

| Customer: | Date: |  |
|-----------|-------|--|
| Project:  |       |  |



# **POWER SUPPLY**

PS-012-300VTD



















## **TEMPERATURES**

## **WORKING TEMPERATURE:**

-40°F to 140°F (-40°C to 60°C) Cooling by free air convection

### WORKING HUMIDITY:

20-95% RH, Non-Condensing

## FIXTURE STORAGE TEMPERATURE:

-40°F to 176°F (-40°C to 80°C) Humidity 10-95% RH

# TEMPERATURE COEFFICIENT:

±0.03%/°C (0°C-50°C)

#### **CERTIFICATIONS & FEATURES**



DIAGRAM

3.07in (78mm)





10.87in (276mm) 10.39in (264mm) 9.92in (252mm)

# **CONSTANT VOLTAGE DIMMABLE LED DRIVER**

| OUTPUT             |       |  |
|--------------------|-------|--|
| Voltage Accuracy   | ±0.5V |  |
| Voltage Regulation | ±0.5% |  |
| Rated Current      | 25.0A |  |
| Load Regulation    | ±2%   |  |
| Rated Power        | 300W  |  |

#### INPUT

7.87in (200mm)

| Voltage Range                 | 100-277VAC                             |
|-------------------------------|--|
| Input Power                   | 345W@110VAC, 336W@230VAC, 334W@277VAC  |
| THD (Typ. @ Full Load)        | <20%                                   |
| AC Current (Max.)             | 3.4A                                   |
| Frequency Range               | 47–63Hz                                |
| Inrush Current                | 3.1A@110VAC, 1.5A@230VAC, 1.24A@277VAC |
| Leakage Current               | <0.50mA                                |
| Power Factor (Typ.)           | 0.98@120VAC, 0.97@277VAC               |
| Efficiency (Typ. @ Full Load) | 86%@120VAC / 88%@277VAC                |

# **PROTECTION**

| Over Temperature | 100°C±10°C shuts down o/p voltage, automatically recovers after cooling      |
|------------------|--|
| Short Circuit    | Shuts down o/p voltage, re-power to recover after fault condition is removed |
| Over Loading     | ≤120% constant current limiting, auto-recovery                               |

### **ENVIRONMENT**

| Vibration 10–500Hz, 5G, 10 min/cycle for 60 min on | X,Y,Z axes |
|--|------------|
|--|------------|

# **SAFETY & EMC**

| Safety Standards     | UL8750, CAN/CSA-C22.2 No. 250.13 |
|----------------------|----------------------------------|
| Withstand Voltage    | I/P-O/P: 1.88KVac                |
| Isolation Resistance | I/P-O/P: 100MΩ/500VDC/25°C/70%RH |
| EMC Emmission        | FCC 47 CFR Part 15, Subpart B    |

# Notes:

- 1. All parameters NOT specially mentioned are measured at 110V/ 277VAC input, rated load and 25°C of ambient temperature. 2. Tolerance: includes set us tolerance, line regulation and load regulation.
- The power supply is considered as a component that will be operated in combination with final equipment.
- Since EMC performance will be affected by the complete installation, the final equipment manufactures must be qualify EMC Directive on the complete installation again.

## OTHER INFORMATION

| Weight   | ~1.7Kg  |
|--|---|
| Enclosure Size (LxWxH)   | 7.4" x 3.72" x 1.57" (276mm x 78mm x 47mm) (L*W*H)  |
| Packaging  | 12.95" x 10.98" x 6.93" (329mm x 279mm x 176mm) (L*W*H) 10 pcs / CTN                      |
| Built-in PFC, Dimming Range,<br>Load Range, Location Suitability | Built-in PFC (PF>0.99) / Dimming range: 0-100% / Load: 10-100% / Dry, damp, wet locations |
| Dimming  | 0-10V/1-10V/Potentiometer/10V PWM/Phase-Cut (Forward, Reverse, MLV, ELV, TRIAC)           |



# **POWER SUPPLY**

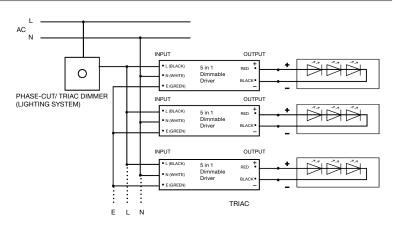
#### PS-012-300VTD



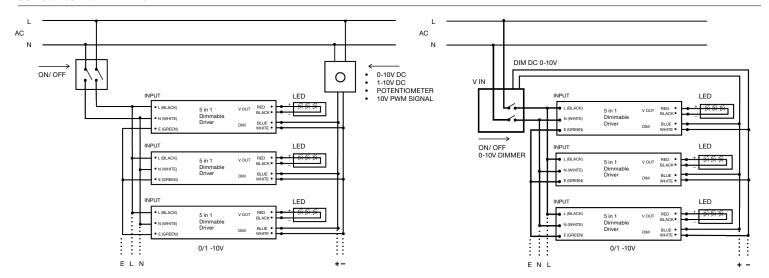
- Input cable 3\*18AWG,the green cable to (FG) "Black" to L ,and "White" to N of Mains AC.
- Output cable 2\*14AWG, "Red" (+) to LED Positive side (+), "Black"(-) to LED Negative side (-). Noted that 12V 300W is with 2 groups of 2\*14AWG output wires to separate
  the output current
- Dimming cable 2\*18AWG, DIM (+) Purple to 0/1-10V dimmer signal(+), DIM (-) Grey to 0/1-10V dimmer signal (-).
- Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
- · Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.

#### USING TRIAC/PHASE CUT DIMMING

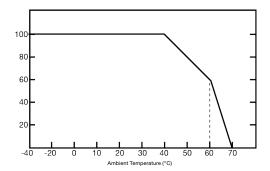
- The Pulse-Width Modulation (PWM) output voltage can be adjusted through the input terminal of the AC phase line (L) by connecting a phase/TRIAC dimmer (lighting system).
- Works with forward phase/leading edge, MLV and reverse phase/trailing edge, ELV, and TRIAC dimmers.
- Please try to use dimmers with power at least 1.5 times the output power of the driver
- 4. Min loading is about 10%.



### **USING 0-10 / 1-10V DIMMING**



#### **DERATING CURVE**



Load carried in accordance with the derating curve, according to the ambient temperature, in order to extend the working life.

#### INSTRUCTIONS

- 1. This driver should be installed by a qualified and professional person
- 2. Make sure the driver is installed with adequate ventilation to allow for heat dissipation
- Ensure all wiring is correct before testing in order to avoid light and power supply damage
- 4. If the dimmable LED drivers do not perform normally, do not maintain privately. Contact us at: support@glls.com or 1-888-580-6366

