

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

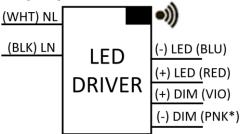


Ordering Information

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

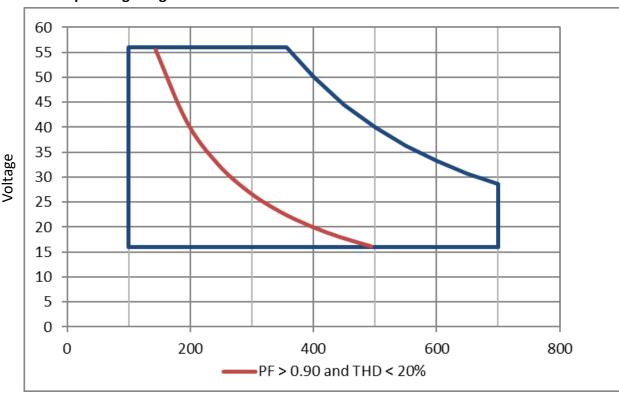
Dimming Curve

(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



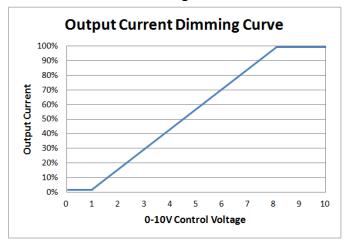
Driver Operating Range:

Current (mA)

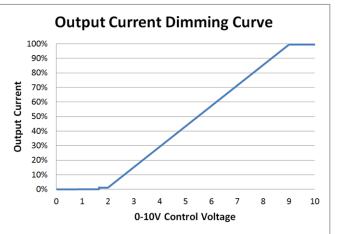


0-10V Dimming

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.

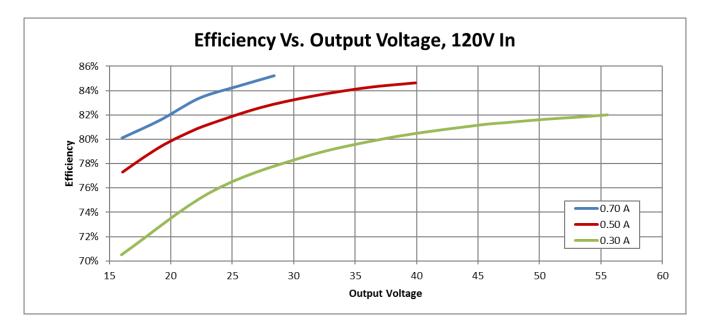
Feature	Range	Factory Default
Maximum Output Current	100 - 700mA	default = 700mA
Minimum Dimming Level	4 - 350mA	default = 7mA
Dimming Curve	(Linear, Linear Soft Start, Logarithmic w/ factor 1 to 7)	default = Linear
Dimming Control Voltage Range		
Max Bright Control Voltage	7 - 9Vdc	default = 8Vdc
Min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

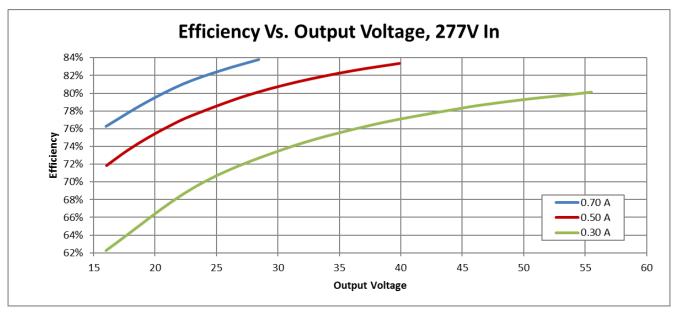
* Refer to application note EVD10 at <u>www.unvlt.com</u> for additional information on programmable dimming features.



Performance: Efficiency

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

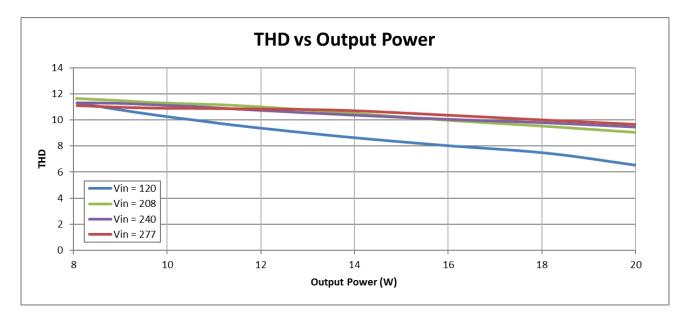


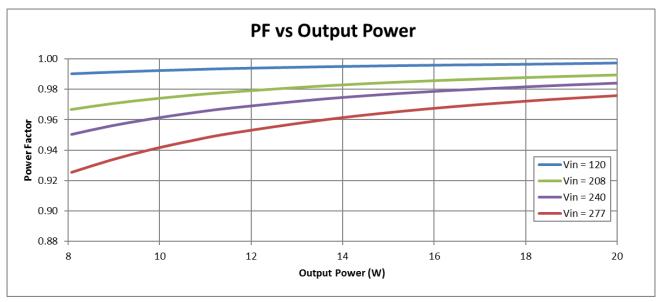




Performance: Total Harmonic Distortion, & Power Factor

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

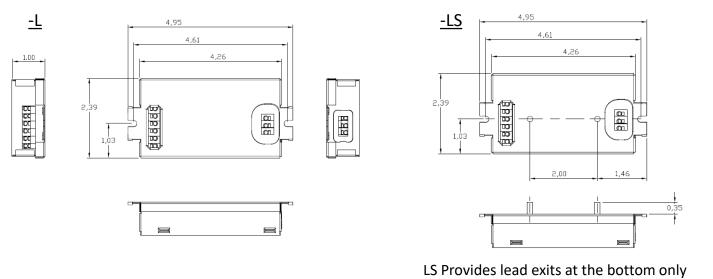




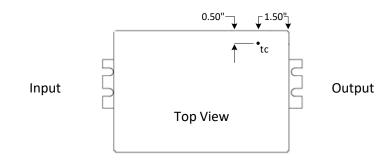
Output power based on maximum rated output current and varying load voltages.



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.