ADVANCE

by (s) ignify

LED Driver

Xitanium

XI100C230V042CNS1





Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. **The Advance Xitanium LED Outdoor Driver portfolio** offers a range of products specially designed to operate LED solutions in outdoor applications. These drivers are designed for hard-wired integration into outdoor luminaires even in rugged applications. They operate to specification under wide temperature and electrical ranges to help ensure reliability.

Specifications

Input Voltage (Vac)	Output Power (W)	Output Voltage Range (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi-Wave, KV)	Envir. Protection Rating	Driver Type
120				87.5		0.95		<8%			UL damp	Constant
277	96.6	6.6 21-42	2.3	87.5	90°C 0.40	0.40	123	<12%	>0.95 4.0	& dry and Type HL	Current	

Enclosure

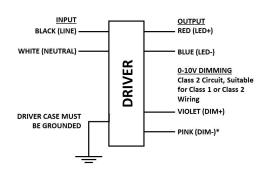
	In. (mm)
Case Length	8.37 (212.6)
Case Width	1.70 (43.2)
Case Height	1.14 (29.0)
Mounting Length	8.89 (225.8)
Overall Length	9.45 (240.0)



Warning

- · Install in accordance with national and local electrical codes.
- The field-wiring leads or push-in terminals shall be enclosed.

Wiring Diagram



Input and output use lead-wires.

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

Input Lead Length outside enclosure: 10.5" (+2"/-1").

Input Lead Length outside enclosure: 11" (+2"/-1").

Driver case must be grounded.

Dimming	Dimming Range	Minimum Output Current (A)
0-10V Analog Class 2 Wiring	15% ~ 100% of the setting current	0.345



100W 120-277V 2.3A 0-10V

Features

- UL Class 2 output
- 50,000+ hour lifetime¹
- · High drive current

Benefits

- Flexibility and ease of design for Class 2 luminaire designs
- · Enables long life luminaire designs
- Enables high lumen per dollar fixture designs

Application

- · Area
- Roadway
- · Parking garages
- $\cdot \ \mathsf{Floodlights}$

Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

Product Data

Corder Information Full Product Code X1100C230V042CNSIM (Mid-Pack, 20pcs/Box) Line Frequency 50/60Hz Min. Mains Voltage Operational 108Vac Output Information Maximum Open Circuit Voltage 42Vdc Output Current Ripple (ripple = peak to average / average) <=10% Coutput Current Tolerance (at maximum output current) 5% Protections Short Circuit, Open Circuit Protection for LED + and LED - Features O-10V Dimming 150µA source current from driver. See dim curve for detail. Environment & Approbation -40°C to +55°C Max Case Temperature (Tease) 90°C Environmental Protection Rating ULdry and damp, Type HL Agency Approbations UL8750, UL1310, UL935, cUL Electromagnetic Compliance FCC Title 47 Part 15 Class A Audible Noise <24dB Class A Weight 1,48Lbs/670kgs					
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	Electromagnetic Compliance	FCC Title 47 Part 15 Class A			
Weight 1.48Lbs/.670kgs	Audible Noise	<24dB Class A			
	Weight	1.48Lbs/.670kgs			

Advance Xitanium LED Drivers are manufactured to engineering standards correlating to a designed and average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTBF modeling.

100W 120-277V 2.3A 0-10V

Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

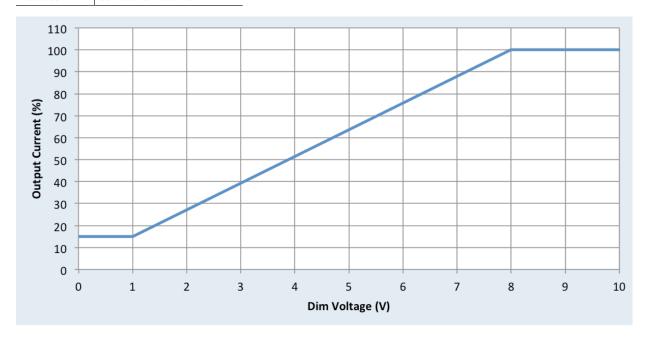
0-10V Dimming Curve

Dimming source current from the driver: 150µA (±3%) (@ 0<Vdim<8V)

The dimming lead leakage current is 0.01mA. The maximum number of drivers that can be connected in parallel to one dimming control circuit is based on this dimming lead leakage current and the calculation is described in the corresponding Design-in Guide.

Approved Dimmer List

Manufacturer	Manufacturer Part Number
Lutron	Visit www.lutron.com/ advance for a list of dimmers (Mark VII) that will work with this driver.
Leviton	IllumaTech IP7 series
Advance	Sunrise - SR1200ZTUNV

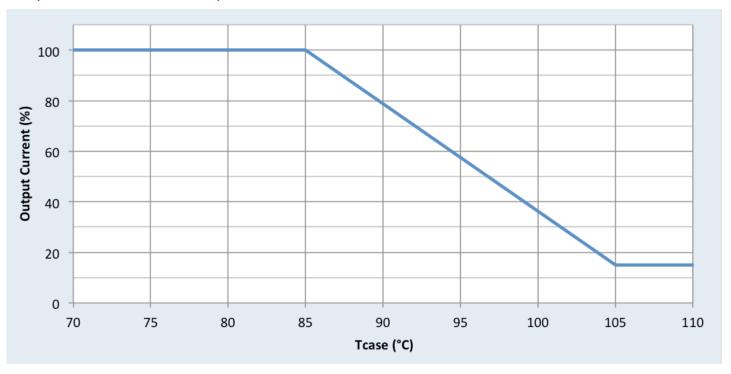


100W 120-277V 2.3A 0-10V

Electrical Specifications

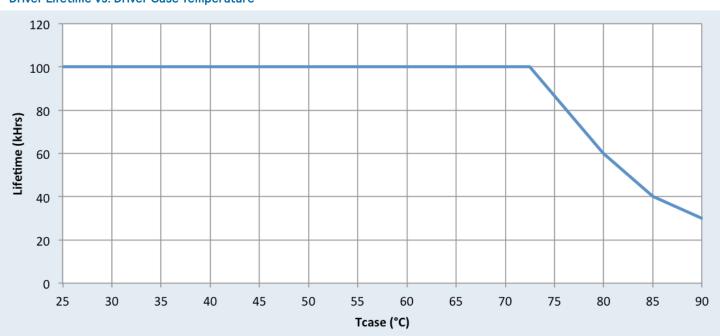
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Output Current Vs. Driver Case Temperature



Note: There is ±5°C tolerance on the driver case temperature.

Driver Lifetime Vs. Driver Case Temperature

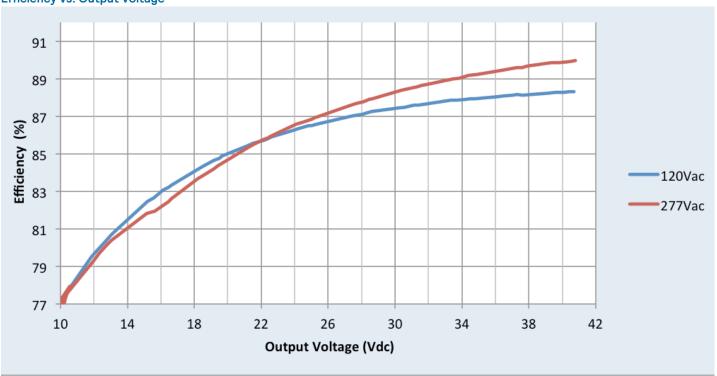


100W 120-277V 2.3A 0-10V

Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

Efficiency Vs. Output Voltage

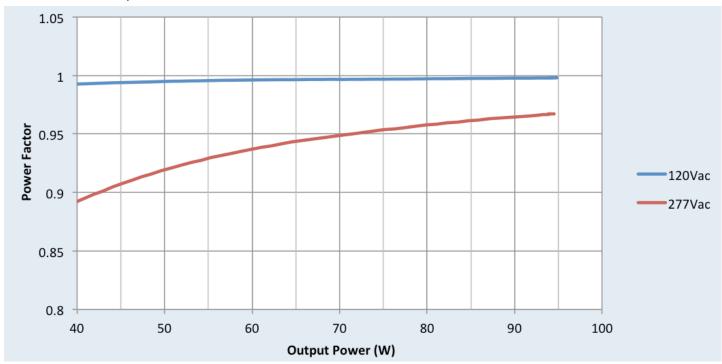


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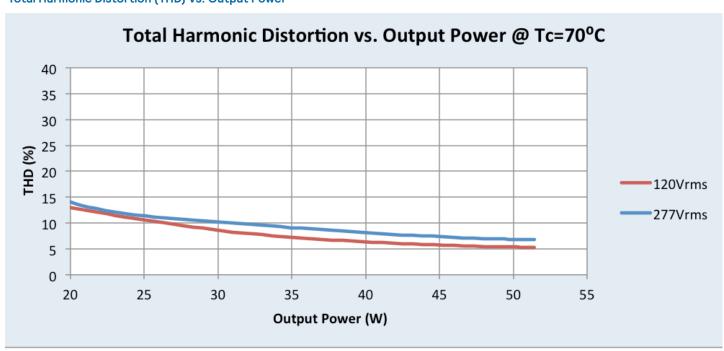
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Power Factor Vs. Output Power

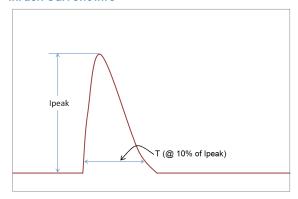


Total Harmonic Distortion (THD) Vs. Output Power



100W 120-277V 2.3A 0-10V

Inrush Current Info



Vin	Ipeak	T (@ 10% of Ipeak)	
120 Vrms	36A	330µS	
277 Vrms	92A	302µS	

Inrush current is measured at peak of the corresponding line voltage. Source impedance per NEMA 410.

Lightning Surge Info

ANSI Surge Type	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
1.2/50μs Combination Wave (w/t 2Ω)	4kV	4kV

Isolation

Isolation	Input	Output	0-10V (Class 2)	Enclosure
Input	NA	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	NA	NA	500V
0-10V (Class 2)	2.5kV	NA	NA	500V
Enclosure	2xU+1kV	500V	500V	NA

U = Max input voltage

UL Conditions of Acceptability

Please contact your representative for a copy of the latest UL Conditions of Acceptability (COA).

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