

### Features:

1. Extra wide input voltage range (300-1500VDC)
2. Size: 201\*68\*35mm
3. Protection type: over load/short circuit/over voltage
4. Operating temperature range -40°C to +70°C
5. 3000V isolation voltage
6. Support PS-ON function optional
7. Designed for PV power generation, wind power generation and other supporting equipment
8. 100% high temperature aging and testing
9. 3 years warranty



3 years  
Warranty

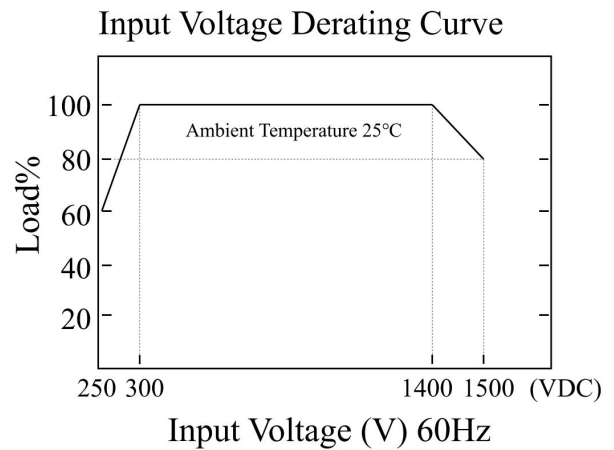
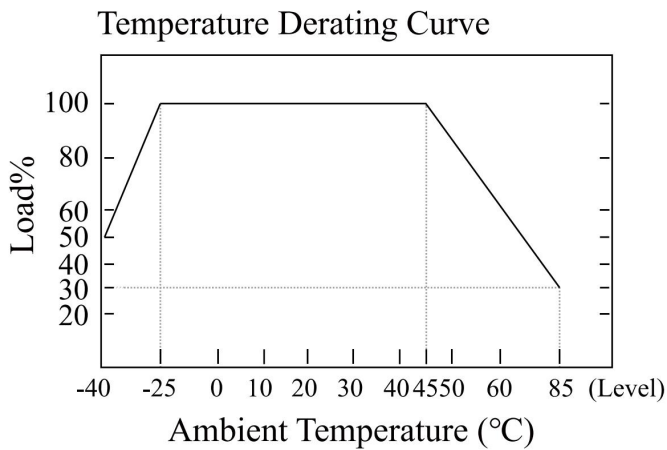
### Selection Guide

| Model              | Input Voltage        | Rated Power (W) | Output Voltage (V) | Output Current (A) | Maximum Capacitive Load (uF) | Ripple & Noise (mVp-p) | Efficiency (%) |
|--------------------|----------------------|-----------------|--------------------|--------------------|------------------------------|------------------------|----------------|
| PV-DU150-900S24G-L | 900VDC<br>(250-1500) | 150             | 24                 | 6.25               | 1500                         | 150                    | 89             |
| PV-DU150-900S28G-L |                      | 150             | 28                 | 5.35               | 1500                         | 150                    | 88             |
| PV-DU150-900S32G-L |                      | 150             | 32                 | 4.68               | 1500                         | 150                    | 91             |

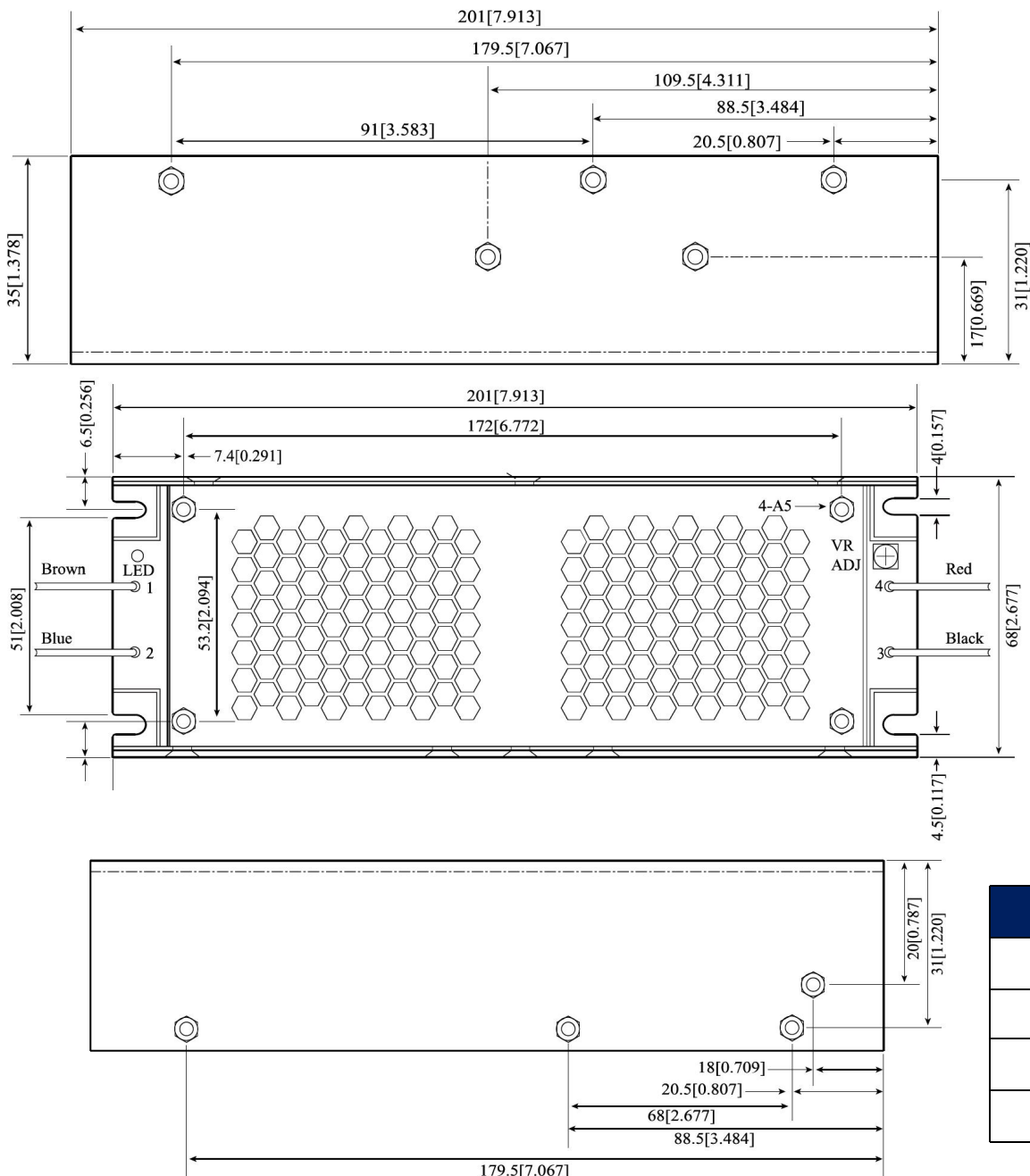
## Specifications

|                        |  |  |        |        |        |
|------------------------|--|--|--------|--------|--------|
| OUTPUT                 | Voltage Tolerance  | ±2.0%  |        |        |        |
|                        | Line Regulation  | ±1.0%  |        |        |        |
|                        | Load Regulation  | ±2.0%  |        |        |        |
|                        | Setup, Rise Time (Typ.)  | 2000ms, 20ms/900VDC at full load                           |        |        |        |
|                        | Hold Up Time (Typ.)  | 10ms/900VDC at full load                                   |        |        |        |
| INPUT                  | Voltage Range  | 250-1500VDC  |        |        |        |
|                        | Nominal Voltage  | 900VDC   |        |        |        |
|                        | Current (Typ.)   | 0.2A/900VDC  |        |        |        |
|                        | Inrush Current (Typ.)  | 100A/800VDC 200A/1500VDC                                   |        |        |        |
|                        | External Fuse Recommended  | 4A/1500VDC   |        |        |        |
|                        | Hot Plug   | Not supported  |        |        |        |
| PROTECTION             | Over Load  | ≥110% load, self-recovery after troubleshooting            |        |        |        |
|                        | Short Circuit  | Hiccup mode, self-recovery after troubleshooting           |        |        |        |
|                        | Over Temperature   | Output off and can be recovered after power restart        |        |        |        |
|                        | Over Voltage   | Output off   |        |        |        |
|                        |  | Voltage  | 24VDC  | 28VDC  | 32VDC  |
|                        |  | Range  | ≤30VDC | ≤36VDC | ≤40VDC |
| ENVIRONMENT            | Working Temp.  | -40°C to +85°C (Refer to "Derating curve")                 |        |        |        |
|                        | Working Humidity   | 85%RH max  |        |        |        |
|                        | Storage Temp., Humidity  | -40°C to +85°C, 10-95%RH                                   |        |        |        |
|                        | Temp. Coefficient  | 0.03%/ (0-50°C)  |        |        |        |
|                        | Vibration  | 10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes |        |        |        |
| SAFETY & EMC (NOTE 3.) | Safety Standards   | UL1012, EN62368, UL62368                                   |        |        |        |
|                        | Isolation Voltage  | I/P-O/P: 4000VAC I/P-FG: 3000VAC O/P-FG: 3000VAC           |        |        |        |
|                        | Isolation Resistance   | I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH     |        |        |        |
|                        | EMC Emission & Immunity  | EN55011, EN55032 (CISPR32)                                 |        |        |        |
|                        | ESD  | IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV            |        |        |        |
|                        | RF   | IEC/EN 61000-4-3   |        |        |        |
|                        | EFT  | IEC/EN 61000-4-4 level 4 2kV                               |        |        |        |
|                        | Surge  | IEC/EN 61000-4-5 level 4 1kV/2kV                           |        |        |        |
| OTHERS                 | MTBF   | 1000K hrs min. MIL-HDBK-217F (25°C)                        |        |        |        |
|                        | Dimension  | 201*68*35mm (L*W*H)  |        |        |        |
| NOTE                   | 1. All parameters not specially mentioned, are measured when TA=25°C, humidity<75%, input nominal voltage and output rated load.   |  |        |        |        |
|                        | 2. Measurement method of ripple & noise: Parallel line test method shall be adopted. Meanwhile, 0.1uF high-frequency ceramic capacitor and one 47uF electrolytic capacitor shall be connected in parallel at the terminal for measurement under 20Mhz bandwidth. |  |        |        |        |
|                        | 3. The power supply is regarded as a component in the system, and electromagnetic compatibility shall be confirmed in combination with the terminal equipment.   |  |        |        |        |

### Derating Curve



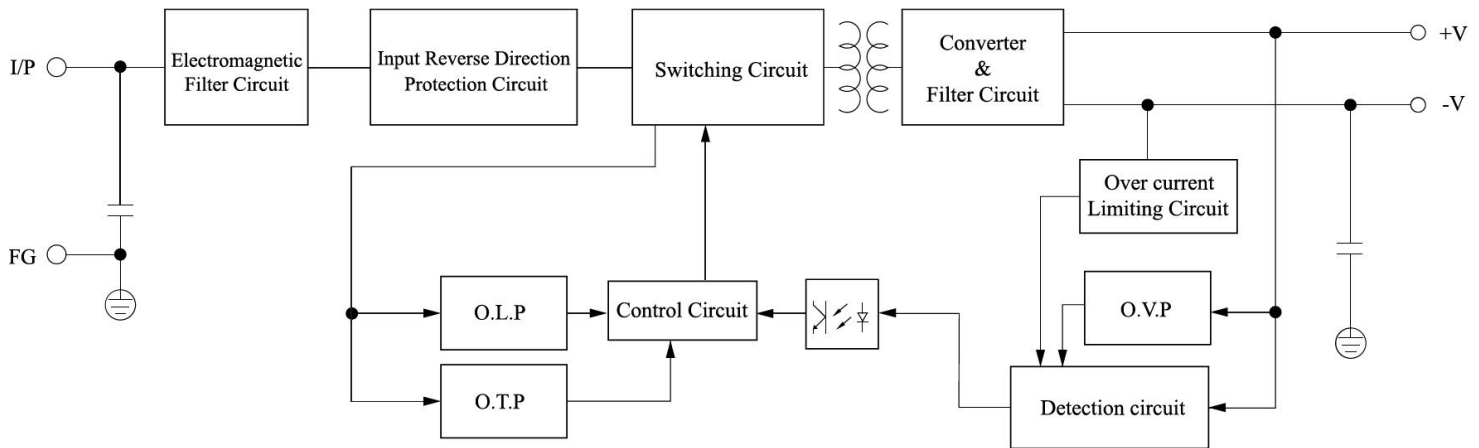
### Dimensions & Function



| Pin | Function |
|-----|----------|
| 1   | +Vin     |
| 2   | -Vin     |
| 3   | -Vo      |
| 4   | +Vo      |

NOTE: Unit size: mm[inch] Unmarked tolerances:  $\pm 0.5\text{mm}$

## Product Schematic



### Notes:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at  $T_a=25^{\circ}\text{C}$ , humidity  $<75\%\text{RH}$ , nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. AMCHARD reserves the right to make changes to the product at any time without notice.