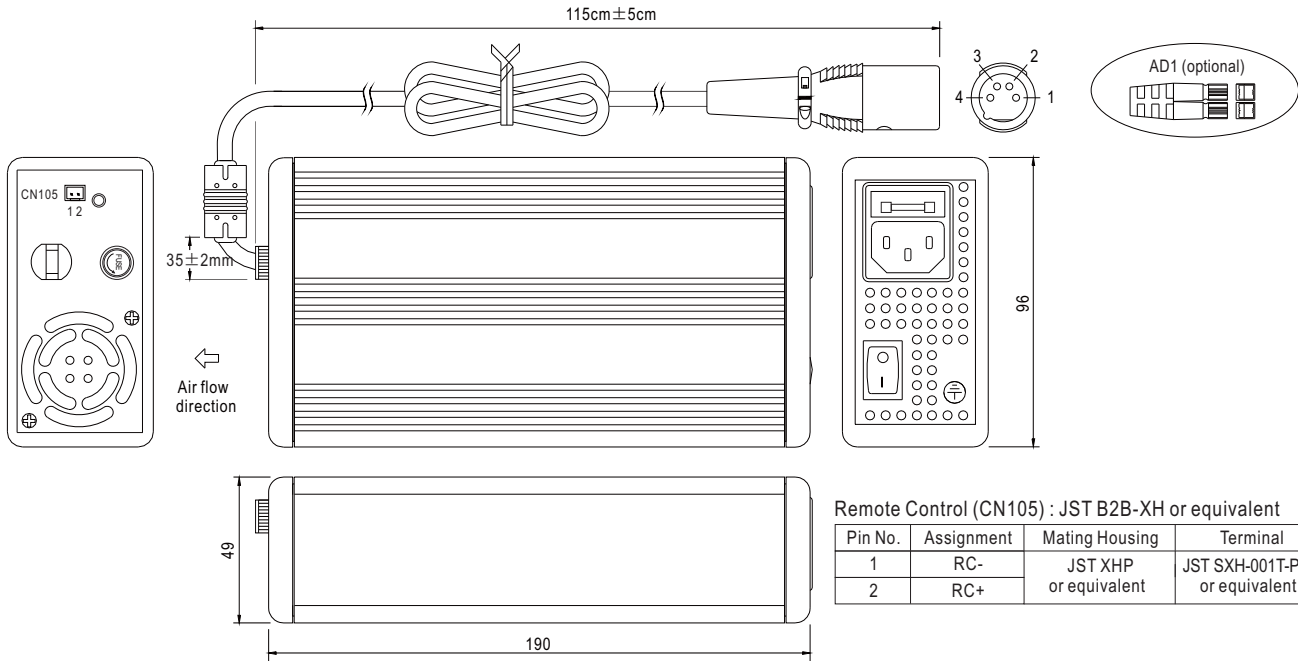
| ORDER NO. | OUTPUT CONNECTOR | SAFETY |
|--|--------------------|----------|
| PB-230-xx (standard model) | 4pin power din | TUV / CE |
| PB-230-xxAD1 (optional model) | Anderson connector | UL / EAC |
| PB-230-xx□ xx=12,24,48 ; □ =Blank, AD1 | | |

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) | 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 | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A, EAC TP TC 020 | | |
| OTHERS | MTBF | 244.5Khrs min. MIL-HDBK-217F (25°C) | | |
| | DIMENSION | 190*96*49mm(L*W*H) | | |
| | PACKING | 1.21Kg; 12pcs/15.5Kg/1.29CUFT | | |
| CONNECTOR | PLUG | See page 2 ; Other type available by customer requested | | |
| | CABLE | See page 2 ; Other type available by customer requested | | |
| NOTE | <ol style="list-style-type: none"> 1. Modification for charger specification may be required for different battery specification. Please contact MEAN WELL for details. 2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. 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). | | | |

■ Mechanical Specification

Case No. PB-230A Unit:mm



■ Plug Assignment

DC output connector (standard)

4pin XLR
UNICABLE 89M103-4P or equivalent

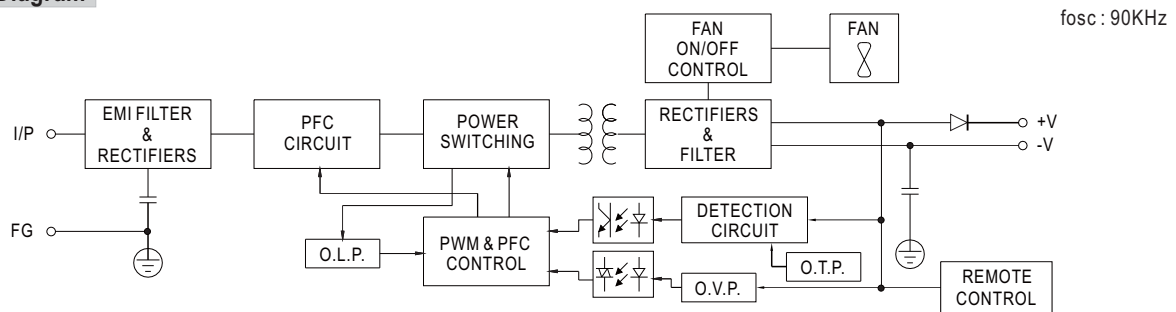
| PIN NO. | OUTPUT |
|---------|--------|
| 1,2 | +V |
| 3,4 | -V |

DC output connector (optional)

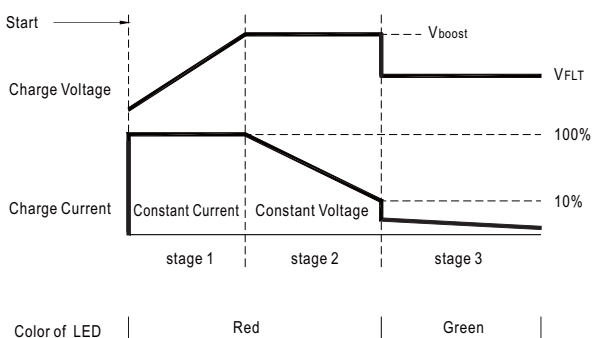
AD1
[housing: Anderson 1327FP(red), 1327G6FP(black)
contacts: Anderson 261G2 (45A) or equivalent]

Red(+V) Black(-V)

■ Block Diagram



■ Charging 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 |

■ Derating Curve

