

by (s) ignify

LED Driver

Xitanium





LEDINTA0530C280DO

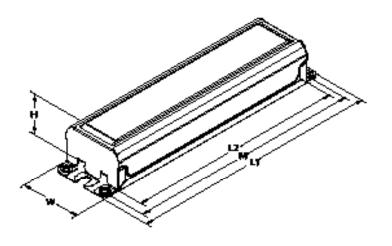
Xitanium Long-lasting and low maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. The Advance Xitanium LED outdoor driver portfolio offers a range of products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

Specifications

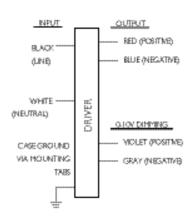
Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load and 70°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection (Combi- Wave, KV)	Envir. Protection Rating
120	150	120, 200	0.53	91.4	00°C	1.4	169	-100/	>0.95	6	UL damp & dry and
277	150	120-280 0.53	0.53	93.9	80°C 0.6	0.6	109	9 <10%	>0.95	6	Type HL

Enclosure

	In. (mm)
Case Length	8.31 (211.1)
Case Width	2.32 (59.1)
Case Height	1.56 (39.6)
Mounting Length	8.90 (226.2)
Overall Length	9.47 (240.5)



Wiring Diagram



Dimming	Dimming Range (with specified dimmers)	Minimum Output Current (A)
0-10V Analog Class 1 and 2 Wiring	10% ~ 100%	0.053





150W 120-277V 0.53A 0-10V

Features

- · 50,000+ hour lifetime¹
- · Excellent thermal performance
- 6kV combi-wave surge rating to comply with ANSI C82.77-5 CAT C low

Benefits

- · Enables long life luminaire designs
- Allows luminaire designs for a wide range of ambient environments
- No external surge protection required to pass C82.77-5 CAT C low

Application

- Area
- · Roadway
- · Parking garages
- Floodlights

Electrical Specifications

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

Product Data

Order Information Full Product Code LEDINTA0530C280DOM (Mid-Pack, 10pcs/Box) Line Frequency 50/60Hz Min. Mains Voltage Operational 108 Vac Max. Mains Voltage Operational 305 Vac Output Information Maximum Open Circuit Voltage Output Current Ripple (ripple = peak to average / average) 15% max @ max lout Low frequency (≤120 Hz) content <5% Output Current Tolerance (at maximum output current) <5% Protections Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback Features	
Line Frequency 50/60Hz Min. Mains Voltage Operational 108 Vac Max. Mains Voltage Operational 305 Vac Output Information Maximum Open Circuit Voltage 375Vdc Output Current Ripple (ripple = peak to average / average) Low frequency (≤120 Hz) content <5% Output Current Tolerance (at maximum output current) Protections Short Circuit, Open Circuit Protection for LED + and LED − and Temperature Foldback Features	
Min. Mains Voltage Operational 305 Vac Output Information Maximum Open Circuit Voltage 375Vdc Output Current Ripple (ripple = peak to average / average) Low frequency (s120 Hz) content <5% Output Current Tolerance (at maximum output current) Protections Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback Features	
Max. Mains Voltage Operational 305 Vac Output Information Maximum Open Circuit Voltage 375 Vdc Output Current Ripple (ripple = peak to average / average) 15% max @ max lout (because of the content of the c	
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Features	
450 A (200)	
0-10V Dimming 150µA (±3%) source current from driver. See dim curve for detail.	
Environment & Approbation	
Operating Ambient Temp. Range -40°C to +55°C	
Max Case Temperature (Tcase) 80°C	
Agency Approbations UL 8750, CSA 250.13	
Electromagnetic Compliance FCC Title 47 Part 15 Class A	
Audible Noise <24dB Class A	
Weight 2.1 Lbs / 0.95 kgs	

l. 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 MTTF modeling.

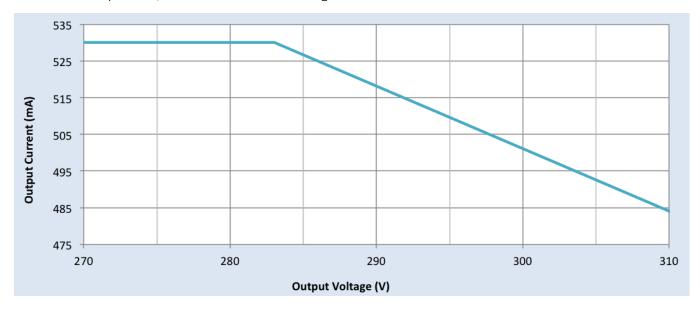
150W 120-277V 0.53A 0-10V

Electrical Specifications

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Driver Current Cutback

The driver current cutback feature provides for an increased output voltage with a reduced output current during abnormal LED operation, such as cold weather starting.



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0-10V Dimming Curve

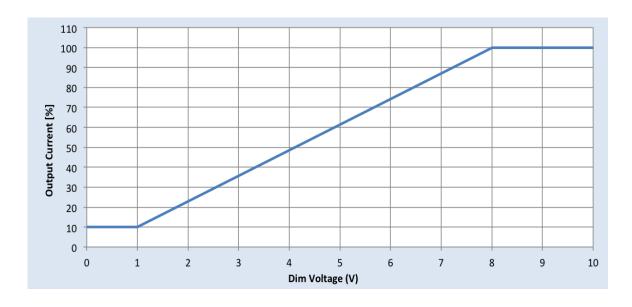
Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

Minimum dim level: 10% of Iout

Maximum output voltage on the dimming wires: 12V

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

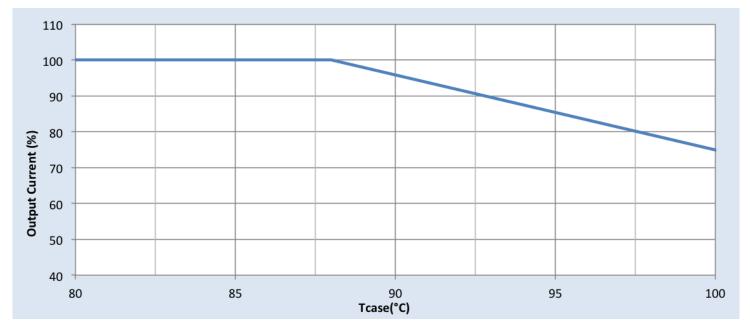


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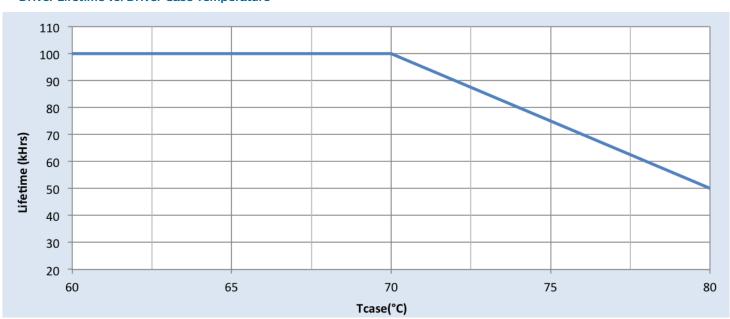
Output Current Vs. Driver Case Temperature



Note

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

Driver Lifetime vs. Driver Case Temperature

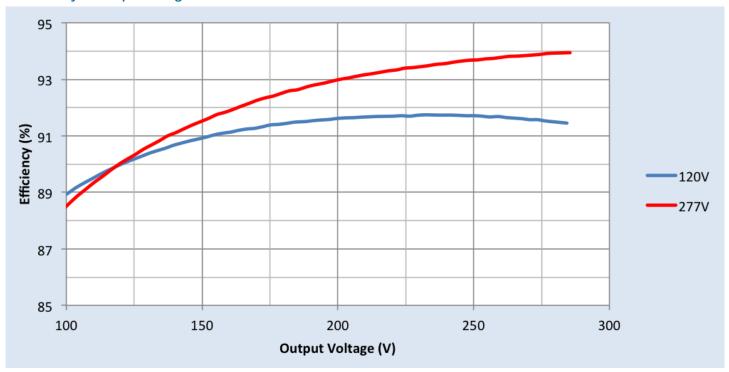


150W 120-277V 0.53A 0-10V

Performance Characteristics

Based on measurements on a typical sample at 70° C case. The accuracy of the measurements is within the tolerance of the measurement instruments.

Efficiency Vs. Output Voltage

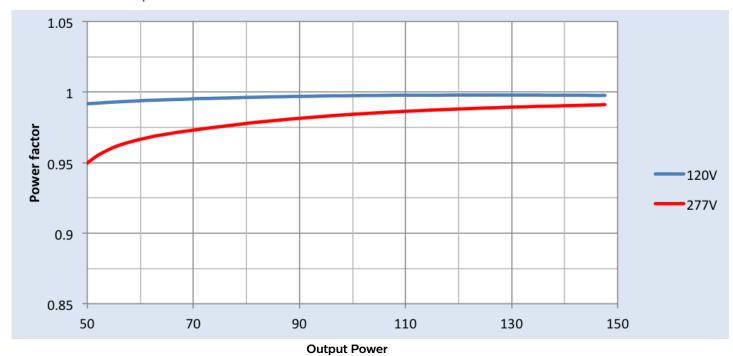


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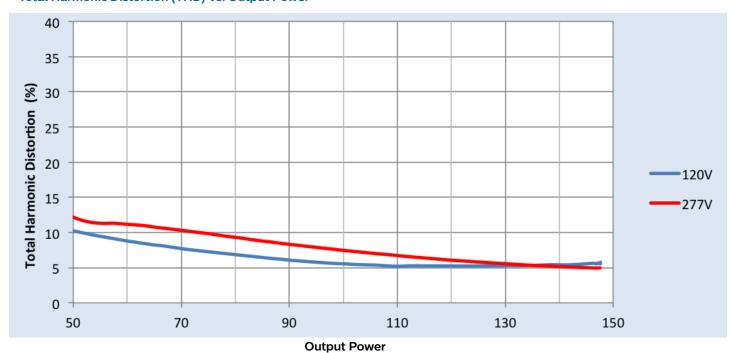
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Power Factor Vs. Output Power

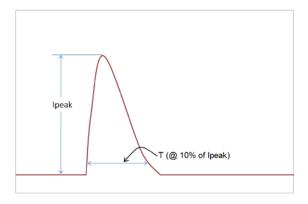


Total Harmonic Distortion (THD) Vs. Output Power



150W 120-277V 0.53A 0-10V

Inrush Current Info



Vin	lpeak	T (@ 10% of Ipeak)
120 Vrms	32A	298µS
277 Vrms	110.4A	273µS

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)	
1.2/50 μ s Combination Wave (w/t 2 Ω)	6kV	6kV	

Isolation

Isolation	Input	Output	0-10V	Enclosure
Input	NA	2xU+1kV	2.5kV	2xU+1kV
Output	2xU+1kV	NA	2.5kV	2xU+1kV
0-10V	2.5kV	2.5kV	NA	2xU+1kV
Enclosure	2xU+1kV	2xU+1kV	2xU+1kV	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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