ADVANCE

by (signify

LED Driver

Xitanium SR

XI075C200V054VPT3



The Advance Xitanium Sensor Ready (SR) LED driver can help reduce complexity and cost of light fixtures used in connected lighting systems for indoor lighting applications. It's D4i certified and features a standard-compliant digital interface to enable direct connection to compatible networked lighting control (NLC) solutions. The minimum dimming level has been improved to be as low as 1%. Advanced lighting control functionalities that ordinarily would require additional auxiliary component are integrated into this driver. The result is a simple, cost-effective light fixture that supports the most advanced smart lighting use cases.

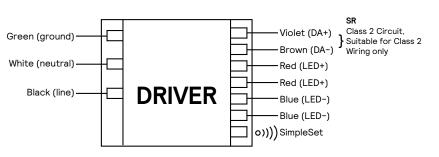
Specifications

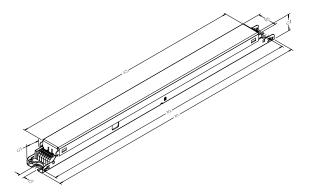
Input Volt. (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency @ Max Load and 70°C Case (%)	Max Case Temp. (°C)	Input Current (A)	Max. Input Power (W)	THD @ Max Load	Power Factor @ Max Load	Surge Protect. (Ring Wave, KV)	Envir. Protect. Rating	Dim.	Dim. Range (with specified dimmers	Min. Output Current (A)	Other Comments
120	75	10 - 54	0.1 - 2.0	87.50%	Life - 80°C	0.7	87.5	<10%	>0.95	2.5	UL damp	SR	1% ~	0.007	SR input current
277				89.50%	UL - 85°C	0.3		<15%			& dry		100%		(PSU off), max 2mA

Enclosure

	In. (mm)	Tolerance (mm)
Overall Length (A1)	16.69 (424.0)	± 0.5
Mounting Hole Distance (A2)	16.34 (415.0)	± 0.5
Case Length (A3)	14.49 (368.0)	± 0.5
Case Width (B1)	1.20 (30.5)	± 0.5
Case Height (C1)	1.02 (25.8)	± 1.0
Mounting Hole Diameter (D1)	0.31 (7.9)	± 0.5
Center of SimpleSet Antenna (G1)	0.76 (19.4)	± 3.0







WARNING

Install in accordance with national and local electrical codes. Use 18 AWG Solid Copper Wire Rated >= 90 °C. Strip Wire 3/8". For Class 2 wiring, use 20 AWG - 16 AWG.

GROUNDING Driver case must be grounded.



Xitanium SR XI075C200V054VPT3

75W 2.0A SR 54V (1%) with SimpleSet

Features

- Standard-compliant (ANSI C137.4 and DiiA) digital interface including:
 - Integrated DALI bus power supply (Part 250)
 Memory Bank 1 extension, Energy Monitoring and Diagnostics (Parts 251, 252, 253)
- Energy metering and advanced diagnostics
- Continuous dimming down to 1%
- Low standby power <0.25W with no loading and

<0.5W with 0.15W load

- Drive current setting via SimpleSet wireless programming
- 5-year limited warranty*

Benefits

- Enable interoperability with diverse wireless
 sensors/network systems
- Reduce complexity and cost of fixture by eliminating auxiliary components ordinarily re-

quired for powering sensors, switching fixture off and monitoring energy use

 Future proof through standard interface to any suitable sensor and ease of adjustable drive current

Application

Indoor linear applications such as troffers and pendants

Product Data

All specifications are typical and at $25^{\circ}\mathrm{C}$ T case unless otherwise specified.

Order Information						
Order Code	XI075C200V054VPT3M (Mid-Pack, 12pcs/Box), 12NC: 929002710913					
GTIN	781087165348					
Input Information						
Line Frequency	50/60Hz					
Min. Mains Voltage Operational	108Vac					
Max. Mains Voltage Operational	305Vac					
Outpit Information						
Maximum Open Circuit Voltage	<60Vdc					
Output Current Ripple	15% max @ max lout 4% max @ Visible for Stroboscopic Frequency range 60Hz-3KHz					
(ripple = peak to average / average)						
Pst/SVM	Meets NEMA77					
Output Current Tolerance	<5%					
Protections	Short Circuit, Open Circuit Protection for LED + and LED – and Temperature Foldback					
Control Lead Leakage Current (SR)	0.01mA, recommended max number of control circuits in parallel, refer to Design In Guides					
Features						
AOC (Adjustable Output Current)	0.1A-2.0A via SimpleSet (Factory Default at 2.0A)					
Suitable for Outdoor Use?	No					
Interfaces	Simpleset, Sensor Ready(SR)					
Power Reporting Accuracy	+/-4% in performance window and under nominal operating conditions					
Configurable Features	Adjustable Light Output (ALO) Adjustable Output Current (AOC) Constant Light Output (CLO) Dia specification DALI Part 253 - Luminaire Maintenance (DALI 253 M) Luminaire (Fixture) Information (Luminaire Info) OEM Write Protected features (OWP) SR Power Supply (SR PSU)					
SR power supply						
Current Source	52mA to 60mA					
Voltage Range	12V to 20V					
Communication Protocol	DALI-2, D4i, ANSI C137.4					
Mis-wiring to Mains Protection	No					
Environment & Approbation						
Operating Ambient Temp. Range	-20°C to +50°C					
Max Case Temperature (Tcase)	85°C					
Agency Approbations	UL8750, CSA C22.2 No.250.13, NOM, Class P (UL, ETL), cUL					
Electromagnetic Compliance	FCC Title 47 Part 15 Class A					
Audible Noise	<24dB Class A					
Weight	0.79Lbs/ 0.36Kgs					
Envir. Protection Rating	UL Dry and Damp					

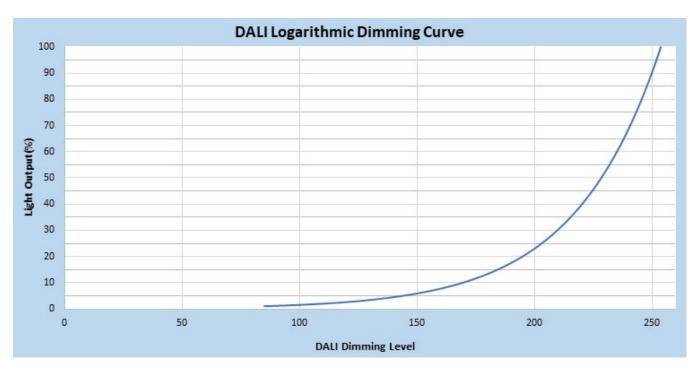
*1. Advance Xitanium LED drivers are designed and manufactured to engineering standards correlating to an average life expectancy of 50,000 hours of operation at maximum rated case temperature. Minimum 90% survivals based on MTTF modeling

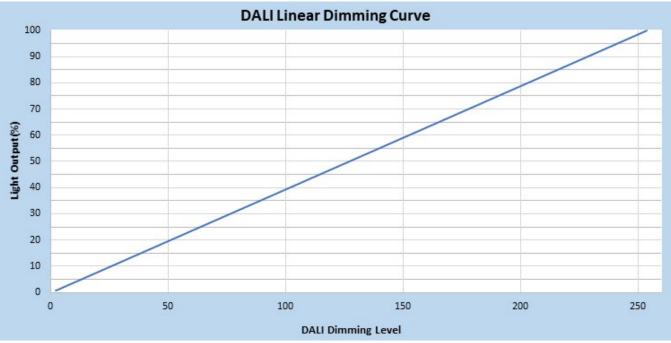
Electrical Specifications

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

Dimming Characteristics

Dimming is accomplished through the 2-wire DALI connection to the sensor. DALI standard IEC62386_102 Edition 2 defines the logarithmic dimming curve. DALI standard IEC62386_107 Edition 1 defines the linear dimming curve as well as the command for switching between logarithmic and linear curves (Default = Logarithmic).

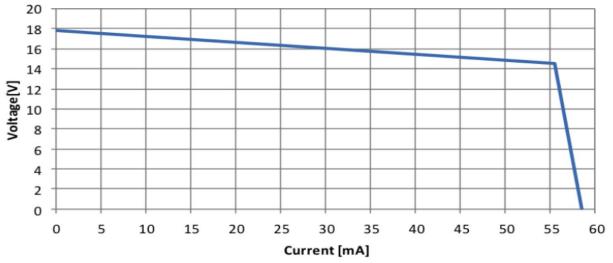




Electrical Specifications

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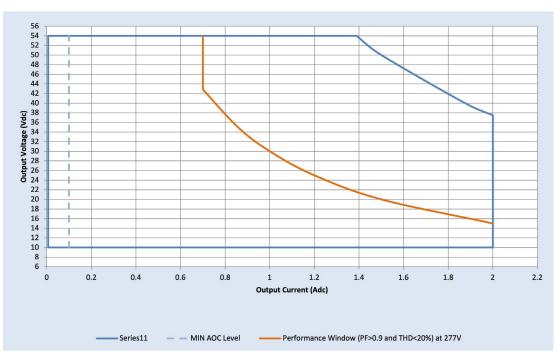
SR Power Supply Characteristics (Typical)



Note:

Power supply through digital connection, default "on," for connection of one driver to one sensing/RF device. Consult your representative for use with multiple devices.

Operating Window



Note:

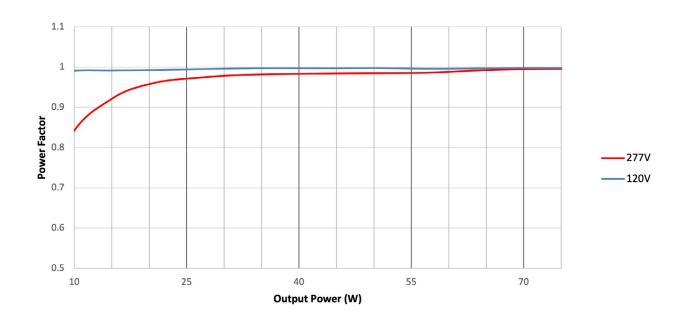
1. Factory default output current is 2A.

2. To get a 100% to 1% dimming range, the output current setting through AOC should be \geq 0.7A.

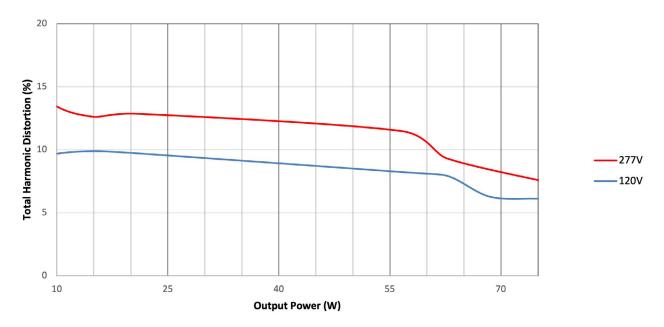
Performance Characteristics

Based on measurements on a typical sample at 75°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.

Power Factor vs. Output Power



Total Harmonic Distortion vs. Output Power



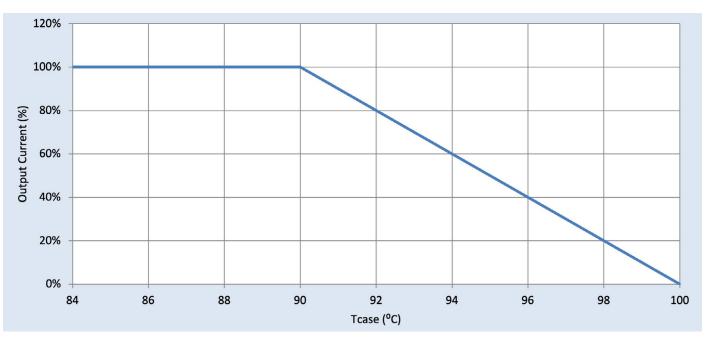
Note:

PF>0.9, THD<20%.

Performance Characteristics

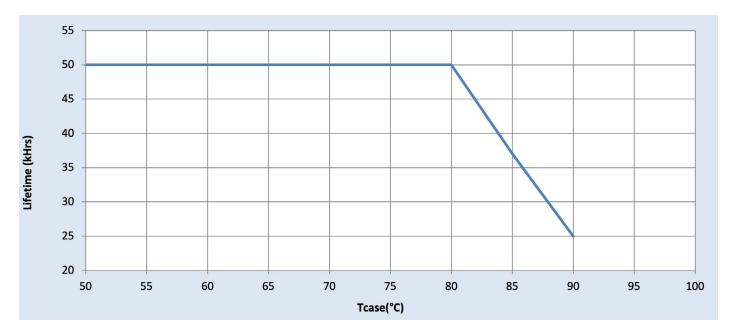
Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

Output Current Vs. Driver Case Temperature



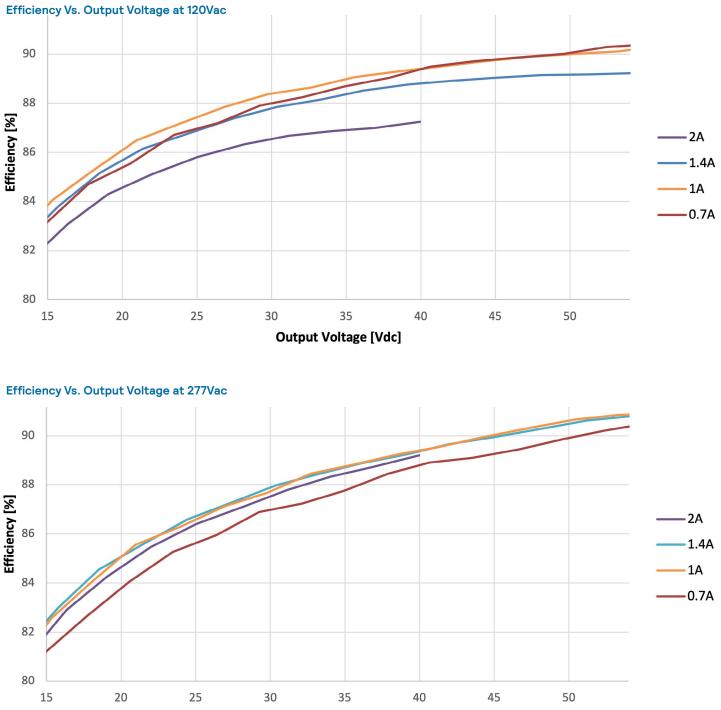
Note: There is $\pm 5^{\circ}$ C tolerance on the driver case temperature

Driver Lifetime vs. Driver Case Temperature



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.

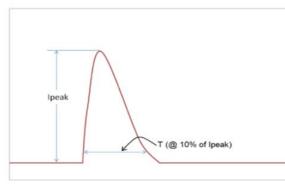


Output Voltage [Vdc]

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Inrush Current Info



Vin	lpeak	T (@10% of Ipeak)		
120 Vrms	7A	50us		
277 Vrms	17A	50us		

Lightning Surge Info

ANSI Surge Type	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
100 kHz Ring Wave (w/t 30₂)	>2.5kV	>2.5kV

Isolation:

Isolation	Input	Output	SR	Enclosure	
Input	-	1610Vac	1610Vac	1610Vac	
Output	1610Vac	-	500Vac	500Vac	
SR	1610Vac	500Vac	-	500Vac	
Enclosure	1610Vac	500Vac	500Vac	-	

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