



### ■ 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 BS EN/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



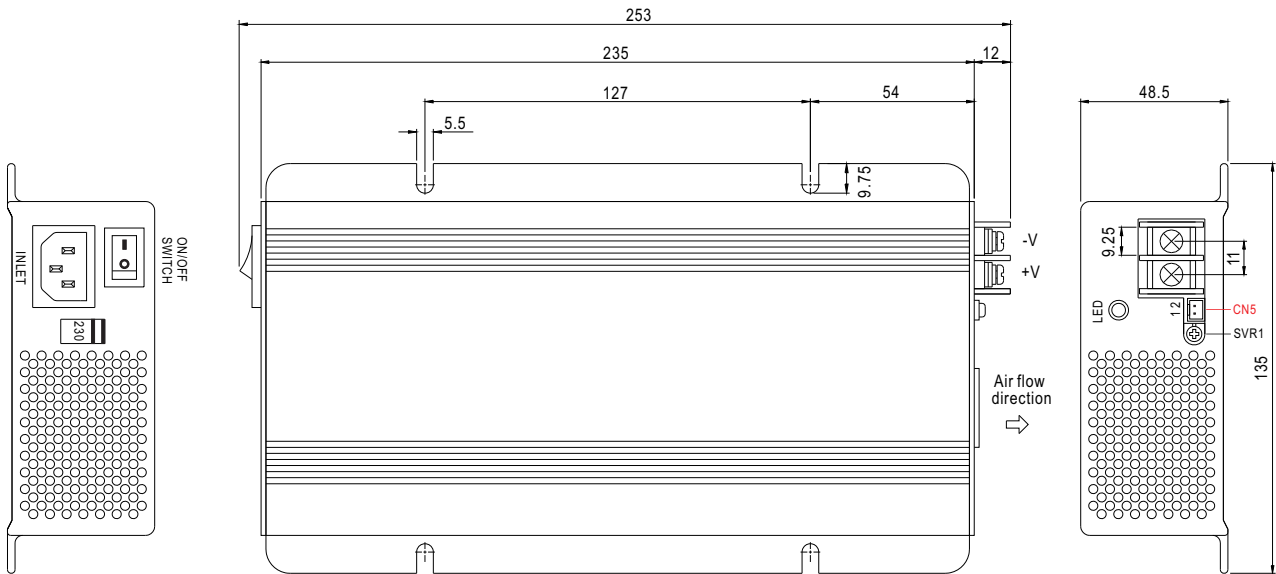
|   |   |   |
|---|---|---|
| PB - 300 <span style="border: 1px solid black; padding: 2px;">P</span> - 12 |   |   |
| P: With Passive PFC<br>N: Without Passive PFC                               | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <span style="border: 1px solid black; padding: 2px;">P</span> </div> <div style="text-align: center;"> <span style="border: 1px solid black; padding: 2px;">- 12</span> </div> </div> | <b>12:14.4V</b><br><b>24:28.8V</b><br><b>48:57.6V</b> |

### SPECIFICATION

| MODEL                                | PB-300 <span style="border: 1px solid black; padding: 2px;"> </span> -12  | PB-300 <span style="border: 1px solid black; padding: 2px;"> </span> -24  | PB-300 <span style="border: 1px solid black; padding: 2px;"> </span> -48 |                             |
|--------------------------------------|---|---|--|-----------------------------|
| OUTPUT                               | BOOST CHARGE VOLTAGE V <sub>boost</sub>   | 14.4V   | 28.8V  | 57.6V                       |
|                                      | FLOAT CHARGE VOLTAGE V <sub>float</sub>   | 13.6V   | 27.2V  | 54.4V                       |
|                                      | VOLTAGE ADJUSTABLE RANGE  | 13 ~ 14.7V  | 26 ~ 28.8V   | 52 ~ 58.6V                  |
|                                      | RECOMMENDED BATTERY CAPACITY(AMP HOURS) <small>Note 6</small>   | 60 ~ 200Ah  | 30 ~ 100Ah   | 15 ~ 50Ah                   |
|                                      | BATTERY TYPE  | Open & Sealed Lead Acid   |  |                             |
|                                      | MAX. OUTPUT CURRENT(Typ.) <small>Note 8</small>   | 20.85A  | 10.5A  | 5.3A                        |
|                                      | CONTINUOUS OUTPUT CURRENT (Typ.) <small>Note 7</small>  | 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                    |
|                                      | OVER TEMPERATURE  | Protection type : Shut down o/p voltage, re-power on to recover   |  |                             |
| FUNCTION                             | REMOTE CONTROL (CN5)  | Open: Normal work      Short: Stop Charging   |  |                             |
|                                      | WORKING TEMP.   | -10 ~ +50°C (Refer to "Derating Curve")   |  |                             |
| ENVIRONMENT                          | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |  |                             |
|                                      | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C , 10 ~ 95% RH non-condensing  |  |                             |
|                                      | TEMP. COEFFICIENT   | ±0.05%/°C (0 ~ 45°C)  |  |                             |
|                                      | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes  |  |                             |
| SAFETY & EMC <small>(Note 5)</small> | SAFETY STANDARDS  | IEC60335-2-29 CB approved by TUV(except for 48V), UL62368-1, CSA C22.2 No. 62368-1, EAC TP TC 004 approved, Design refer to BS EN/EN62368-1 for P type only |  |                             |
|                                      | 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°C / 70% RH  |  |                             |
|                                      | EMC EMISSION  | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3 (only P type), EAC TP TC 020  |  |                             |
|                                      | EMC IMMUNITY  | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, light industry level, criteria A, EAC TP TC 020  |  |                             |
| OTHERS                               | MTBF  | 115.8Khrs min.      MIL-HDBK-217F (25°C)  |  |                             |
|                                      | DIMENSION   | 253*135*48.5mm(L*W*H)   |  |                             |
|                                      | PACKING   | 1.45Kg; 6pcs/9.7Kg/1.03CUFT   |  |                             |
| NOTE                                 | <ol style="list-style-type: none"> <li>Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.</li> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>This is Mean Well's suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.</li> <li>Test condition is at 25°C, charging current will change under different temperature.</li> <li>Maximum charging current will be in the range of 90~110% rated output current.</li> <li>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).</li> </ol> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |   |  |                             |

**Mechanical Specification**

Case No.801B Unit:mm

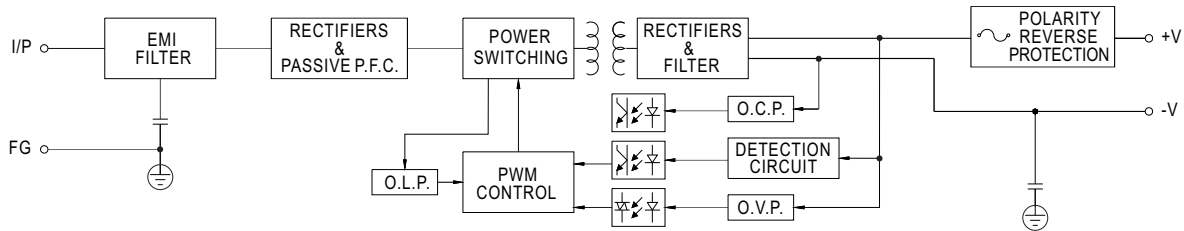


Remote Control(CN5) : JST B2B-XH or equivalent

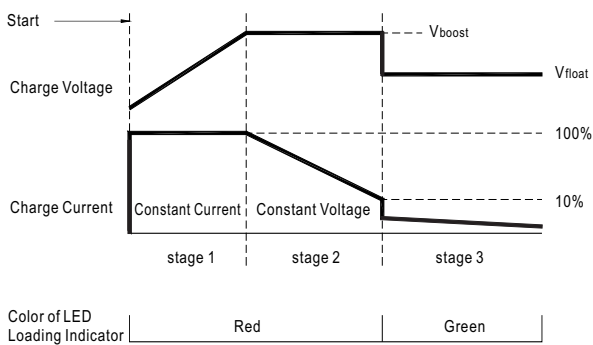
| Assignment                  | Mating Housing        | Terminal                        |
|-----------------------------|-----------------------|---------------------------------|
| PIN1,2 Open: Normal work    | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| PIN1,2 Short: Stop Charging |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

**Block Diagram**

fosc : 70KHz

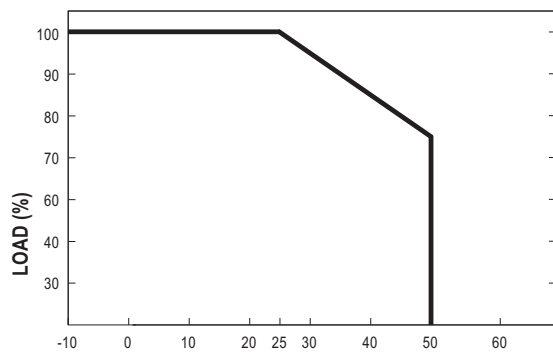


**Charging Curve**



| 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**



EXTERNAL CASE TEMPERATURE (°C)