# ADVANCE

by (signify

**LED** Driver

### Xitanium

XI065C053V125CNY1



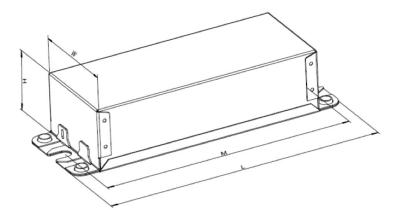
Long-lasting and low-maintenance, LED-based light sources are an excellent solution for all lighting applications. For optimal performance, these solutions require reliable drivers matching the long lifetime of the LEDs. **The Advance Xitanium LED outdoor driver portfolio** offers a range of products 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

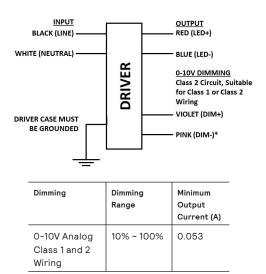
Input Voltage (Vrms)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max. Load and 70°C Case	Max. Case Temp. (°C)	Input Current (Arms)	Max. Input Power (W)	THD @ Max. Load	Power Factor @ Max. Load	Surge Protection (Combi Wave, KV)	Envir. Protection Rating	Driver Type
120	65	40,405	-125 0.53	90.5	80 (Life)	0.70	74	<10%	>0.95	4	UL Damp	Constant
		42-125			85 (UL)						& Dry, Type	Current

### Enclosure

	In. (mm)
Case Length	5.43 (138.00)
Case Width	2.32 (59.00)
Case Height	1.50 (38.00)
Mounting Length	5.98 (152.00)
Mounting Width	1.69 (42.88)
Overall Length	6.61 (168.00)



### Wiring Diagram



### Warning

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



### **Electrical Specifications**

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

### Features

- 50,000+ hour lifetime<sup>1</sup>
- Excellent thermal performance

### Benefits

- Enables long-life luminaire designs
- Allows luminaire designs for a wide range of ambient environments

#### Application

- Area
- Roadway
- Parking garages
- Floodlights

 0-10V dimming suitable for UL Class 1 and Class 2 wiring

### **Product Data**

Order Information					
Full Product Code	XI065C053V125CNY1M (Mid Pack, 12pcs/box)				
Line Frequency	50/60Hz				
Min. Mains Voltage Operational	108Vac				
Max. Mains Voltage Operational	305Vac				
Output Information					
Maximum Open Circuit Voltage	190Vdc				
Output Current (ripple = peak to average / average)	15% max @ max lout				
Output Current Tolerance	<5%				
Protections	Short Circuit and Open Circuit Protection for LED + and LED - and Temperature Foldback				
Features					
0-10V Dimming	150µA source current from driver				
Environment & Approbation					
Operating Ambient Temp. Range	-40°C to +55°C				
Max. Case Temperature (Tcase)	80°C				
Agency Approbations	UL 8750				
Electromagnetic Compliance	FCC Title 47 Part 15 Class A				
Audible Noise	<24dB Class A				
Weight	1.53lbs./0.57kgs.				

1. 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.

### **Electrical Specifications**

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### 0-10V Dimming Curve

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

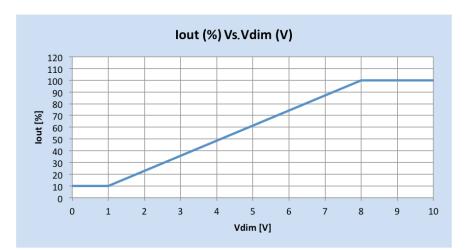
Minimum Dim Level (nominal): 53 mA

Maximum output voltage on the dimming wires: 12V

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**

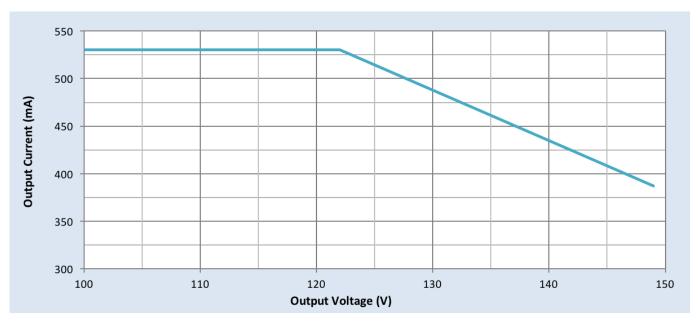
Manufacturer Part Number
Visit www.lutron.com/ advance for a list of dimmers (Mark VII) that will work with this driver.
IllumaTech IP7 series
Sunrise - SR1200ZTUNV



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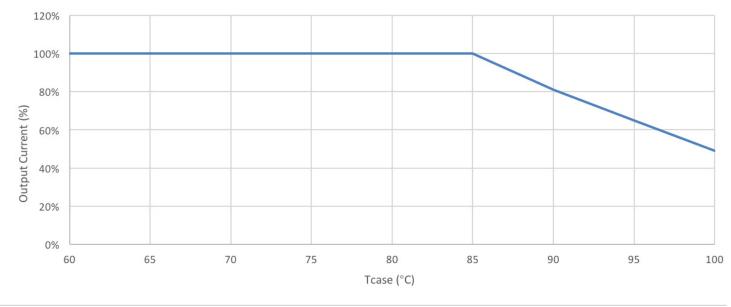
### **Driver Operation Window**



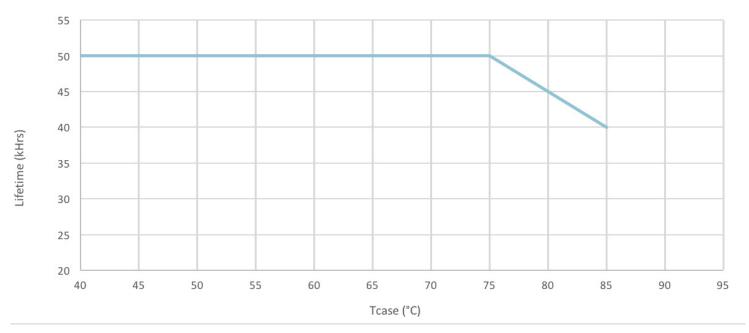
### **Electrical Specifications**

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#### **Output Current Vs. Driver Case Temperature**



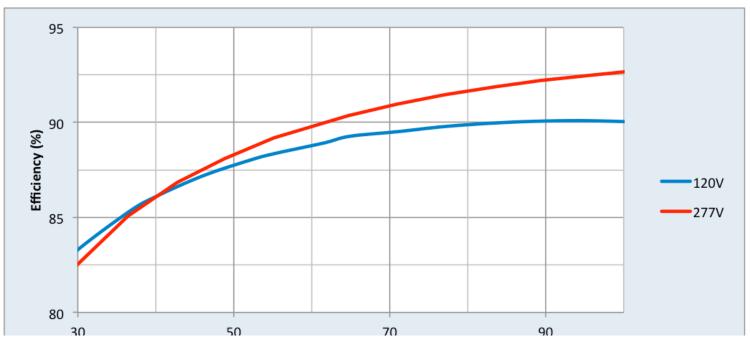
### Driver Lifetime Vs. Driver Case Temperature



### **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. The graphs are meant to be a guideline and not a specification.

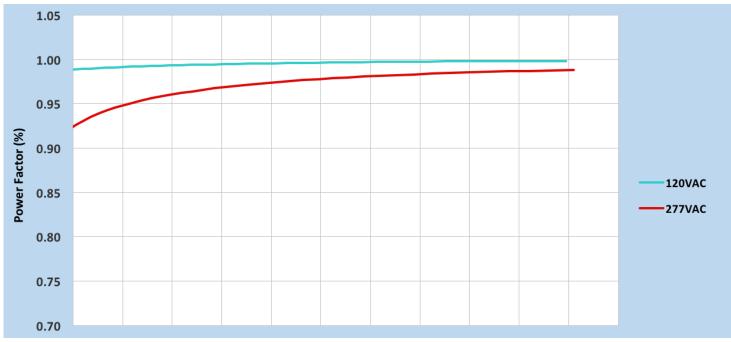
### Efficiency Vs. Output Voltage



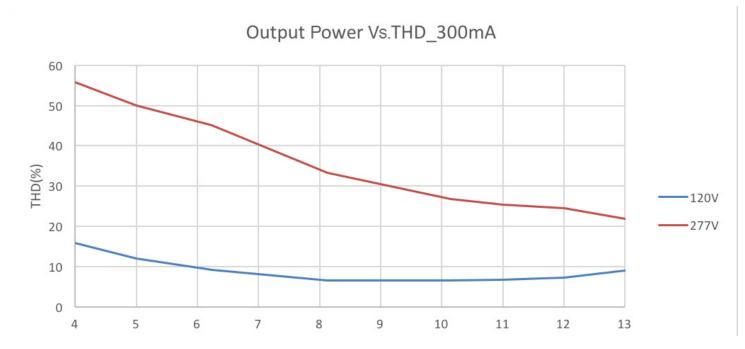
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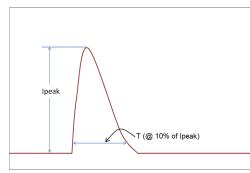
### Power Factor Vs. Output Power



### Total Harmonic Distortion (THD) Vs. Output Power



#### Inrush Current Info



Vin	lpeak	T (@ 10% of Ipeak)	
120 Vrms	36A	223µs	
277 Vrms	92A	188µs	

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 $2_2$ )	4kV	4kV

#### Isolation

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

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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