

# PV-LGxx300 xxx 300W, PFC)

## Features

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built\_in active PFC function
- Fully encapsulated with IP67 level
- UL60950 Class 2 power unit, pass LPS
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Damp / wet location outdoor application
- 2 years warranty

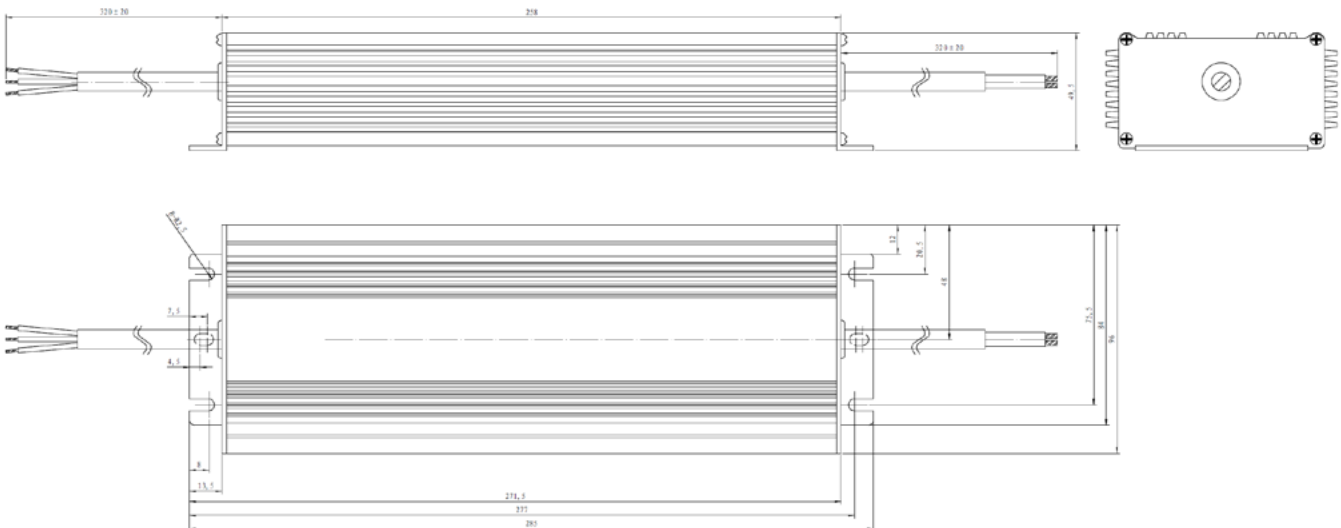


## Specification

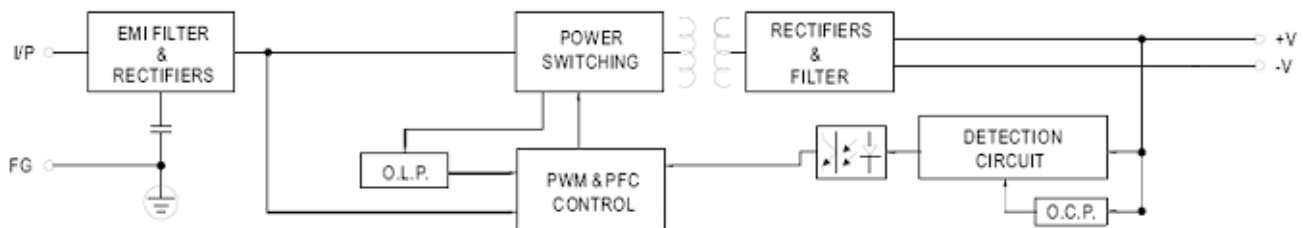
| OUTPUT     | MODEL                    | LGA300P-12  | LGA300P-24 |  |
|------------|--------------------------|---|------------|--|
|            | DC VOLTAGE               | 12V   | 24V        |  |
|            | RATED CURRENT            | 25A   | 12.5A      |  |
|            | RATED POWER              | 300W  |            |  |
|            | RIPPLE & NOISE (max.)    | max:3% VO Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.  |            |  |
|            | VOLTAGE TOLERANCE        | ±3.0%   |            |  |
|            | LINE REGULATION          | ±1.0%   |            |  |
|            | LOAD REGULATION          | ±2.0%   |            |  |
|            | SETUP,RISE TIME          | 1000ms, 80ms / 230VAC 1000ms, 80ms / 115VAC at full load  |            |  |
|            | HOLD UP TIME (Typ.)      | 60ms / 230VAC 30ms / 115VAC at full load  |            |  |
| INPUT      | VOLTAGE RANGE            | 100 ~ 240VAC  |            |  |
|            | FREQUENCY RANGE          | 47~63Hz   |            |  |
|            | POWER FACTOR             | PF>0.95/230VAC PF>0.98/115VAC at full load PF≥0.9 at 75 ~ 100% load, 115VAC / 230VAC  |            |  |
|            | EFFICIENCY(Typ.)         | 87%   | 88%        |  |
|            | AC CURRENT(at full load) | 3.1A / Measured at full load and 115 Vac input.<br>1.55A / Measured at full load and 230 Vac input.   |            |  |
|            | INRUSH CURRENT (max.)    | 65A<br>At 230Vac input 25 Cold Start  |            |  |
|            | LEAKAGE CURRENT          | <1mA / 240VAC   |            |  |
| PROTECT ON | OVER CURRENT             | 95 ~ 108%<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed                             |            |  |
|            | SHORT CIRCUIT            | Hiccup mode, recovers automatically after fault condition is removed  |            |  |
|            | OVER VOLTAGE             | 14.4~18V  | 29~36V     |  |
|            |                          | Protection type : Shut down o/p voltage, re-power on to recover   |            |  |
|            | OVER TEMPERATURE         | Tj 140 typically(U1) Detect on main control IC<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |            |  |

|              |                            |   |
|--------------|----------------------------|---|
| ENVIRONMENT  | WORKING TEMP.              | -30 ~ +50 @ full load ; +70 @ 50% load  |
|              | WORKING HUMIDITY           | 20~95% RH non-condensing  |
|              | STORAGE TEMP., HUMIDITY    | -40~80°C, 10~95% RH   |
|              | TEMP.COEFFICIENT           | ±0.03%/°C (0~50°C)  |
|              | VIBRATION                  | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes                               |
| SAFETY & EMC | SAFETY STANDARDS           | Design refer to UL1310 Class 2, TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91, meet IP67     |
|              | WITHSTAND VOLTAGE          | I/P-O/P:3.0KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC   |
|              | ISOLATION RESISTANCE       | I/P-O/P:>100M Ohms / 500VDC / 25~70% RH   |
|              | EMI CONDUCTION & RADIATION | Compliance to EN55015, EN55022 (CISPR22) Class B  |
|              | HARMONIC CURRENT           | Compliance to EN61000-3-2 Class C ( ≥75% load) ; EN61000-3-3  |
|              | EMS IMMUNITY               | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level , criteria A |
|              | DIMENSION                  | 285x96x49.5mm (LxWxH)   |

## Mechanical specification



## Block Diagram



## Derating Curve:

