

### 400mA Selectable Output Current LED Driver

- ➤ 400/350/300/250mA Selectable Output Current
- > 0-10V dimming to 5% with dim-to-off
- Class B EMI at 120Vac input



| Performance           |                           |
|-----------------------|---------------------------|
| Input Voltage         | 120 ~ 277 Vac             |
| Input Current Max     | 0.20 / 120 V 0.07 / 277 V |
| Input Power Max       | 19.3W                     |
| Input Frequency       | 50 - 60 (Hz)              |
| Power Factor          | > 0.95 @ max load         |
| THD max               | < 20% @ max load          |
| Output Voltage        | 24V to 42V                |
| Max. Output Current   | 250/300/350/400mA         |
| Min. Dimming Current  | 5% of selected lout       |
| Max. Output Power     | 16.8W                     |
| Standby Power         | < 0.25W @120Vac           |
|                       | < 0.75W @ 277Vac          |
| Line Regulation       | ±5 %                      |
| Load Regulation       | ±5 %                      |
| Output Current Ripple | <30% (Pk-Pk/avg)          |
| Inrush Current*       | 120V: 16A / 20uS          |
| Peak / >50% Duration  | 277V: 41A / 20uS          |
| LED Start Up Time     | <500mS                    |

<sup>\*</sup> Source impedance per NEMA 410

| Environmental        |                                |  |
|----------------------|--------------------------------|--|
| EMI and RFI          | FCC part 15 (Class B) at 120V  |  |
|                      | FCC part 15 (Class A) at 277V  |  |
| Operating Temp.      | -40°C to 40°C / -40°F to 104°F |  |
| Storage Temperature  | -40°C to 75°C / -40°F to 167°F |  |
|                      | 75°C max for warranty          |  |
| tc                   | 90°C max for UL                |  |
| Protection Rating    | UL Dry & Damp                  |  |
| Transient Protection | IEEE C62.41 2.5kV              |  |

| Physical               |                           |
|------------------------|---------------------------|
| Length                 | 3.74 in (95 mm)           |
| Width                  | 1.57 in (40 mm)           |
| Height                 | 1.00 in (25.4 mm)         |
| Mounting Length        | 3.35 in (85 mm)           |
|                        | w/ 1.18 in (30 mm) offset |
| Weight (lbs)           | 0.36 lbs                  |
| Lead Lengths           |                           |
| Blk, Wht               | 5.90 in (150 mm)          |
| 18AWG / 105°C / 600V   |                           |
| Red(LED+), Blue(LED-)  | 5.90 in (150 mm)          |
| 18AWG / 105°C / 300V   |                           |
| Vio(Dim+), Pink*(Dim-) | 10.63 in (270 mm)         |
| 20AWG / 105°C / 300V   |                           |

Protection

Over Voltage, Short Circuit, Over Temp

Safety:

UL 8750 & CSA 250.13 UL Class P

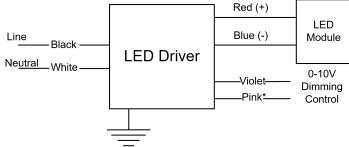




#### **Ordering Information**

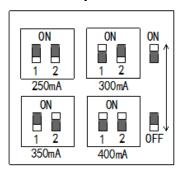
| Order Number        | Description | Qty/Carton |
|---------------------|-------------|------------|
| D400C16UNVSL-GA030C | 400mA 16W   | 30         |

#### Wiring Diagram:



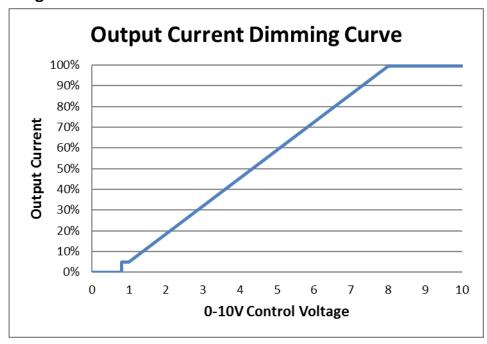
 Note: The Gray has been changed to Pink for the negative 0-10V dimming control lead.

### **Selectable Output Current**



| Switch 1 | Switch 2 | Output Current  |
|----------|----------|-----------------|
| On       | On       | 400mA (default) |
| Off      | On       | 350mA           |
| On       | Off      | 300mA           |
| Off      | Off      | 250mA           |

#### 0-10V Dimming



| <b>Control Voltage</b> | <b>Light Output</b> |
|------------------------|---------------------|
| 8V                     | 100%                |
| 1V                     | 5%                  |
| 0.8V                   | Turn-Off            |
| 1V                     | Turn-On             |

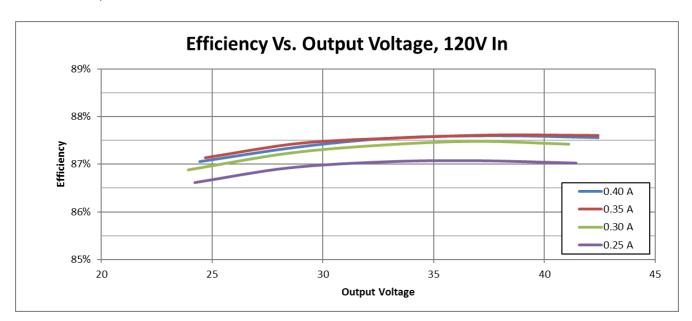
#### 0-10V Analog Dimming Interface

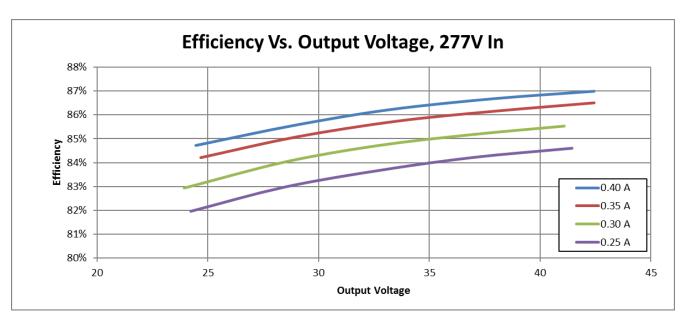
- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Pink\* (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = dim-to-off
- Wiring Violet & Pink\* together provides min. light output.
- Capping Violet & Pink\* separately provides 100% light output.
- 0-10V interface can be wired as a Class 1 or Class 2 Circuit.
- Driver will source a maximum of 160uA for control needs.
- Controller must sink current from the 0-10V control leads.



### **Performance: Efficiency**

Typical performance measurements are shown. The charts are to be used as a guideline and not for specification use.

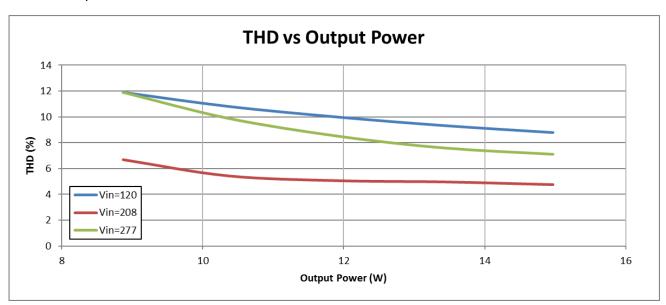


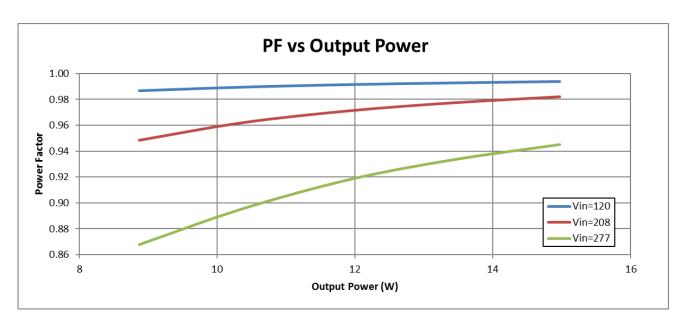




#### Performance: Total Harmonic Distortion, & Power Factor

Typical performance measurements are shown. The charts are to be used as a guideline and not for specification use.





Output power based on maximum rated output current and varying load voltages.

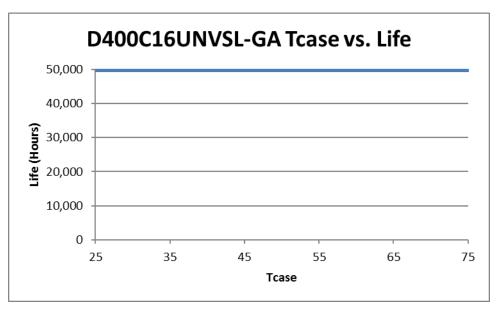


| Transient Protection                           |                            |  |
|--|----------------------------|--|
| Transient                                      | Differential Mode<br>(L-N) |  |
| IEEE C62.41 100kHz Ring<br>Wave (200A maximum) | > 2.5kV                    |  |

| Isolation |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|
| Isolation | Input     | Output    | 0-10V     | Enclosure |
| Input     | -         | 2xU + 1kV | 2xU + 1kV | 2xU + 1kV |
| Output    | 2xU + 1kV | -         | 2xU + 1kV | 700V      |
| 0-10V     | 2xU + 1kV | 2xU + 1kV | -         | 2xU + 1kV |
| Enclosure | 2xU + 1kV | 700V      | 2xU + 1kV | -         |

U = Max Input Voltage

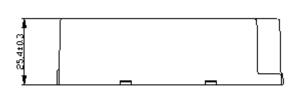
### **Driver Lifetime vs. Driver Case Temperature**



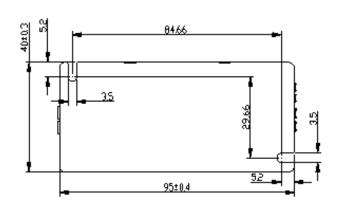
The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.



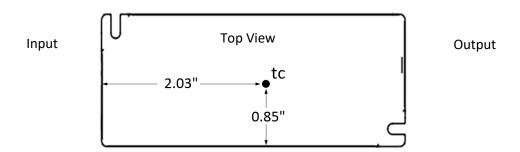
### **Dimensional Diagram:**



| Length          | 3.74 in (95 mm)           |
|-----------------|---------------------------|
| Width           | 1.57 in (40 mm)           |
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| Mounting Length | 3.35 in (85 mm)           |
|                 | w/ 1.18 in (30 mm) offset |



#### Tc Location:



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.