

# L12V60UNV-Q

## 12 Volt 60 Watt Class 2 LED Driver

- ➤ Universal input voltage 120 277 Vac
- ➤ Dry, Damp and Wet Location Rated
- ➤ Class 2 Output



Performance	
Input Voltage	120 ~ 277 Vac
Input Current Max	0.58A /120V 0.26A/277V
Input Power Max	69W
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.90
THD max	< 10 %
Output Voltage	12 ± 5 %
Output Current	5.0 (A) max
Output Power	60 W max

Physical	
Length	12.13 in
Width	2.08 in
Height	1.54 in
Mounting Length	9.9 in w/ 0.9 in offset
Weight	1.7 lbs.
Lead Lengths	
Blk, Wht, Grn	24 in.
Red, Blk (PLTC Jacketed)	61 in.

Lead-wires are 18 AWG 105°C /600V solid copper.

## Protection

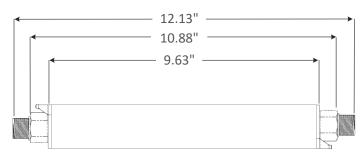
Over voltage, Overload and short circuit.

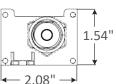
### Safety

UL 1012 & CSA107

## **Ordering Information**

Description	Qty/Carton
ndard Product	1 1
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Environmental		
FMI and RFI	Meets FCC part 15 (Class A)	
LIVII alla Ki i	Non-Consumer Limits	
Operating	-40°C to 55°C	
Temperature	(-40°F to 131°F)	
Ctarrage Tarrage returns	-40°C to 80°C	
Storage Temperature	(-40°F to 176°F)	
tc	80°C (176°F) max	
Location Rating	UL Dry, Damp, or Wet	
IP Rating	IP 67	

## Wiring Diagram:

<u>Inp</u>	<u>out</u>		<u>Output</u>	
Line	Black		Red	
		LED Driver	Positive	LED
Neutral	White	LED DIIVei	Black	Chains
			Negative	
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# L12V60UNV-Q

(Recognized Component Driver – Referred to when used in a Light Fixture)

Conditions of Acceptability -

- 1. The drivers shall be installed in compliance with the applicable requirements of the end-product standard for, mounting, spacing, casualty and segregation
- 2. The maximum available output parameters were within the maximum allowable limits for Class 2, inherently limited as specified in the UL1310 standard for Class 2 Power Units and also in accordance with the Canadian safety standard CSA C22.2 No. 223 for use in "WET" Location.
- 3. The driver was evaluated for use in a 57.7°C elevated ambient and the maximum case temperature at (Tc) location as identified on the marking label should not exceed 80°C when the driver is installed in the end-use application.
- 4. The leakage current test was performed in accordance with the Ul1310 standard while the driver was connected to a 120 V and also while connected to a 240 V source of supply and the maximum measured leakage current was 0.25 mA.
- 5. The primary (Black/White/GREEN) and the output (Red-Black) connection wires of the driver are R/C (AVLV2/AVLV8), 18 AWG, 90 C, and the suitability shall be determined in the end-use application.
- 6. The Output Cable is Listed, Power-Limited Circuit Cable (QPTZ), type PLTC, marked "sunlight resistant" or "sun res", "WET" or "WET LOCATION", 3 conductor, -40 °C.
- 7. The thickness of the Extruded aluminum of the housing of the drivers is 0.91 mm. This is in compliance with the minimum required thickness that is specified in Table 6.1 of UL8750 standard for nonferrous sheet metal.



Application and operation performance specification information subject to change without notification.



# L12V60UNV-Q

### (Recognized Component Sign Accessory – Referred to when used in an Electric Sign)

Condition of Acceptability – When installed in the end-use equipment, consideration shall be given to the following:

- The drivers shall be installed in compliance with the applicable requirements of the end-product standard for, mounting, spacing, casualty and segregation.
- 2. The maximum available output parameters were within the maximum allowable limits for Class 2, inherently limited as specified in the UL 1310, Standard for Class 2 Power Units for wet location and also in accordance with the Canadian Safety Standard CSA C22.2 No. 223.
- 3. The drivers were tested for a maximum manufacturer's recommended Tc location, should not exceed 80°C, in ambient of 57.7°C. If adjacent LED power supplies are spaced closer than 1 in. end to end or 4 in. side to side a temperature test shall be conducted in the end use product.
- 4. The drivers are suitable for use in "DRY", "DAMP", and "WET" locations.
- 5. In the end product, power supply spacing to other heat producing components shall be minimum 2 inches spacing to sidewalls, and minimum 2 inches spacing to top of enclosure. Adjacent power supplies shall be spaced at least 1 in. end to end and 4 in. in any other direction.
- 6. The input and output leads were not subjected to the strain relief test. However, the drivers are potted and the need to perform the Strain Relief and/or Pushback Relief Tests on the lead wires should be determined in the enduse application.
- 7. The primary (Black/White/GREEN) and the output (Red-Black) connection wires of the power supply are R/C (AVLV2/AVLV8), 18 AWG, 90°C. The suitability of the leads shall be determined in the end-use application.
- 8. The leakage current test was performed in accordance with the Ul1310 standard while the driver was connected to a 120 V and also while connected to a 240 V source of supply and the maximum measured leakage current was 0.25 mA. Therefore, a maximum of two LED Drivers can be used for portable signs.
- 9. Enclosure not required when up to four LED drivers are connected to Listed 4in. by 4in. by 2in. minimum electrical box by the driver line voltage side integral conduit fitting. For dry or damp location except may be wet location when a wet rated Listed electrical box and Listed wet location seal rings or conduit fittings are used in the installation. Drivers may also be mounted inside a sign body.
- 10. The Output Cable is Listed, Power-Limited Circuit Cable (QPTZ), type PLTC, marked "sunlight resistant" or "sun res", "WET" or "WET LOCATION", 3 conductor, -40 °C.
- 11. The minimum thickness of the aluminum of the housing of the drivers is 0.91 mm. This is in compliance with the minimum required thickness that is specified in Table 6.1 of UL8750 standard for nonferrous sheet metal.

FCC Statement: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Warranty:

Universal Lighting Technologies warrants to the purchaser that each power supply will be free from defects in material or workmanship for a period of 5 years from the date of manufacture when properly installed per instructions and under normal operating conditions of use. Call 1-800-225-5278 for technical assistance.



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