



D700C20UNVPW-C

700mA Programmable LED Driver

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



Performance

| | |
|--|---|
| Input Voltage | 120 ~ 277 Vac |
| Input Current Max | 0.19 / 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 (Refer to Power Curve Chart) | 16V to 29V @ 0.70 Amps 16V to 56V @ 0.36Amps |
| Max. Output Current | 700mA |
| Min. Dimming Current | 4mA |
| Output Power | 20W |
| Standby Power | < 1W @ 120Vac < 1W @ 277Vac |
| Line Regulation | ±3 % |
| Load Regulation | ±5 % |
| Output Current Ripple | <10% (Pk-Pk/avg) |
| Inrush Current* Peak / >10% Duration | 120V: 5A / 10.2uS 277V: 11.5A / 10.2uS |

* Source impedance per NEMA 410

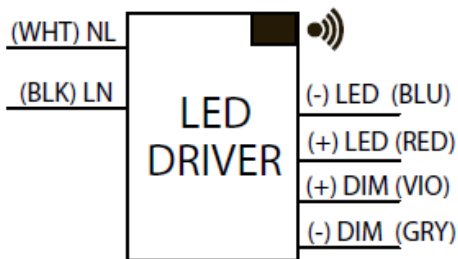
Physical

| | |
|--|----------|
| Length | 14.25 in |
| Width | 1.18 in |
| Height | 1.00 in |
| Mounting Length | 13.75 in |
| Weight (lbs) | 1.0 lbs |
| Wire Trap / Plug-in Connectors for 16-22 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 |
| Location Rating | UL Dry & Damp |
| Transient Protection | IEEE C62.41 2.5kV |

Wiring Diagram:



Driver case must be grounded

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-C010C | 700mA 20W | 10 |



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



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Programmable Features

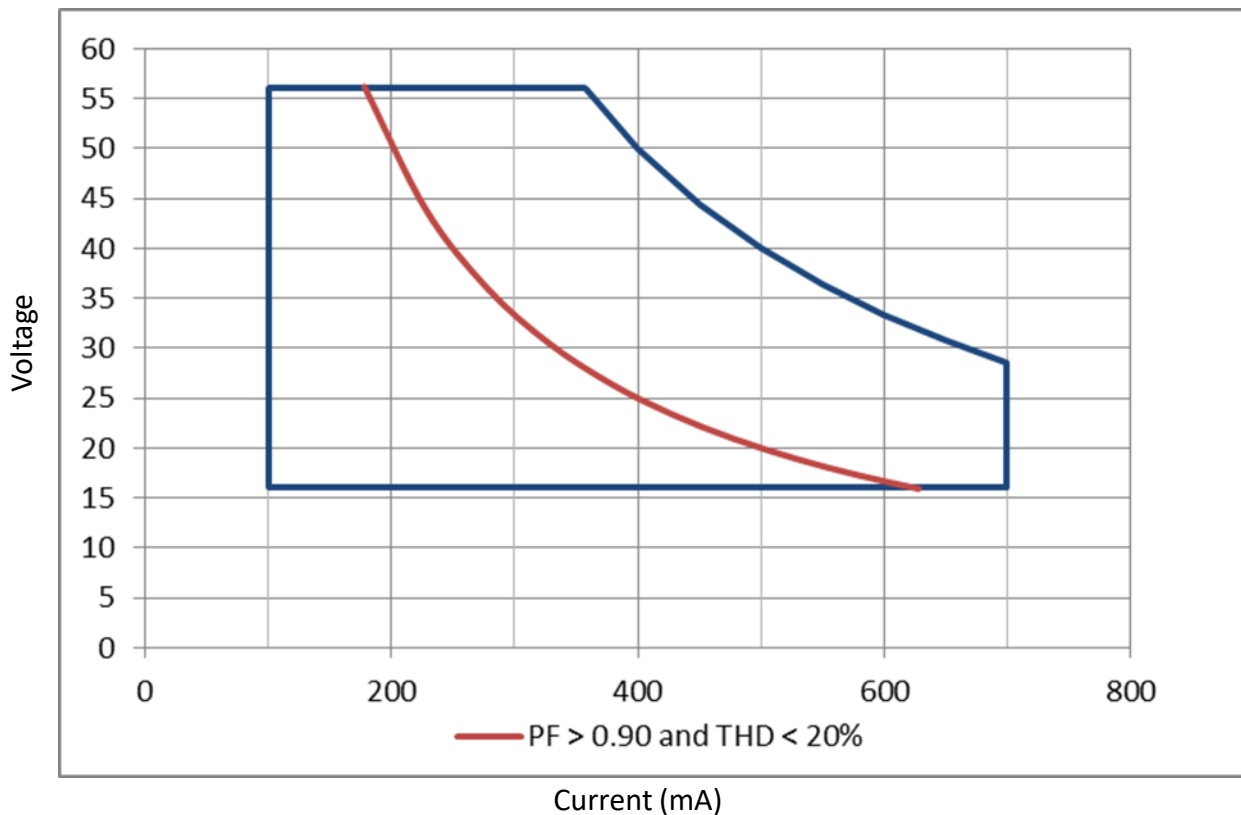
| |
|---|
| Output Current |
| Minimum Dimming Level |
| Dim-to-Off |
| Dimming Curve (Linear, Linear Soft Start, Logarithmic) |
| Lumen Maintenance |

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

Programming System

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

Driver Operating Range:

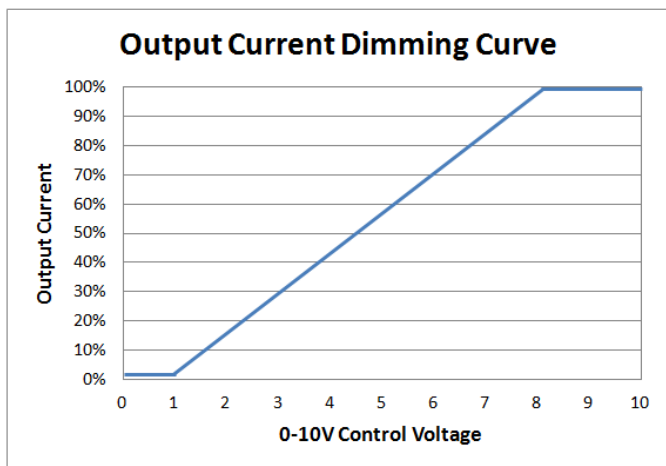


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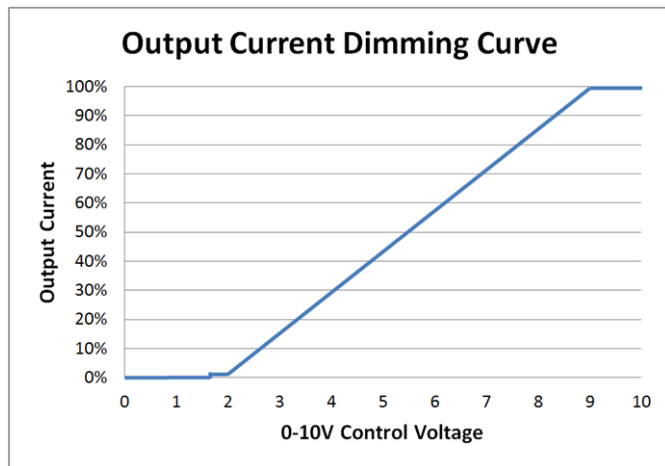


0-10V Dimming

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 (+) & Gray (-) 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.

Programmable Dimming Features

| 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 www.unvlt.com for additional information on programmable dimming features.

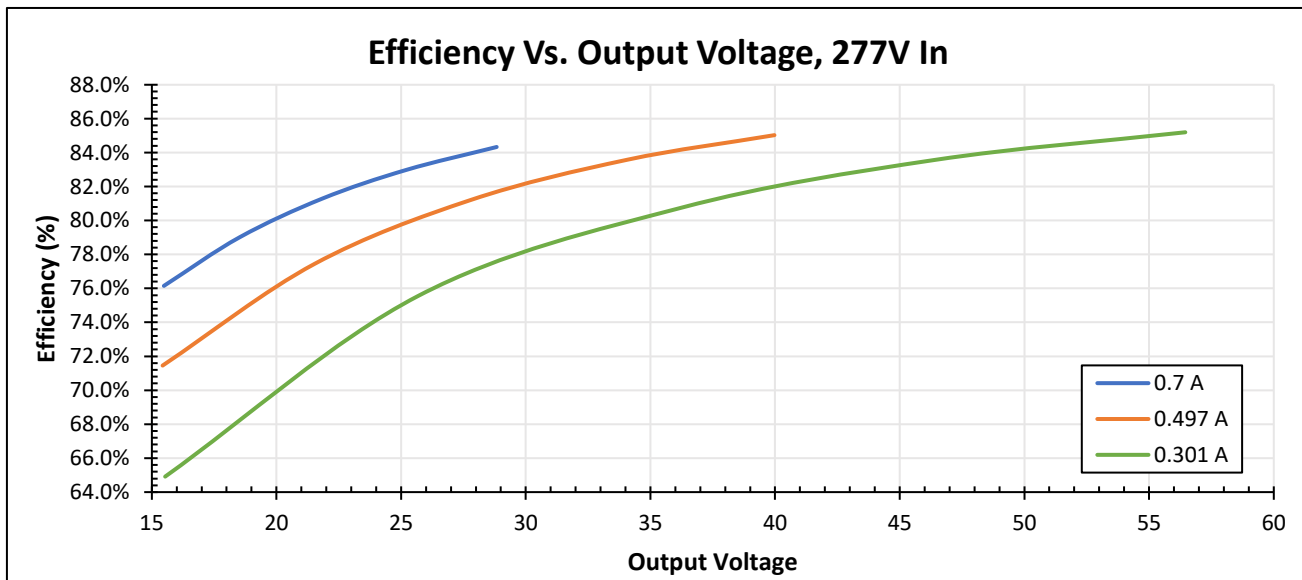
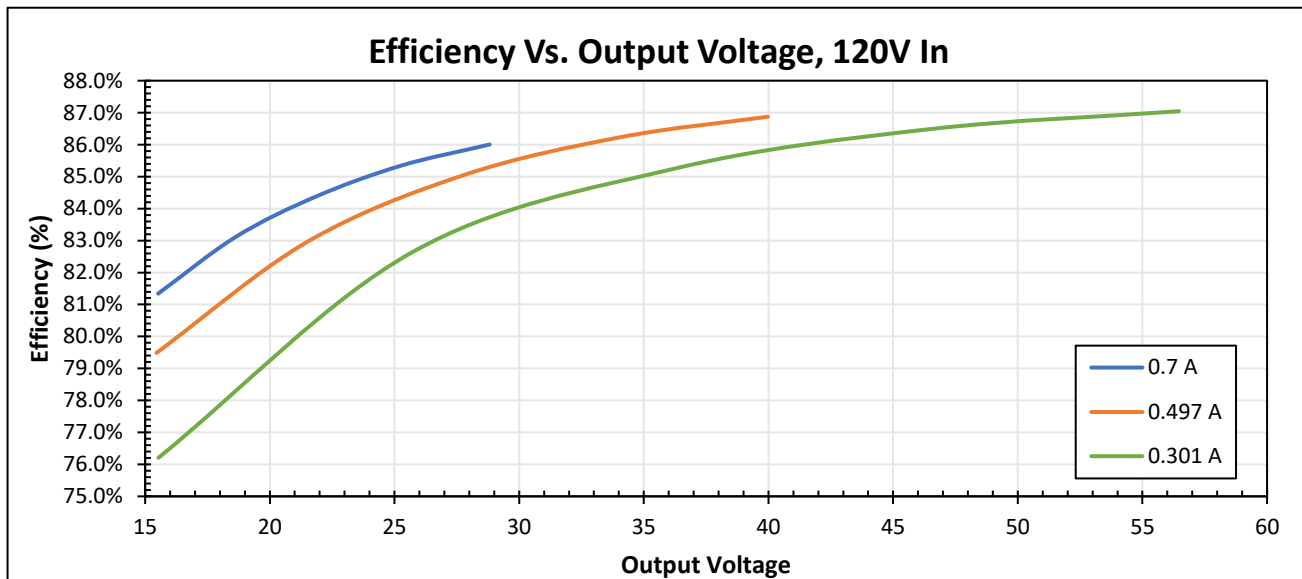


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Performance: Efficiency

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

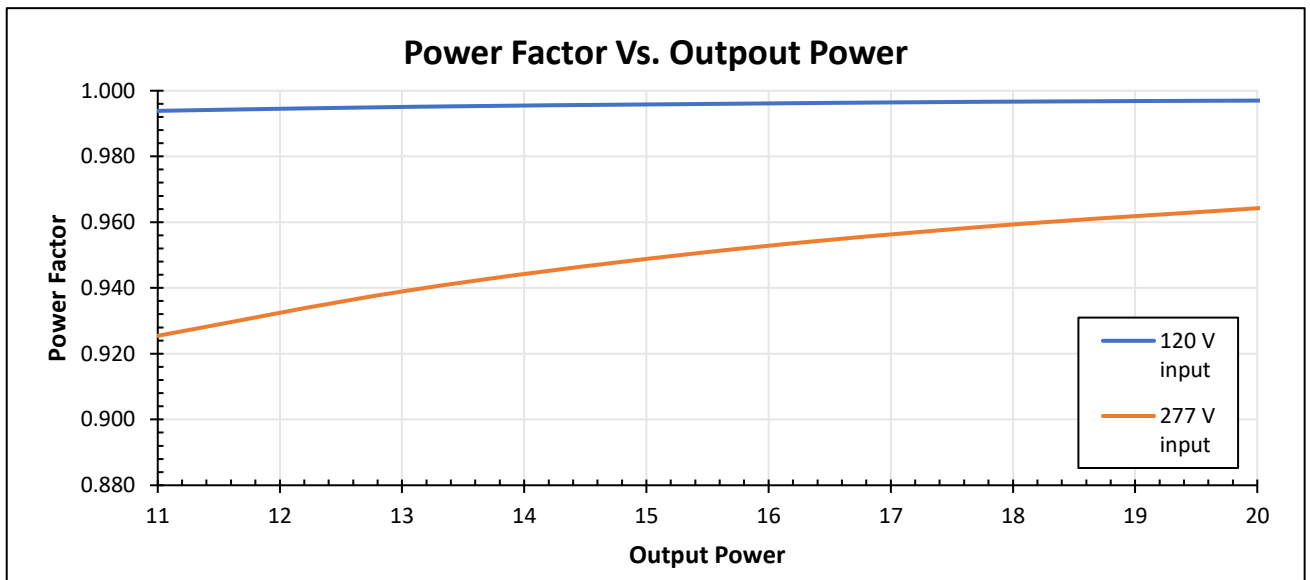
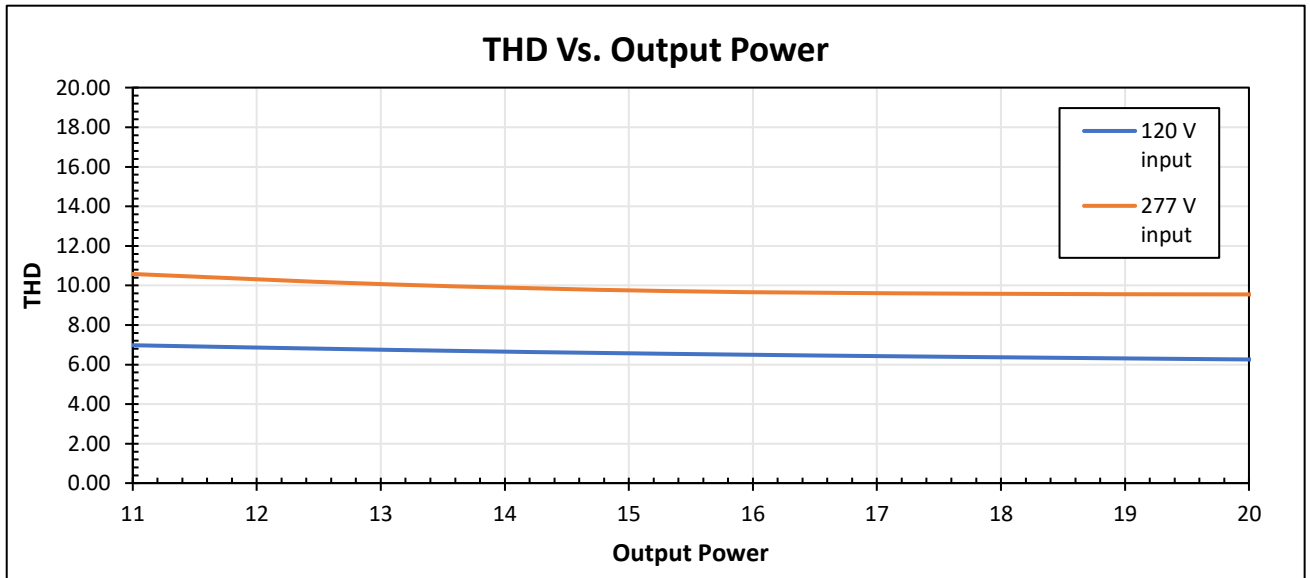


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Performance: Total Harmonic Distortion, & Power Factor

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.

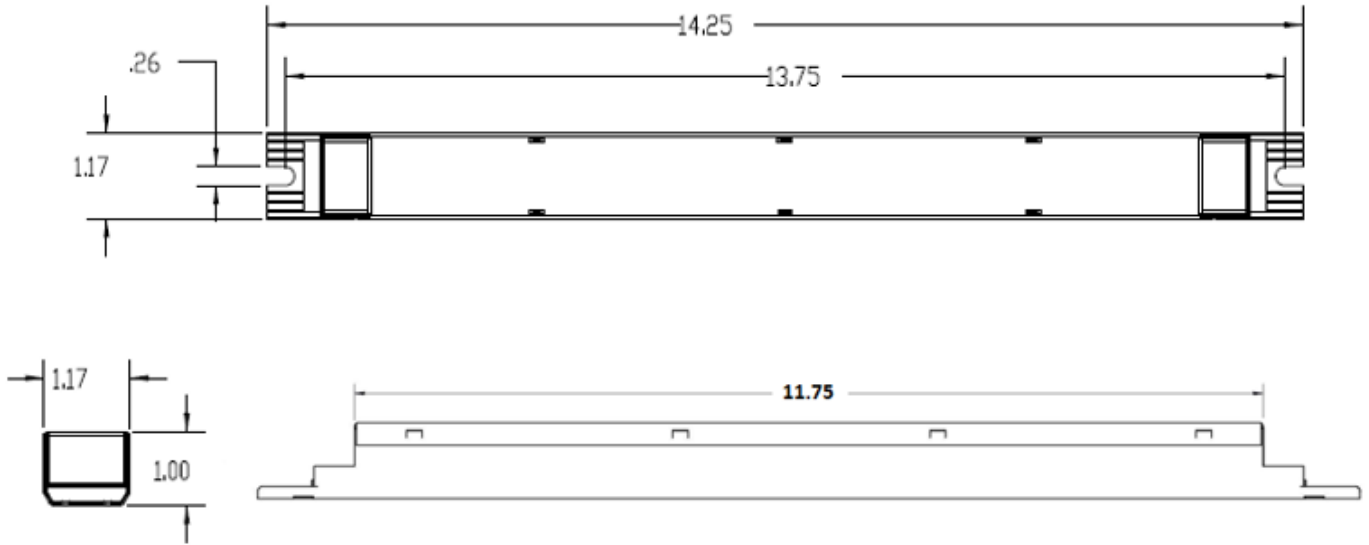


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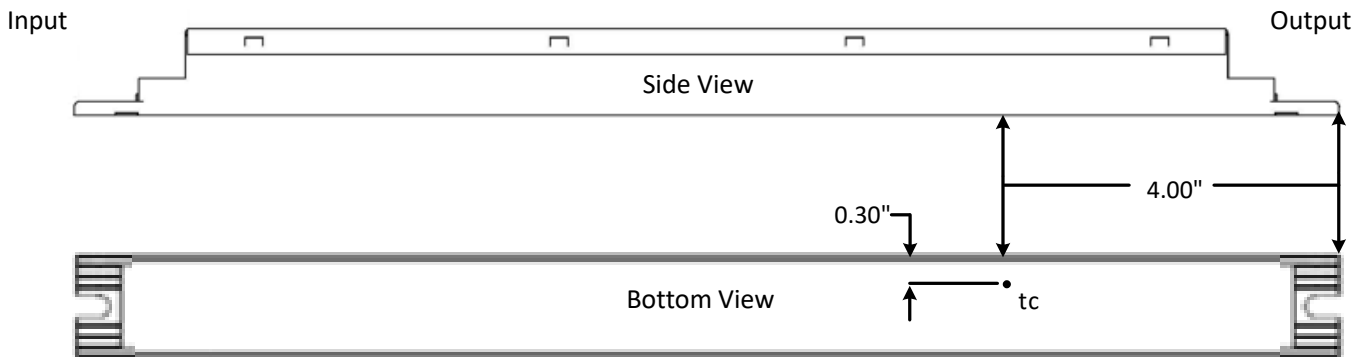


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Dimensional Diagram:



Lifetime Tc Location:



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| 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.



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