LED Driver

ADVANCE

by (s) ignify

Xitanium

XI150C200V050BPF1





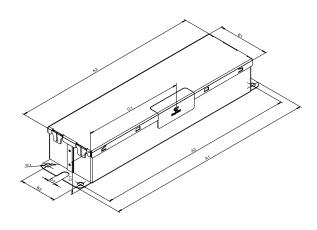
The Advance Xitanium range of edge industrial LED Drivers are designed to provide OEMs with efficient solutions for Class 2 linear high bay luminaries. These models are compatible with standard 0-10V dimming systems to deliver reliably smooth dimming performance down to a minimum of 10%. Adjustable output current via the SimpleSet Wireless programming enables OEM's to use 1 driver for multiple lumen packages.

Specifications

Input Volt. (Vac)	Out- put Power (W)	Output Voltage (V)	Output Cur- rent (A)	Efficiency @ Max Load and 75°C Case	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Pro- tect. (Combi Wave, KV)	Envir. Protect. Rating	Dim.	Dim. Range	Min. Out- put Cur- rent (A)	Driver Type
120	150	24 - 50	04.00	88.50	Life - 85°C	1.43	475	100/	0.05		UL damp	0-10V Analog	10% ~		Constant
277	(2x75)	Class 2 Output	0.1-2.0	89.50	UL - 90°C	0.62	175	<10%	>0.95	6	& dry, Type HL	Class 2 Wiring	100%	0.1	Current

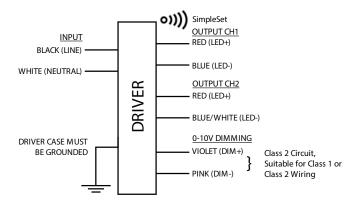
Enclosure

	In. (mm)	Tolerance (mm)
Overall Length (A1)	9.43 (239.5)	±0.5
Mounting Length (A2)	8.91 (226.2)	±0.5
Case Length (A3)	8.39 (213)	±0.5
Case Width (B1)	2.30 (58.3)	±0.5
Mounting Width (B2)	1.69 (42.9)	±0.5
Case Height (C1)	1.48 (37.6)	±1.0
Mounting Hole Diameter (D1)	0.23 (5.9)	±0.5
Mounting Hole Diameter (D2)	0.31 (7.9)	±0.5
Center of SimpleSet Antenna (G1)	4.41 (112.1)	±3.0



Wiring Diagram

Dimming	Wire Length (mm)
Black (Line)	270 (± 30)
White (Neutral)	270 (± 30)
Red (Positive, LED Output)	270 (± 30)
Blue (Negative, LED Output)	270 (± 30)
Blue/White (Negative, LED Output)	270 (± 30)
Violet (Positive, 0-10V)	270 (± 30)
Pink (Negative, 0-10V)	270 (± 30)



Warning

Install in accordance with national and local electrical codes. The field-wiring leads or push-in terminals shall be fully enclosed. For connections use wire rated for at least 90°C. Risk of fire or electric shock. Do not interconnect output terminations.

Grounding

Driver case must be grounded.



150W 2.0A 2 channel 0-10V dimming

Features

- 50,000+ hour lifetime¹
- Programmable output current through SimpleSet
- 6kV/3kA Surge rating ANSI C82.77-5

Benefits

- Designed for Class 2 luminaires
- Fast and simple way of programming
- No external surge protection required to pass C82.77-5 CAT C low

Application

· High-bay and mid-bay fixtures

Electrical Specifications

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

Product Data

Order Information					
Full Product Code	XI150C200V050BPF1 (Mid-Pack, 12pcs/Box), 12NC: 929002739413				
Line Frequency	50/60Hz				
Min. Mains Voltage Operational	108 Vac				
Max. Mains Voltage Operational	305 Vac				
Output Information					
Maximum Open Circuit Voltage	< 60Vdc				
Output Current Ripple (ripple = peak to average / average)	15% max. @ max. lout				
Output Current Tolerance (in the performance window)	<5%				
Protections	Short Circuit and Open Circuit Protection for LED + and LED-, Mis-wiring Protection				
Features					
0-10V Dimming	150μA (min 100μA, max 250μA for dimming voltage>1V, min 60μA 0 <voltage<1v)< th=""></voltage<1v)<>				
AOC (adjustable output current)	0.1-2.0A via SimpleSet Programming (Refer to Graph and Notes below, Factory Default at 1.29A)				
Additional SimpleSet Configurable Features	Adjustable Output Current (AOC) OEM Write Protected Features (OWP)				
Environment & Approbation					
Operating Ambient Temp. Range	-40°C to +55°C				
Max. Case Temperature (Tcase)	85°C for Life and 90°C for UL Safety				
Agency Approbations	UL8750, Class P (UL, cUL)				
Electromagnetic Compliance	FCC Title 47 Part 15 Class A				
Audible Noise	<20dB Class A				
Weight	2.16lbs /0.98kgs				

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 2.0A 2 channel 0-10V dimming

Electrical Specifications

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0-10V Dimming Curve

Dimming source current from the driver: 150µA (min 100uA.Max 250uA@1<Vdim<8V, min 60µA 0<Voltage<1V)

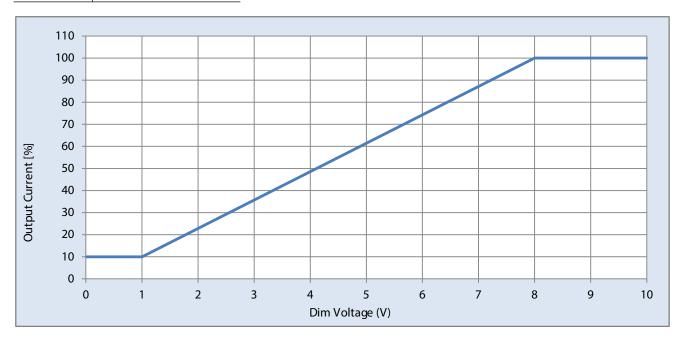
Minimum Dim Level: Factory default 10% of lout setting as default

Maximum output voltage on the dimming wires: 12V

Leakage current of dimming leads: 0.01mA, recommended max number of control circuits in parallel refer to 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		

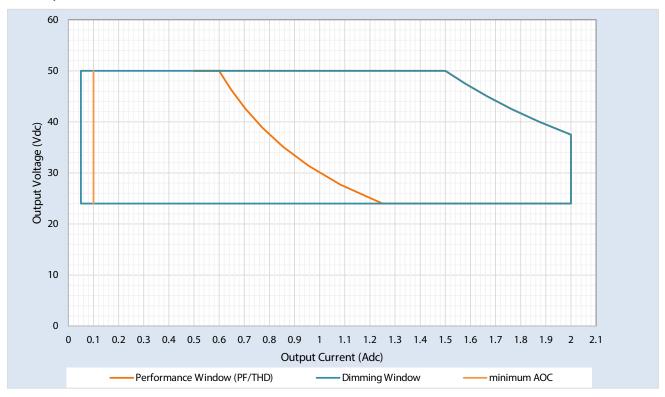


150W 2.0A 2 channel 0-10V dimming

Electrical Specifications

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Driver Operation Window



- 1. Factory default output current is 1.29A.
- 2. To get a 100% to 10% dimming range, the output current setting through AOC should be ≥ 500mA.
- 3. Factory default minimum dimming level is 10%. This can be adjusted between 5% and 100% using Advance MultiOne.
- 4. Absolute minimum current on this driver is 50mA.

150W 2.0A 2 channel 0-10V dimming

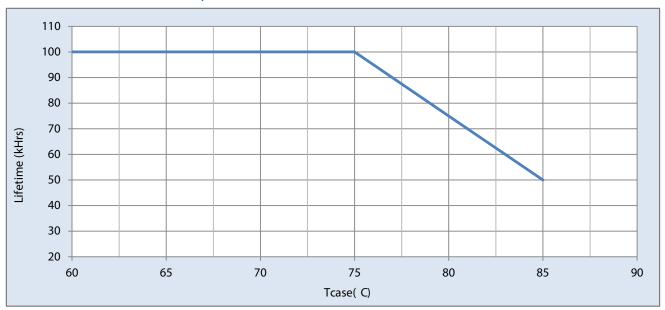
Electrical Specifications

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Output Current Vs. Driver Case Temperature



Driver Lifetime Vs. Driver Case Temperature

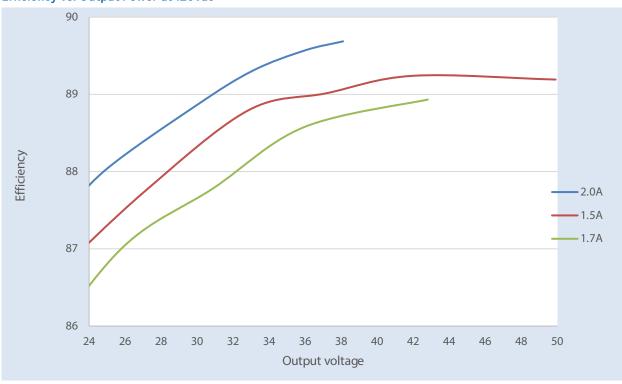


150W 2.0A 2 channel 0-10V dimming

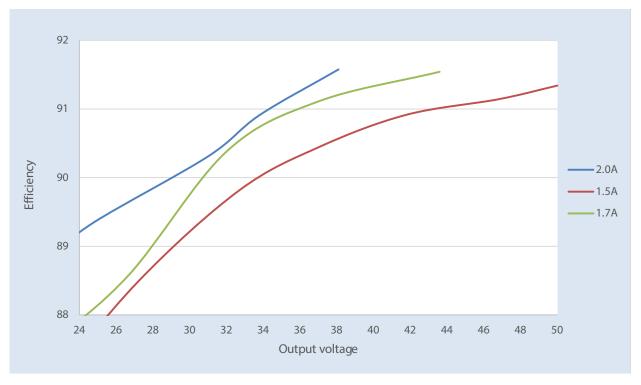
Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments.

Efficiency Vs. Output Power at 120Vac



Efficiency Vs. Output Voltage at 277Vac

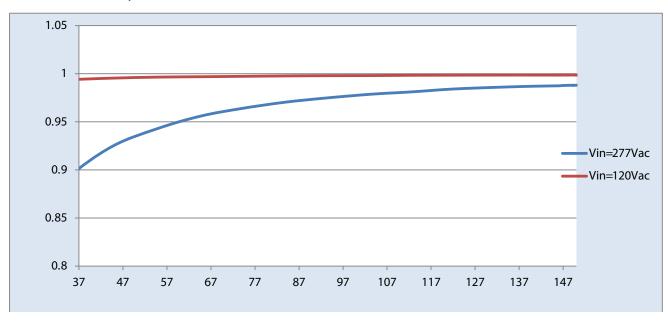


150W 2.0A 2 channel 0-10V dimming

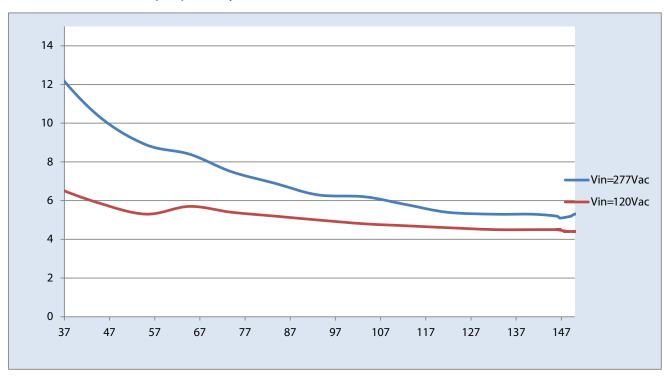
Performance Characteristics

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Power Factor Vs. Output Power

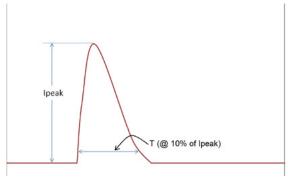


Total Harmonic Distortion (THD) Vs. Output Power



150W 2.0A 2 channel 0-10V dimming

Inrush Current Info



Vin	lpeak	T (@ 10% of Ipeak)	
120 Vrms	46.9A	296µS	
277 Vrms	106.5A	291µS	

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)		
Combi Wave (w/t 2Ω)	6KV	6KV		

Isolation

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

U = Max. Input voltage



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