

## ARPV-SS12200 (12V, 16.7A, 200W)

## ARPV-SS24200 (24V, 8.3A, 200W)

### FEATURES

- High efficiency 91%
- Smaller size
- Economical design
- Protections: Short-circuit /Over-load /Over-voltage/
- Over-temperature / Lightning protection (Alternative)
- Working temperature : -18°C ~ + 70°C
- IP67 design
- 2~3 times burn-in tests (+50°C/-40°C at full load with over 14 hours)



### SPECIFICATION

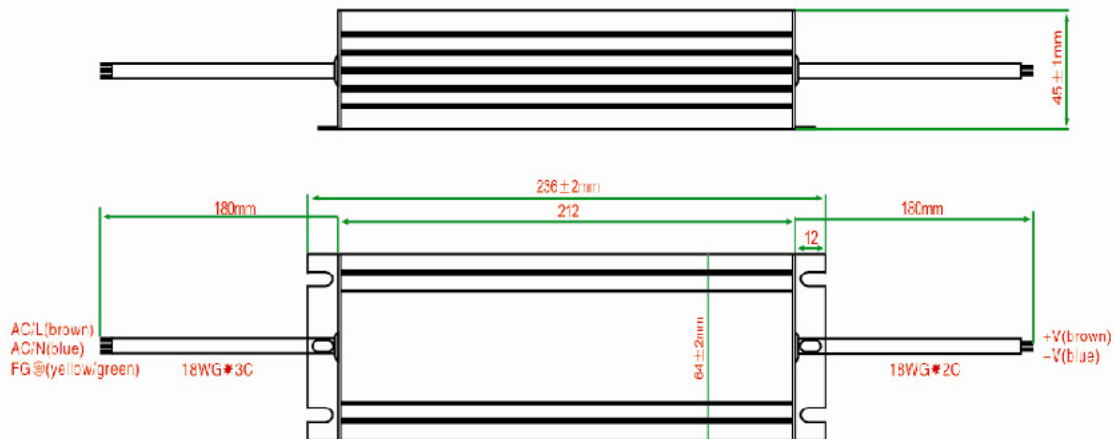
| Model               |                                    | ARPV-SS12200  | ARPV-SS24200 |
|---------------------|------------------------------------|---|--------------|
| Input               | Voltage Range                      | 90~130VAC/170~250VAC  |              |
|                     | Frequency Range                    | 47~63Hz   |              |
|                     | Efficiency (Note 3)                | 87.5%   | 89%          |
|                     | AC Current                         | 2.5A ~ 0.83A  |              |
|                     | Inrush Current                     | Cold Start at 70A/230VAC, Input at Ta: 25°C cold start.                   |              |
|                     | Leakage Current                    | <0.5mA at 230VAC, 60Hz Input  |              |
| Output              | Rated Voltage (Note 1)             | 12VDC   | 24VDC        |
|                     | Output Current Range               | 0 ~ 16.7A   | 0 ~8.33A     |
|                     | Rated Power                        | 200W  | 200W         |
|                     | Ripple and Noise (Max)(Note 2)     | 120mVp-p  | 150mVp-p     |
|                     | Voltage Tolerance                  | ±3.0%   | ±3.0%        |
|                     | Line Regulation                    | ±1%   | ±1%          |
|                     | Load Regulation                    | ±1.0%   | ±1.0%        |
|                     | Set-up, Rise Time                  | 1500ms 80ms/230VAC, 2000ms 80ms/110VAC                                    |              |
|                     | Hold-up Time                       | 50ms/230VAC at full load, 25ms/110VAC at full load                        |              |
| Protection          | Over-Voltage                       | 110% ~ 130% (Shut down O/P voltage, repower on to recover)                |              |
|                     | Over-load                          | 130% ~ 150% (Shut down O/P voltage, repower on to recover)                |              |
|                     | Short Circuit                      | Hiccup mode, recovers automatically after faulty problem is removed       |              |
|                     | Lightning Protection (Alternative) | Gas discharge tube automatically open to discharge, repower on to recover |              |
|                     | Over-temperature                   | 85°C±10°C (Shut down O/P voltage, re-power on to recover)                 |              |
| Working Environment | Working Environment (Note 4)       | -18°C ~ +70°C   |              |
|                     | Working Humidity                   | 20~90% RH non-condensing  |              |
|                     | Storage Environment & Humidity     | -40°C ~ +80°C   |              |
|                     | TEMP. Coefficient                  | ±0.05%/°C (0~50°C)  |              |
|                     | Vibration                          | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |

|                         |                           |   |
|-------------------------|---------------------------|---|
| <b>Safety &amp; EMC</b> | Safety standards          | EN-61347-1, EN61347-2-13, IP67, ROHS Tests, Design refer to UL8750                      |
|                         | Withstand voltage         | I/P-O/P: 3KVAC, IP-FG:1.5KVAC, OP-FG: 500VAC  |
|                         | Isolation resistance      | I/P-O/P IP-FG OP-FG: 100M Ohms/500VDC / 25°C / 70% RH                                   |
|                         | EMC Emission              | Compliance to EN55015: 2007, EN61547:1995+A1:2000; EN61000-3-2: 2006; EN61000-3-3: 2008 |
|                         | EMC Immunity              | Compliance to EN55015 EN61547 EN61000-4-2,3,4,5,6,8,11                                  |
| <b>Others</b>           | Life Span (Note 5)        | ≥50000Hrs (25~30°C)   |
|                         | No Load power consumption | ≤3.0W   |
|                         | MTBF (Note 6)             | 250K hrs min, MIL-HDBK-217F (25°C )   |
|                         | Dimension (Note 7)        | 236*64*45 mm (L*W*H)  |
|                         | Packing (Note 8)          | 15pcs/Carton  |
|                         | Weight                    | 1.15Kg/pc   |

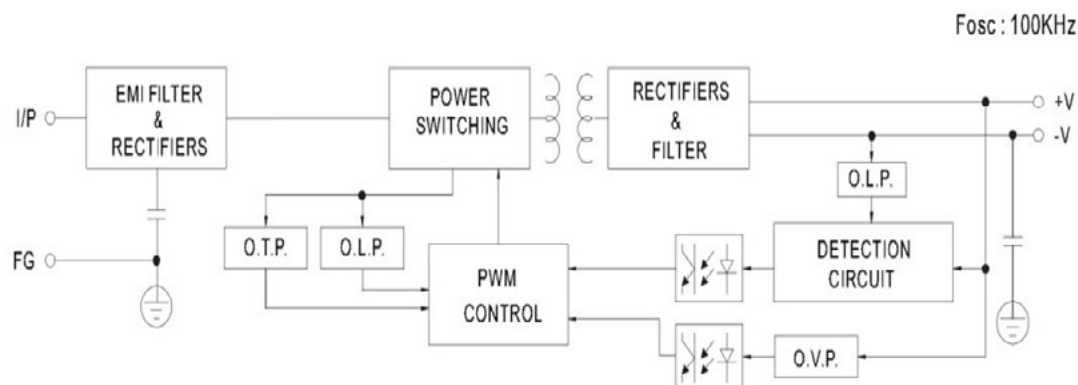
All parameter are measured at normal temperature (+25 ~ +28°C)

1. The rated voltage can be customized, such as 18V/27V... can be customized
2. Ripple & Noise are measured at 20KHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uf & 47uf parallel capacitor (at full load)
3. The efficiency measured at Max output voltage, and 230VAC with full load, if with 110VAC the efficiency will be lowered 1% ~ 2%; Working 1~2 hours, efficiency will be higher 0.5% ~ 1% than the initial stage
4. This measured at 120VAC, 80% ~85% load with environmental temperature about +25°C~+30°C, the outer housing temperature with +55°C or so.
5. This measured at 120VAC, 80% ~85% load with environmental temperature about +25°C~+30°C, the outer housing temperature with +55°C or so.
6. More details see the following mechanical draft.
7. The 15pcs packing method is not suitable for led drivers with waterproof connector

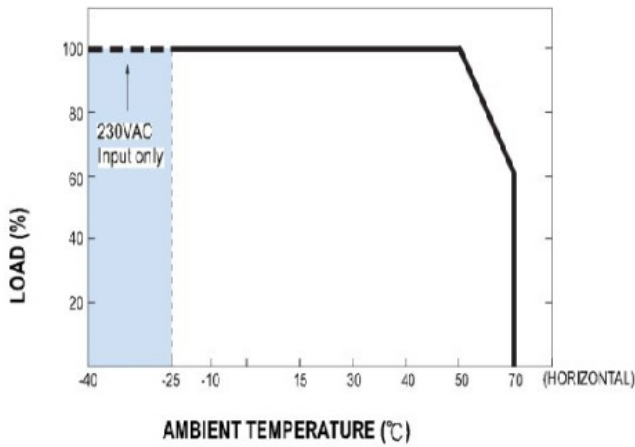
## MECHANICAL SPECIFICATION



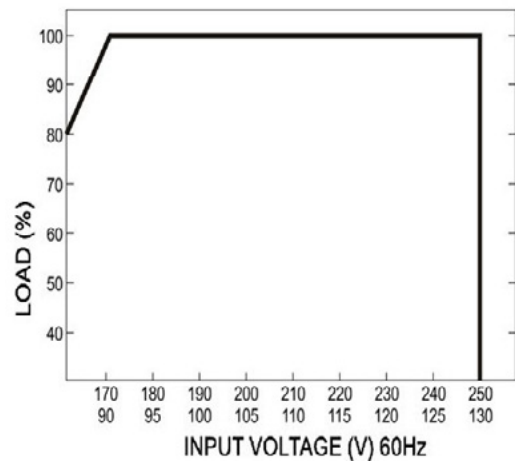
## BLOCK DIAGRAM



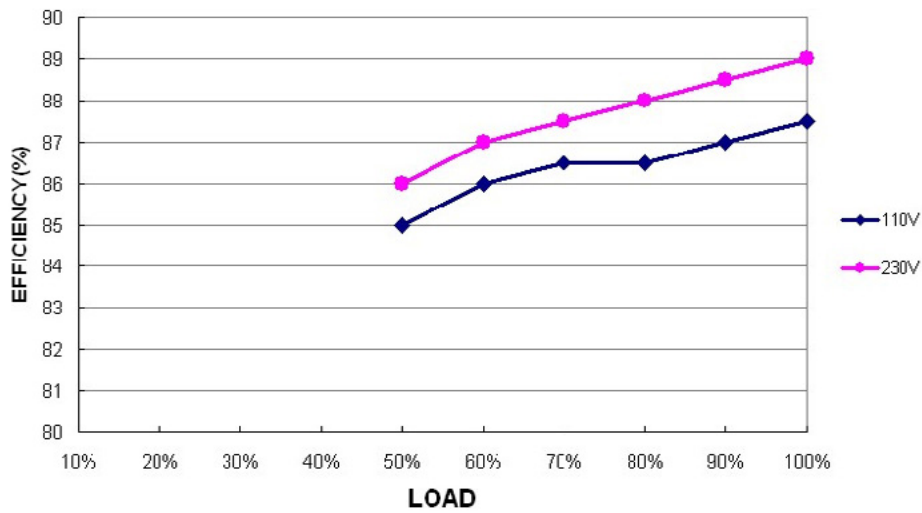
**DERATING CURVE**



**STATIC CHARACTERISTICS**



**EFFICIENCY & LOAD OF (48V) (110VAC / 230VAC)**



**WATERPROOF CONNECTOR (ALTERNATIVE OR CUSTOMIZED)**

The waterproof connector is usually used to easily assemble and replace in projects. It have waterproof performance when in use.

The type of connector can be customized or customer can independently buy in the market

