

530mA LED Driver

- ➤ Universal Input Voltage 120 277 Vac
- ➤ 0-10V Dimming to 10%
- ➤ Thermal Foldback Control



Performance	
Input Voltage	120 ~ 277 Vac
Input Current Max	1.40 /120V 0.59/277V
Input Power Max	165W /120V 161W/277V
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.95
THD max	< 20 %
Output Voltage	99V-285V
Output Current	53-530mA
Output Power	150W Max
Line Regulation	±1 %
Load Regulation	±3 %
Output Current Ripple	<10%
Inrush Current	120V: 31A / 210uS
Peak / >50% Duration	277V: 74A / 200uS

- Meets FCC Part 15 (Class A) Non-Consumer Limits
- Inrush current complies with NEMA 410
- * Refer to charts for additional information

Physical				
Length	9.50 in (241.3 mm)			
Width	2.40 in (61.0 mm)			
Height	1.55 in (39.4 mm)			
Mounting Length	8.89 in (225.8 mm)			
Weight (lbs)	2.6			
Lead Lengths				
Blk, Wht, Blk/Wht, Blu/Wht	8 in			
Red(+), Blue(-), Gry, Prp	8 in			

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

Protection

Over voltage, Overload and short circuit, over temp.

Safetv

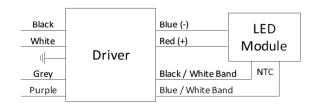
UL 8750 & CSA 250.13-12

Ordering Information

Order Number	Description	Qty/Carton
D530C150UV10F06KC	Standard Product	10

Environmental		
EMI and RFI	Meets FCC part 15 (Class A)	
LIVII dila IVI I	Non-Consumer Limits	
Minimum Operating	-40°C (-40°F)	
Temperature		
Storage	-40°C to 85°C	
Temperature	(-40°F to 185°F)	
tc	85°C (185°F) max	
Location Rating	UL Dry & Damp, Type HL	
Transient Protection	IEEE C62.41 6kV/6kV	

Wiring Diagram:





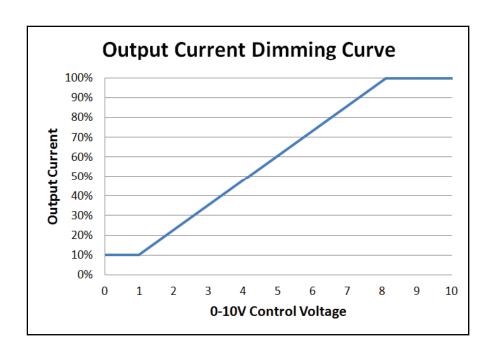








0-10V Dimming



0-10V Analog Dimming Interface

- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Gray (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = minimum output
- Wiring Violet & Gray together provides min. light output.
- Capping Violet & Gray separately provides 100% light output.
- 0-10V interface can be wired as Class 1 or Class 2 Circuit.
- Driver will source a maximum of 200uA for control needs.
- Controller must sink current from the 0-10V control leads.

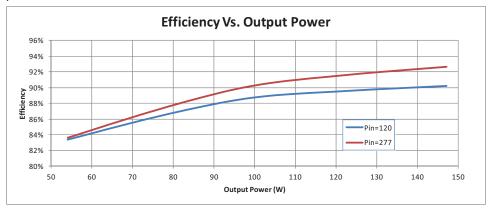


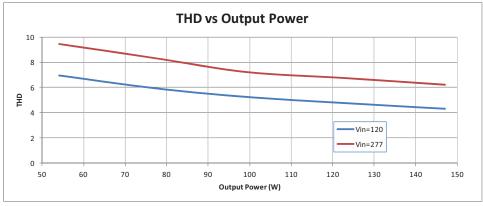


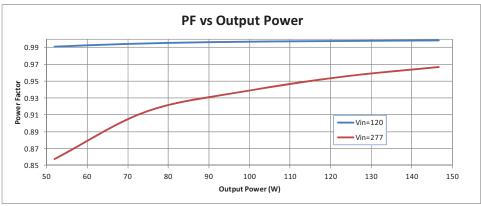


Performance: Efficiency, THD, & Power Factor

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.





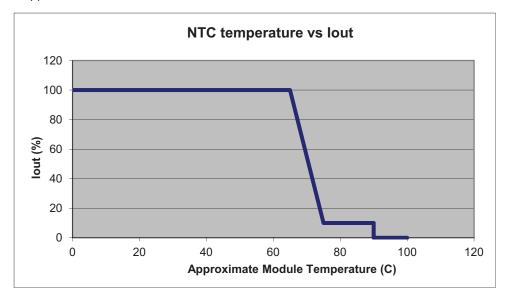


Module Thermal Foldback Protection

Thermal Foldback Control

Luminaire temperature monitoring/protection
LED Driver reduces output current for external thermal
protection if an NTC (Negative Thermal Coefficient) is
connected to the Black/White and Blue/White leads.
Connect unused Black/White and Blue/White leads.
together when thermal foldback control is not used.

• See application note on www.unvlt.com for more information.



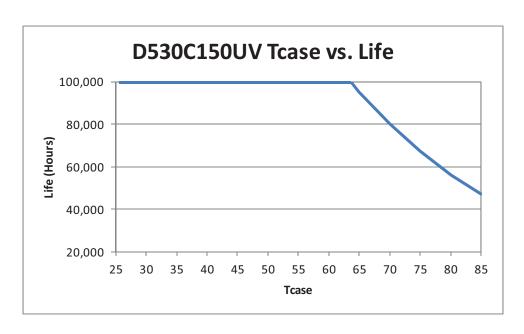
(Example with the Murata NTC p/n NCP18XV103J03RB)





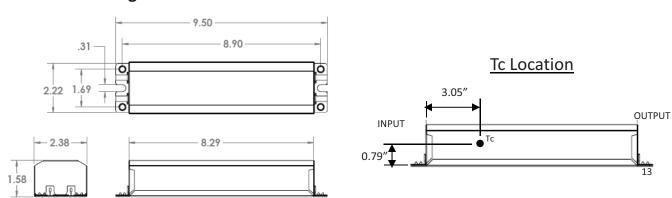


Life vs. Driver Tcase



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









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 Drivers are suitable for use in "DRY" or "DAMP" locations.
- 3. The maximum available parameters from the isolated dimming connection leads were within the maximum allowable limits for Class 2, inherently limited as specified in the UL 1310 standard for Class 2 Power Units, and CAN/CSA C22.2 No. 223 standard for Power Supplies with Extra-Low Voltage Class 2 Outputs.
- 4. When the drivers are installed in the end-use application, the maximum measured temperature at the "Tc" location indicated on the Marking Label, see Illustration #1 (Label), shall not exceed the specified temperatures in the following table:

Model	Max Case Temp (°C)		
	tc	Ambient @ Low Input Voltage Rating	Ambient @ High Input Voltage Rating
D530C150UV10F	85°C	52°C	63°C

- 5. The Leakage Current measurements were not performed on this unit. Compliance with leakage current requirements shall be determined in the end-product standard." And, leakage current available from "User Accessible" dimming circuit shall be considered.
- 6. The leads for the connection of the primary (Black-White), the output (Red-Blue), the dimming circuit, and the Temperature sense circuit are R/C (AVLV2/8), 18 AWG, 600 V minimum, 90°C. The suitability of the leads shall be determined in the end-use application.
- 7. The thickness of the sheet steel used for the housing of the drivers is 0.51 mm. However, the housing was subjected to the "MECHANICAL STRENGTH FOR METAL ENCLOSURES TEST" specified in section 8.13 of UL8750 standard and the results of the test were in compliance.
- 8. These drivers may be provided with an optional temperature sense circuit (Black/White and Blue/White Leads). These leads are intended for connection to LED Array modules provided with temperature sensing circuits for the purpose of dimming the output to levels in accordance to the detected excessive temperature.

The temperature sense circuit is considered to be an extension of the secondary circuit and suitability and the reliability of the function of the temperature sense circuit shall be determined in the end-use application.

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.



