

700mA Programmable LED Driver

- Universal (120-277V) Input Voltage
- Class 2, 20W Constant Current Output with 0-10V dimming
- Full featured programmability with Wireless Programming

Performance

| renonnance | | | |
|------------------------------|-----------------------------|--|--|
| Input Voltage | 120 ~ 277 Vac | | |
| Input Current Max | 0.20/120V 0.09/277V | | |
| Input Power Max | 24W | | |
| Input Frequency | 50 - 60 (Hz) | | |
| Power Factor | >0.95 @ max load | | |
| THD max | < 20 % @ max load | | |
| Output Voltage | 16V to 29V @ 0.70 Amps | | |
| (Refer to Power Curve Chart) | 16V to 56V @ 0.36 Amps | | |
| Max. Output Current | 700mA | | |
| Min. Dimming Current | 4mA | | |
| Output Power | 20W | | |
| Standby Power | <2.8W @120Vac | | |
| | < 3.5W @ 277Vac | | |
| Line Regulation | ±3 % | | |
| Load Regulation | ±5 % | | |
| Output Current Ripple | <10% (Pk-Pk/avg) | | |
| Inrush Current* | 120V: 18A/310uS | | |
| Peak / >10% Duration | 277V: 42A/286uS | | |
| LED Start Up Time | <500mS initial, <600mS full | | |
| | CA T-24 Compliant | | |
| | | | |

| Physical | | |
|---|---------|--|
| Length | 4.95 in | |
| Width | 2.39 in | |
| Height | 1.00 in | |
| Mounting Length (L) 4.61" (mounting feet) | | |
| Mounting Length (LS) 2.00" (#8-32 studs) | | |
| Weight (lbs) 1.0 | | |
| Wire Trap / Plug-in Connectors for 16-20 AWG Solid Wire | | |

Strip Length 0.33in

| Environmental | |
|-----------------------|--|
| EMI and RFI | Meets FCC part 15 (Class A) Non-Consumer Limits |
| Sound Rating | Class A |
| Operating Temperature | -40°C to 50°C (-40°F to 122°F) |
| Storage Temperature | -40°C to 85°C (-40°F to 185°F) |
| Warranty Tc | 85°C max for 50k Hr Life |
| Protection Rating | UL Dry & Damp |
| Transient Protection | IEEE C62.41 2.5kV |

Protection

Over Voltage, Under Voltage, Short Circuit, Over Temp Safety:

UL 8750 & CSA 250.13 UL Class P

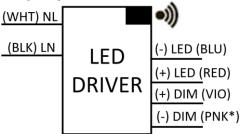


Ordering Information

| Order Number | Description | Qty/Carton |
|---------------------|---------------------|------------|
| D700C20UNVPW-L010C | Multi-Exit | 20 |
| D700C20UNVPW-LS010C | Bottom Exit w/Studs | 20 |

* Source impedance per NEMA 410

Wiring Diagram:



Use wire extraction tool to

remove wires from connectors

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





Programmable Features

Output Current

Minimum Dimming Level

Dim-to-Off

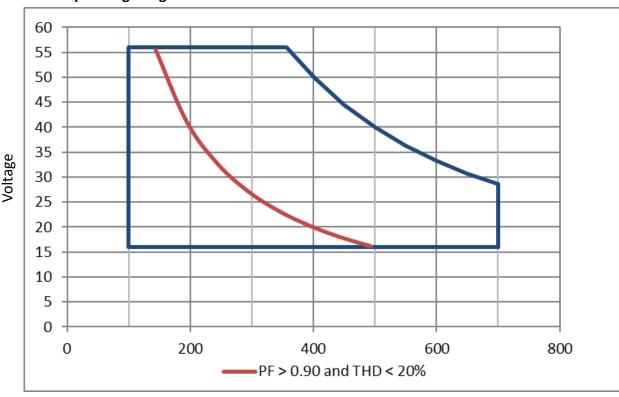
Dimming Curve

(Linear, Linear Soft Start, Logarithimc)

Lumen Maintenance

*Refer to application notes EVD10 and EVD11 at <u>www.unvlt.com</u> for additional information on programmable features.

| Programming System | |
|---------------------------|---------------------------------|
| Software | EVERset Programming Software |
| Hardware | LDPC000A Configuration Tool |
| Driver Interface | Wireless via RFID |



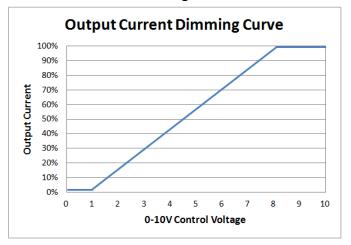
Driver Operating Range:

Current (mA)

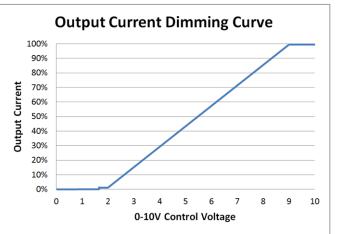


0-10V Dimming

Linear Dimming to 1%



Linear Dimming w/ Dim-to-Off



* Driver ships with Dim-to-Off disabled. Dim-to-Off must be enabled through the EVERset programming software.

0-10V Analog Dimming Interface

- Analog 0 to 10 Vdc Voltage Control
- Use Violet (+) & Pink* (-) for connection to 0-10 Vdc.
- 10V = maximum output
- 0V = dim-to-off or programmed minimum dimming level
- 0-10V interface can be wired as Class 1 or Class 2 Circuit.
- Driver will source a maximum of 165uA for control needs.
- Controller must sink current from the 0-10V control leads.

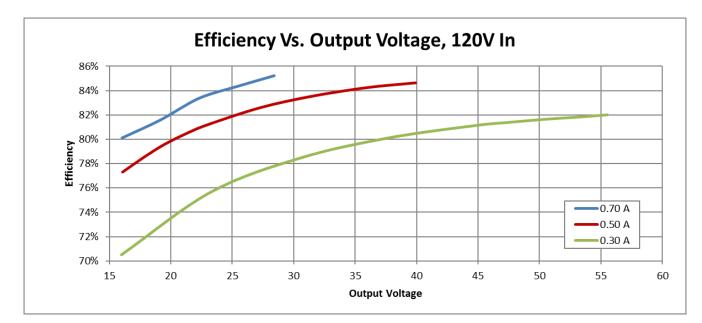
| Feature | Range | Factory Default |
|-------------------------------|--|---------------------------|
| Maximum Output Current | 100 - 700mA | default = 700mA |
| Minimum Dimming Level | 4 - 350mA | default = 7mA |
| Dimming Curve | (Linear, Linear Soft Start, Logarithmic w/ factor 1 to 7) | default = Linear |
| Dimming Control Voltage Range | | |
| Max Bright Control Voltage | 7 - 9Vdc | default = 8Vdc |
| Min Dim Level Control Voltage | 1 - 3Vdc | default = 1Vdc |
| Dim-to-Off | 0.1 - 1.7Vdc | default = 0Vdc (disabled) |

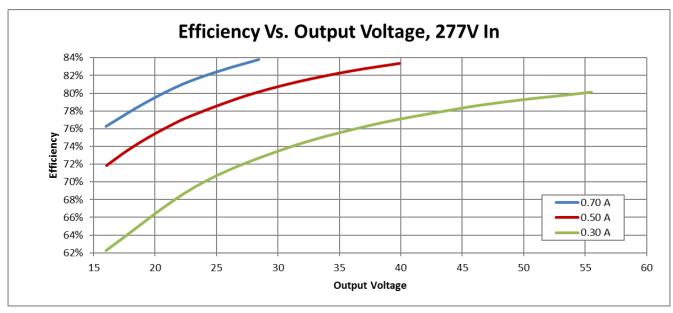
* Refer to application note EVD10 at <u>www.unvlt.com</u> for additional information on programmable dimming features.



Performance: Efficiency

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

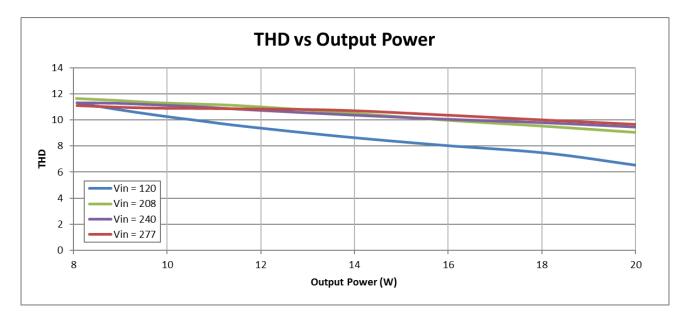


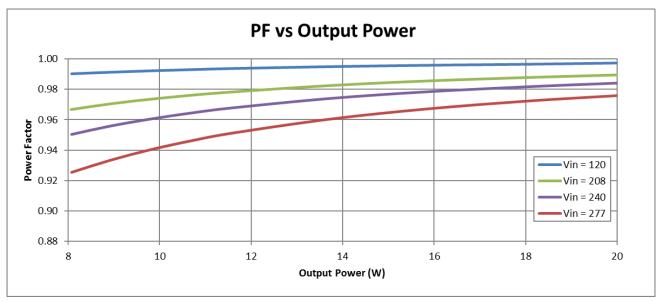




Performance: Total Harmonic Distortion, & Power Factor

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

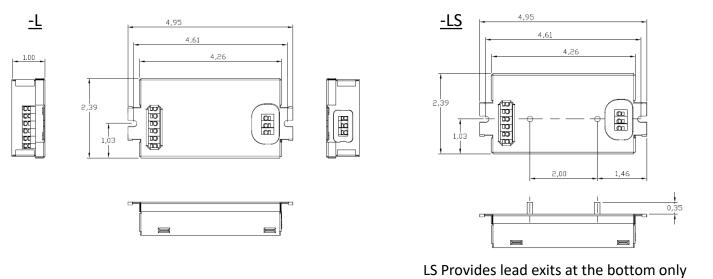




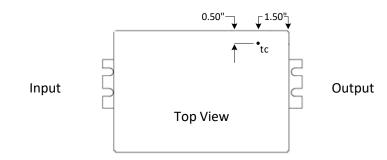
Output power based on maximum rated output current and varying load voltages.



Dimensional Diagram:



Tc Location:





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

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.