



# Bring the highest quality to your lighting

# S)idnify



# Team up with us

Bringing together years of lighting electronics expertise to make a difference for you.

We are proud to introduce our latest LED catalog under our new company name – *Signify*. Our name originates from the way light becomes an intelligent language, which connects and conveys meaning. It is a clear expression of our strategic vision to unlock the extraordinary potential of light for brighter lives and a better world.

As the industry leader in lighting electronics with the Advance and Advance Bodine brands, we deliver breakthroughs in LED electronic components that are the building blocks of everything from the basic to the most advanced lighting fixtures and systems available today. Our comprehensive offering of LED components is engineered with the highest attention to quality, and reliability standards delivered in optimal system combinations.

Our leading innovation center in Rosemont, IL, coupled with global R&D in Eindhoven and Shanghai, offer significant collaborative expertise to partner with local customers to bring the latest innovations to market. Our seasoned US-based Design-in Services team will work closely with our partners to prototype luminaires built with Advance Bodine components by performing rigorous testing for the most demanding application conditions.

Also, our suite of design-in tools can configure and facilitate ease of programming of a complete LED system to enable seamless work flow from design to product release.

Lastly, our world class North American manufacturing and distribution footprint enables us to deliver superior value to our OEM partners by utilizing our supply chains to ensure best in class service levels.

Our combination of vision, products and services brings light to life. Signify and you—brightening spaces and experiences together.



Dinesh Balan
Head of Marketing | Electronics | North America

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**OEM LED catalog 2018** 

In this catalog you will find a simple overview of our LED innovations. We always strive for high quality, therefore your feedback is highly appreciated.

# Dan Cozzo

Channel Marketeer – OEM

# Technology

We have been focusing on the LED market already for over three decades and have a solid track record of technology leadership, combined with excellent application knowledge and market understanding. Prime activities include designing, developing, manufacturing and selling LED drivers, modules and sensors to luminaire manufacturers for incorporation in new luminaires. Our extensive portfolio of LED products covers a wide range of luminaire applications.



# Connected to you

The best Internet of Things (IoT) lighting platform requires advanced sensors, digital LED drivers, and a robust partners ecosystem to bring it life.

Designing a modern, IoT-enabled lighting system can be daunting. No matter where you are in this journey you can count on Signify to provide the most comprehensive and advanced LED electronics in the industry. We help you to realize your vision from the ground up, starting with award-winning Xitanium SR LED driver that provides the digital foundation for the smart lighting system of the future.



The indoor segment has been dominated for many years by linear lighting solutions.

This segment, which includes everything from commercial offices to educational spaces and retail/hospitality to health care, has always maintained a strong drive towards energy saving. Legislation and building regulations have driven the standards applicable on light quality, luminance and energy efficiency in a working environment and this has also highlighted the role of lighting controls. Our portfolio of lighting components consisting of highly efficient LED modules and drivers deliver what this segment needs.

# Outdoor

Outdoor lighting encompasses a vast range of applications, including motorways, highways, residential areas, city centers and tunnel lighting.

All have their particular lighting needs and requirements. The outdoor market is transforming fast from HID light sources to LED and is also a forerunner in looking at how to use lighting control management systems. Here we have a diverse product portfolio available for luminaire manufacturers with a vast range of outdoor drivers, with a focus on robustness, reliability, configurability and connectivity.

# within Signify

# **44** Industry

The industry segment covers an extensive range of applications such as warehouses, production areas and cold storage.

This segment has a strong drive towards energy saving and lower maintenance while enabling high quality and uniform lighting for optimum visual performance and comfort in order to create a more efficient and productive environment. Our module and driver portfolio enables cost effective and reliable systems for extreme application conditions. Used with controls, our lighting solutions provide illumination only when and where it is needed.

# lighting

Lighting products, brightening faces. Product visibility and attractiveness helps create the ultimate shopping experience.

From food to fashion, retailers are in need of quality lighting solutions that not only can help them save energy and operating expenses, but enhance their merchandise to help drive point-of-sale conversions. Our portfolio has application specific solutions with a wide range of flexibility to address the diversity of this market, from freezer lighting, to chillers and coolers, to dry-shelf merchandising.



Emergency lighting is an essential part of every facility's life safety program.

When normal power fails for any reason, emergency lighting provides critical illumination. In fact, emergency lighting is required by state, local and national codes for commercial, industrial and institutional buildings in the United States. The emergency segment delivers manufacturers a broad portfolio of emergency lighting solutions designed to satisfy code and application requirements. Manufacturers can choose the right Advance Bodine emergency LED driver or inverter for their fixtures and know they are providing their customers with quality and reliability they deserve.

signify.com/oemna

# Component oroduct families

Integrated LED modules and drivers are your partners in performance.

Our portfolio of LED modules, drivers and emergency products cover a large range of your luminaire application requirements. We offer two component levels of drivers: the high-performance Xitanium LED drivers and CertaDrive LED drivers for more general lighting applications. Both can be used in combination with the high-performance Advance Fortimo LED modules that push the performance boundaries in high-end lighting applications, and are for your basic solutions in general lighting applications respectfully.

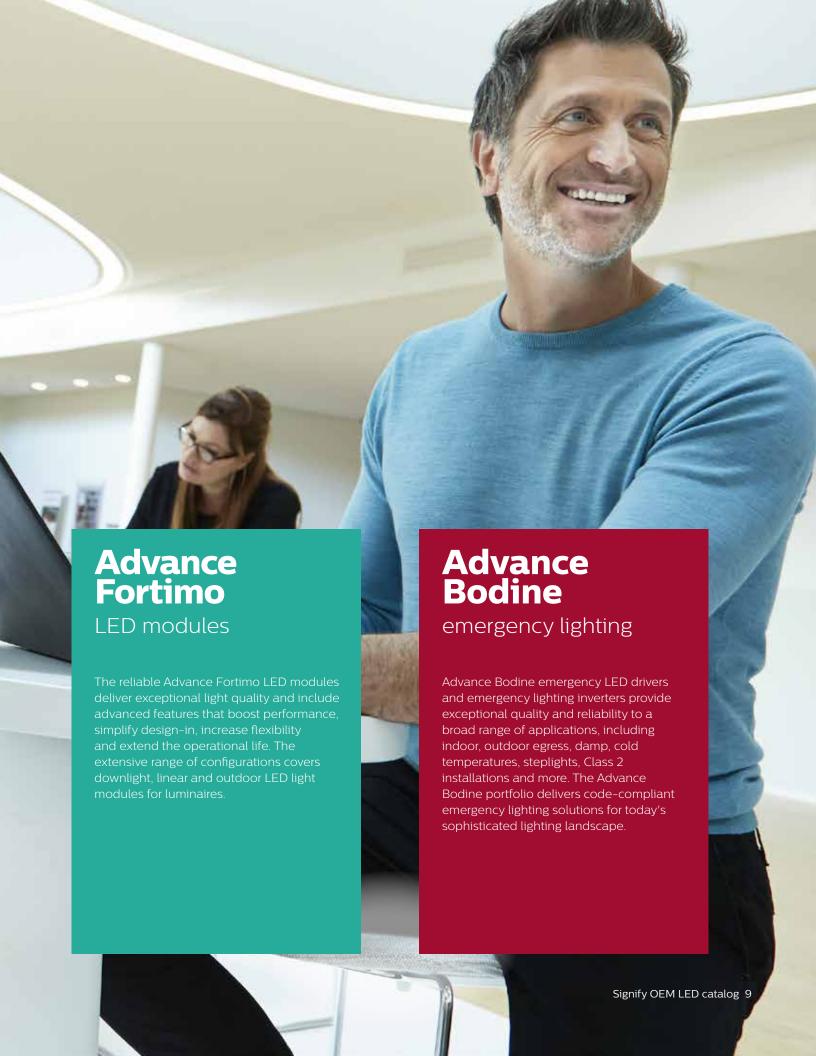
# **Xitanium**

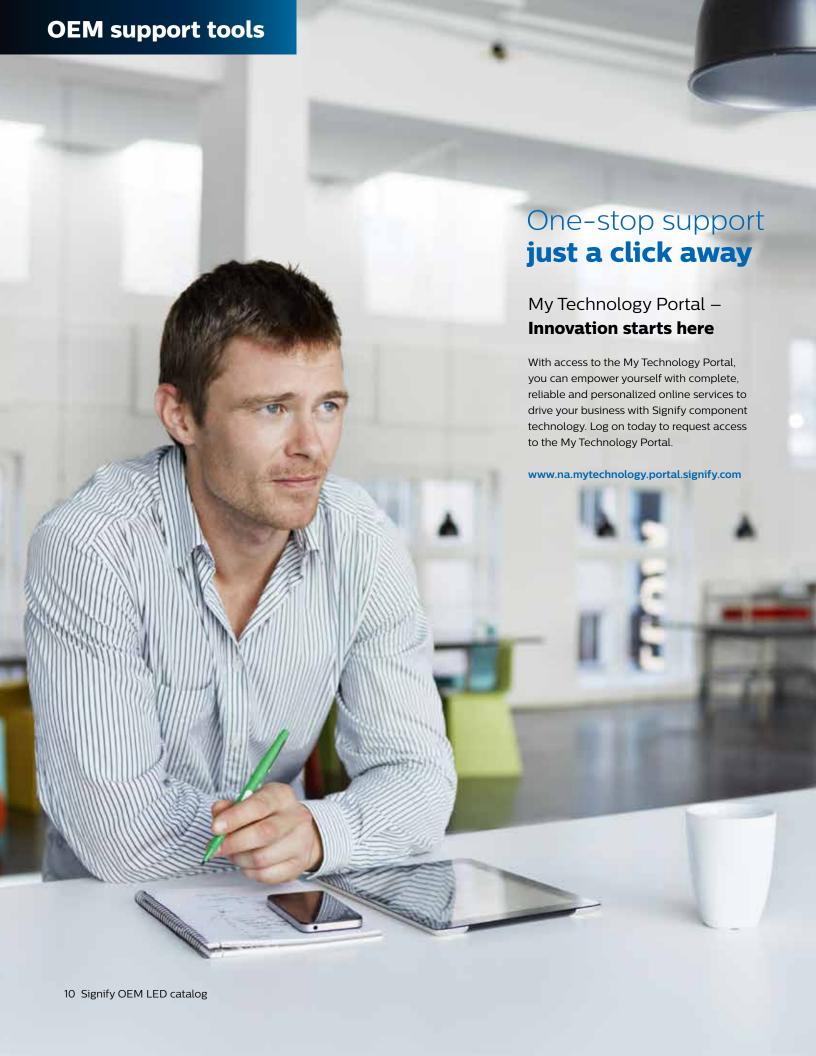
LED drivers

The state-of-the-art Xitanium LED drivers are robust and reliable, and are offered with a wide choice of operating windows. They are 'partners in performance' for Advance Fortimo LED modules and are now available with ComfortFade\* The drivers come in various form factors and are available for indoor and outdoor applications. The range comprises fixed light output and dimming versions as well as programmable drivers that provide the flexibility to configure the drivers at a later stage. Xitanium drivers come with a fiveyear limited system warranty.6 SR versions are available for connected lighting applications.

# **Certa**Drive

CertaDrive LED drivers are designed to meet your market needs for lighting components in general lighting applications. They are ideal for high-volume applications, as well as third-party LED modules. Offering basic specifications, such as specific current and voltage settings, the drivers come with a five-year limited system warranty<sup>6</sup> (module and driver).









# 24/7 access to these support tools:



**News**, including product videos, event information and other market specific insights



Easy Design-in Tool

Access to the LED Easy Design-in Tool with extended features to help you quickly find the right LED product for your application



**Portfolio**, a customized overview based on your order history, quantity, phase-out information, search and Excel download



My account,

customize your dashboard, set notifications



**Product news,** all upcoming introductions and phaseouts including dates, codes, all the files you need



**Share center,** to share files with your key account manager and find relevant documentation

Make sure that you have your notification turned on to stay on top of all the latest developments from Signify.



**Contacts**, see your relevant contacts and get in touch

# **Coming soon:**

New Design-in widget to save even more time

More product videos uploaded to our News section

Design-in Funding Assistance Program Widget information



# Making your work easier every day



With the Easy Design-In Tool you can configure optimal LED module to driver combinations in minutes. Based on your selections, EDIT automatically calculates solutions and helps to manage complexity in LED systems with ease.

# **Trusted to save time**

Easy Design-in Tool has been developed to help save you time. Not only does it help you select the best LED module-driver combination, it also indicates how to connect components and set up the driver to suit each installation. EDIT is easy to incorporate into your daily routine.

### Quick and ease of use

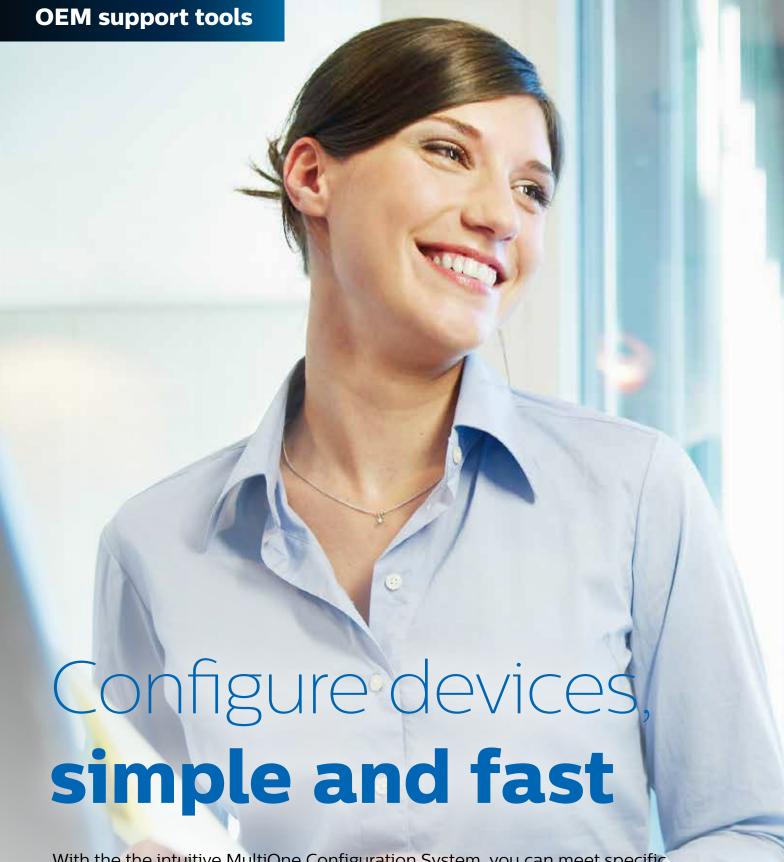
Easy Design-in Tool is very easy to use. The interface has been optimized, to make it easier to select the components you would like to design-in. You can focus on the specifications that matter to you, associate the right drivers and modules, or compose your combination from scratch. Simply select the solution that will give you optimal results. When you're ready, you can download a summary of your newly-designed system – including full technical details and a configuration of the components, system and basic luminaire specifications. It's that simple.

### **New features**

A unique new feature in EDIT is that you can use the driver as the starting point for your system design. Furthermore, after logging in to EDIT though the My Technology Portal, you can customize the tool to your needs with focused views and exciting new functionality. Or having your customized LED modules in the tool. For your eyes only, of course. EDIT is designed to make your work easier every day.

To discover more go to www.na.easydesignintool.signify.com





With the the intuitive MultiOne Configuration System, you can meet specific application requirements with a limited portfolio of configurable devices. Depending on the type of device, driver and/or sensor, a combination of features can be configured to create diversity, security and savings.



Use the
MultiOne Configuration
System to configure
devices to your
application needs...

# **Configuration layout**









# MultiOne engineering

Used to read and configure devices, and to create Feature files which can be used by MultiOne Workflow.

### MultiOne workflow

Used to automate the configuration process during any stage of the manufacturing process.

# Configuration interface

Hardware used to communicate with devices.

# Configurable devices

- Xitanium LED drivers
- EasySense sensors

# **Benefits**

# √ Flexibility

Because the tool can access features built into the driver or sensor, you're free to configure your devices to meet specific requirements. This enables optimized installations, last minute changes, easy diagnostics and maintenance.

# ✓ Innovative

We bring innovation to your organization by allowing you to wirelessly configure our sensors and drivers using our SimpleSet technology

# Configurable features

# ✓ Functionality

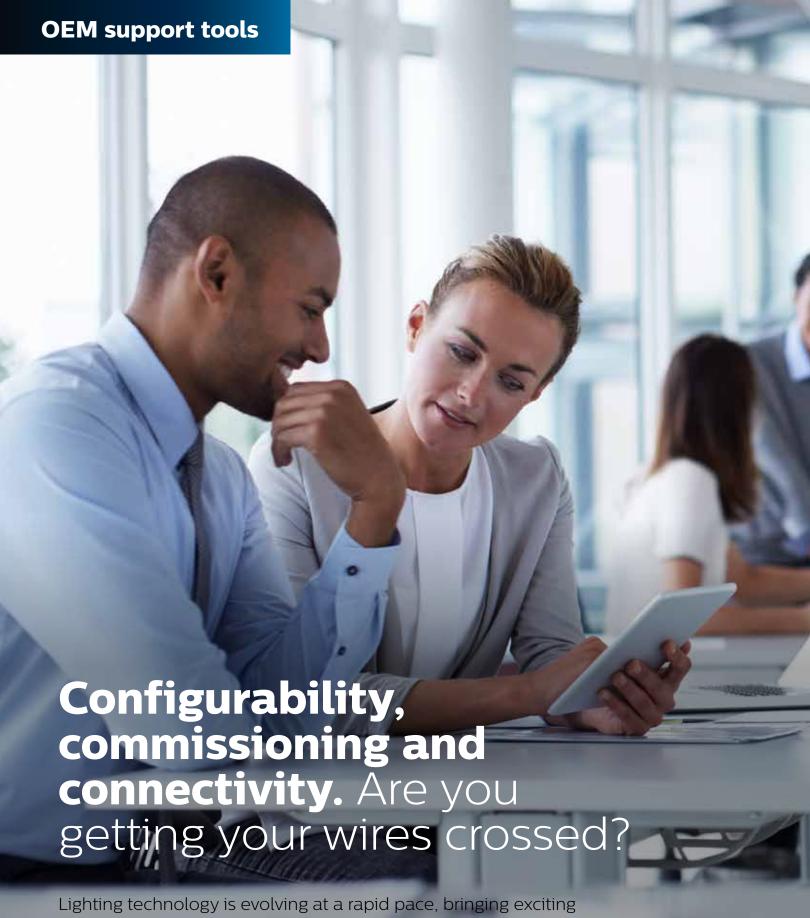
- · adjustable output current
- · adjustable light output
- · adjustable startup time
- · end of life indication

# ✓ Security

- module temperature protection
- · driver temperature limit
- active cooling
- DC emergency
- · OEM write protection
- OEM traceability

# ✓ Savings

- · constant light output
- · energy meter
- · dimming interface
- 1-10 V dim level
- AmpDim
- LumiStep
- DynaDimmer
- corridor mode
- touch and dim



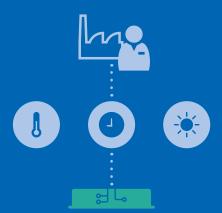
Lighting technology is evolving at a rapid pace, bringing exciting possibilities for OEMs and their customers. But with so many new introductions and features, there is a lot of new terminology to understand.



# Configurability

This refers to a device's feature(s) which can be configured during the manufacturing process using DALI or SimpleSet technologies. Some of the configurable features are:

- · adjustable Output Current for the LED module
- corridor mode with light levels and fade-time settings for presence detection
- DynaDimmer for autonomous light levels and timers for outdoor dimming
- LineSwitch for light levels, ramp up and fade down with central outdoor control
- DC-emergency for light levels when mode switches to central battery during mains failure
- start-up time to gradually increase light levels at switch on
- module temperature protection for over-temperature conditions
- driver temperature limit to protect driver at over-temperature.

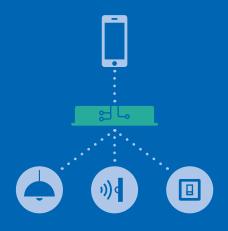


# Commissioning

This refers to grouping capabilities which can be set after a lighting solution has been installed. Using a portable device with infrared capabilities the following can be linked and commissioned:

- drivers
- luminaires
- switches
- · sensors.

This enables you to tailor a lighting installation, setting discrete lighting zones and parameters within one location to suit a range of different needs.



# Connectivity

This refers to **the wireless connection** between drivers, luminaires, switches and sensors. The Zigbee language of connected lighting enables you to:

- $\cdot\,\,$  create new ways to use light
- $\boldsymbol{\cdot}$  download and upload information
- · improve comfort and convenience
- save energy.







# Plug and play — Working together





# Just released!

# New-to-market LED innovations

# Troffer solution and Edge industrial high bay solution

### **Troffer solution:**

## CertaDrive gen 2 LED driver + Fortimo VO LV2 LED module

The new Advance CertaDrive gen 2 LED driver is designed to pair perfectly with the Fortimo LED strip VO LV2 module, no programming necessary. This paired solution is ready out of the box with the quality and reliability that is synonymous with the Advance and Fortimo names.

### Industrial high bay solution:

# Edge LED driver + Fortimo edge LED module

The industrial high bay solution employs a similar concept, pairing the new edge LED driver and module to provide optimal cost and reliability, even at extreme application conditions and heights.

Both solutions are produced onshore, allowing for shorter turn around cycles and delivery times, without overseas transport.

Suitable for:





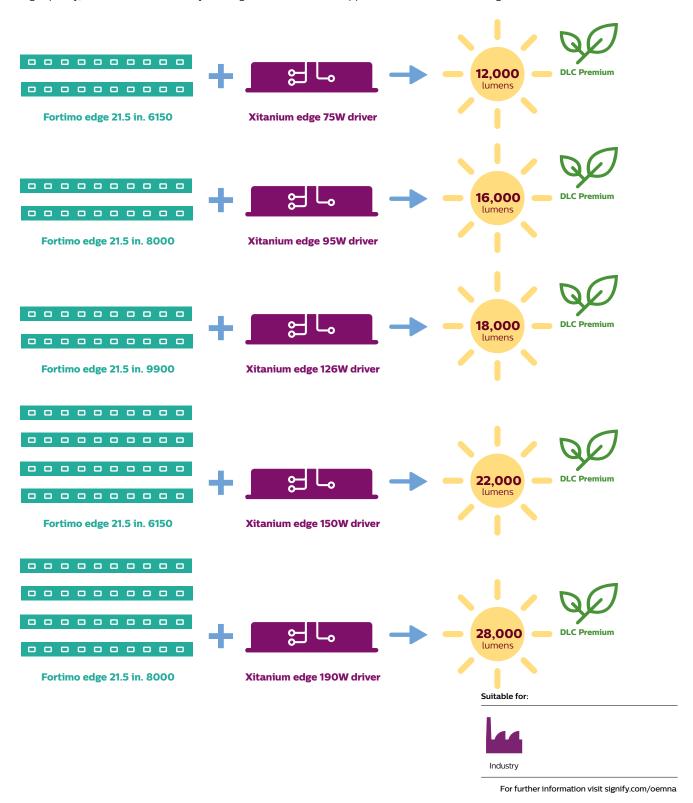
Indoor

Industry

For further information visit signify.com/oemna

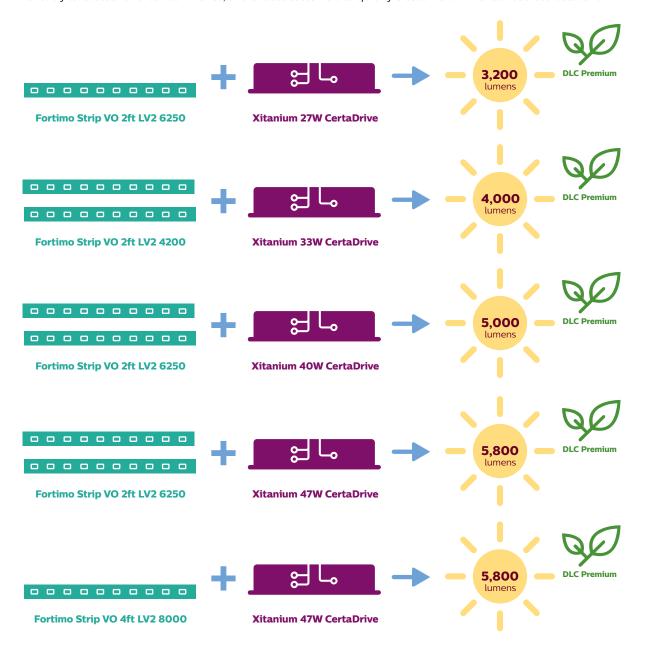
# Edge industrial high bay solution

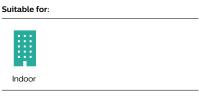
The Edge industrial high bay solution perfectly pairs drivers and modules to efficiently and cost effectively supply fixtures with high quality, DLC Premium efficiency level light even at extreme application conditions and height.



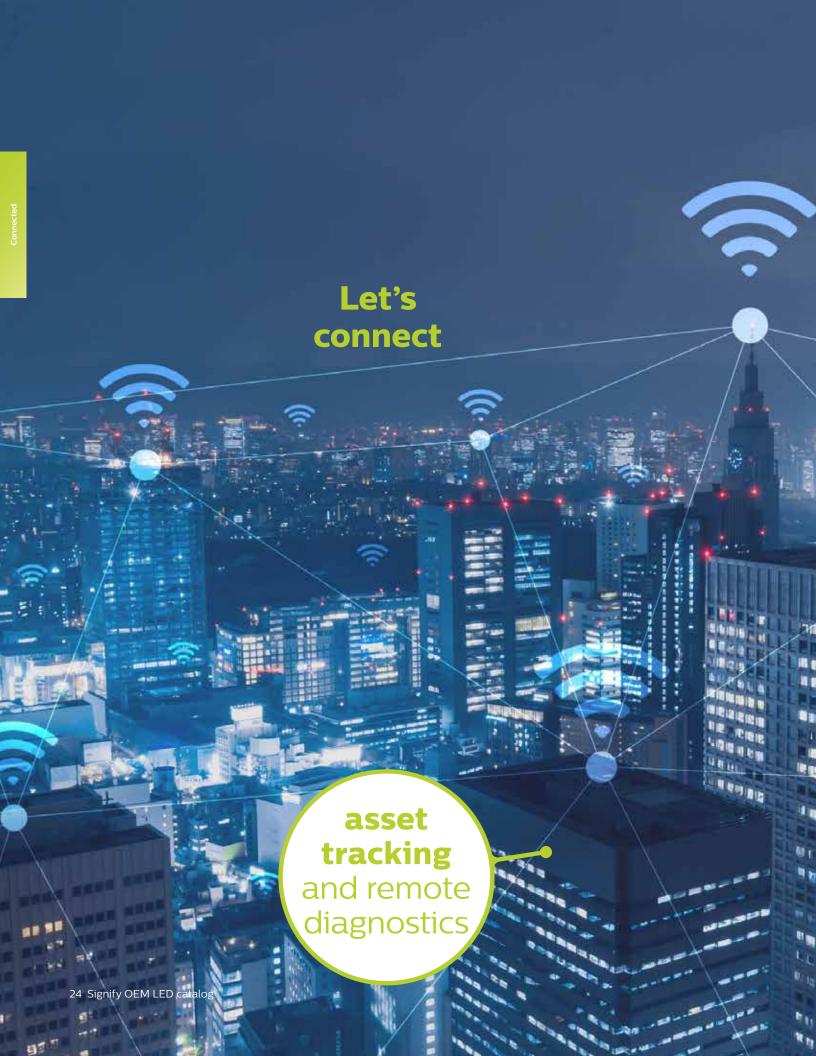
# **Troffer solution**

The Fortimo strip VO LV2 and CertaDrive gen 2 have been designed to create off the shelf troffer solutions. These systems are ideal for entry level stock and flow luminaries, and enable customers to quickly create North American sourced solutions.





For further information visit signify.com/oemna









# SR = Sensor Ready, two-way digital communication

The Advance Xitanium SR LED drivers are sensor ready, meaning they can be easily connected to a fixture-based, wireless sensor, making them perfect for a growing list of intelligent and connected lighting applications. The intelligence is already built in, ready to interface with and power the sensors exactly to your customers' needs. Our drivers are future proof, as SR will be the new standard for connectivity. Thanks to our SR certified partner program you can choose from a wide variety of quickly expanding possibilities.

# **EasySense = Cost-effective, fixture-based lighting control**

The Advance EasySense portfolio comprises of some of the most cost-effective, DLC-approved wireless network lighting control (NLC) solutions on the market today. They integrate advanced network lighting control functionalities and energy savings capabilities either with or without the need for external gateway. They can also be easily programmed using the smartphone apps. Together with the Advance Xitanium SR LED drivers, the EasySense portfolio provides a compelling and cost-effective solution that enables you to design the lighting system of tomorrow.



Robert Lee Product Marketeer



# Just released!

For more information, please visit **signify.com/connectedlighting** 

Advance EasySense SNH200 Network lighting control solution for high-bay and industrial applications

Advance EasySense SNH200 is well suited for warehouse and high-bay applications with high ceiling height and harsh temperature/humidity conditions. It provides advanced network lighting control capabilities (e.g. group sharing and zoning), PIR motion sensing, daylight harvesting in a IP65 rating enclosure without the need for an external gateway.

### Advance Xitanium SR 180W outdoor LED drivers

They are the latest additions to our popular Advance Xitanium SR outdoor driver portfolio. It features an open-standard, low-voltage digital interface to other SR-certified network lighting control (NLC) products. It also provides auxiliary power supply to, and accepts logical signal input from, SR-certified third-party devices. The integrated power supply eliminates the need for high-voltage relays and increase system reliability.

### **Advance Xitanium SR 75W outdoor LED drivers**

A refresh of the popular Advance Xitanium SR outdoor drivers, they feature new firmware for improved constant light output (CLO) performance. They include expanded internal memory that is ideal for remote asset tracking and diagnostics.

# Coming soon!

LED innovations in the pre-launch phase

Advance Xitanium SR indoor LED drivers with 1% dimming

1% dimming is coming to the Advance Xitanium indoor SR family. This feature brings smooth, continuous, and flicker-free dimming from 100% to 1% lighting level.



# **EasySense sensors**

## Advance EasySense sensors

Advance EasySense sensors comprise of a group of indoor and high-bay network lighting control sensors that are DLC-qualified. They incorporate PIR and daylight ensing capabilities. They also support wireless networking capability which enables them to communicate with each other as well as other compatible Zigbee devices. They are powered by Xitanium SR driver via a low-voltage, two-wire, connection. The main target applications include, but not limit to, commercial, school, and industrial applications. The intuitive Android-based Advance Field Apps enable quick and easy configuration and commissioning during and after installation. So, let's get connected.

For more information go to philips.com/easysense.



**João Salgueiro**Product Manager





# Indoor

Product specification Product specification										
Product name	Housing (volume inside luminaire)	Key features	Req. luminaire hole	Occupancy technology	Detection area	Viewing angle	Full light dimlevel	Operating Ambient temperature	Product code	
	mm		mm		ft.		%	°C	GPC	
EasySense SNS200	50x19x31.5 (50x19x24)	Advanced grouping Color: white	44x17	Passive IR	At 10ft 12ft.x11ft. (minor movement) At 8ft 10ft.x9ft. (minor movement)	X=72° Y=86°	5-100%	0-55	929000766813	
EasySense SNS300	50x19x31.5 (50x19x24)	Advanced grouping Color: white Zigbee 3.0 gateway	44x17	Passive IR	At 10ft. – 12ft.x11ft. (minor movement) At 8ft. – 10ft.x9ft. (minor movement)	X=72° Y=86°	5-100%	0-55	929000795613	
EasySense SNH200	Diameter: 115 Height: 43	Advanced grouping and zoning	M20 threaded nipple for M20 knockout	Passive IR	At 52.4ft range diameter 52.4ft. At 39.4ft range diameter 42.7ft. At 26.2ft range diameter 29.5ft. At 13.1ft range diameter 14.8ft.	X=45° Y=45°	5-100%	-30-65	929000793913	

# Accessories

# **Product specification**

Product name	Description	Product code
		GPC
IR Dongle	Infrared device to commission Easy- Sense SNS200 and EasyAir SNH200	9290 016 51106
EasySense SMR-50	Surface mount ring for EasySense SNS200 and EasySense SNS300	929000767013
EasySense SMB-50	Surface mount bracket for EasySense SNS200 and EasySense SNS300	929001540213
EasySense SNS200CMP	Ceiling mount bracket for EasySense SNS200 remote mounting (the sensor is built-in with the bracket)	929000790213
EasySense SNS300CMP	Ceiling mount bracket for EasySense SNS300 remote mounting (the sensor is built-in with the bracket)	929001702613

# Wireless wall switches

# **Product specification**

Manufacture	Product Description	Model
Illumera	Self-Powered Single Rocker ZigBee Wireless Light Switch	ZBT-S1AWH
	Self-Powered Dual Rocker ZigBee Wireless Light Switch	ZBT-S2AWH
	Decorator Style Rocker Switch (single-rocker)	MZ-SW1
	Decorator Style Rocker Switch (dual-rocker)	MZ-SW2
Magnum	Self Powered Wireless Switch (single-rocker)	MZ-ASW1
Energy Solutions	Self Powered Wireless Switch (double-rocker)	MZ-ASW2
	Single Rocker Pad	MZ-ESRP
	Dual Rocker Pad	MZ-EDRP

# Suitable for:







Connected

Indoor

Industry

# **Apps**

Three complementary programming apps are available within the Advance Field Apps for configuring EasySense sensors: EasySense NFC, EasySense Office IR, and EasySense Industry IR.

# The **EasySense NFC app** can be used to:

- · Configure light parameters, one luminaire at a time
- · Store the desired settings as profiles for future use
- · Data reporting

This app is intended for programming of the EasySense at the factory or prior to installation: the luminaires do not need to be powered. The communication to the sensor is with NFC, which means the smartphone needs to be in close proximity, almost touching the sensor.

# The EasySense office/industry IR apps can be used to:

- · Commission luminaires as a single group
- EasySense Industry IR can be used to program multiple EasySense SNH200 as a separate zone (within a group)
- · Configure light parameters of a single luminaire or an entire group
- · Add wireless switches to a group
- · Reset sensors or settings to factory defaults

Both apps can be used once the luminaires are installed and powered. The communication to the sensor is with IR signal from the ground level.



# **Xitanium SR LED drivers**



Advance Xitanium SR LED drivers provide the digital foundation for smart lighting system of today and tomorrow. They enable two-way data exchange between the LED driver and the sensor/controller. This data-exchange is essential for advanced smart lighting use cases such as power metering, remote monitoring, asset management, etc. The key benefits for using the Advance Xitanium SR LED drivers are:

### Unlocking the potential of lighting beyond illumination

The depth and complexity of connected lighting systems can vary greatly – from simple luminaire-level controls to integrated systems connected to building networks. Advance Xitanium SR (Sensor Ready) LED drivers make it easy to develop and deploy control-ready luminaires for a host of applications. SR represents the standard interface for connecting drivers to nodes/sensors and is the key foundational element for any connected lighting system.



## Reducing complexity: Streamlined fixture design

The all-in-one design of Advance Xitanium SR LED drivers standardizes the digital connection between the driver and sensor and includes an integral power supply, so no additional auxiliary components or power packs are required. A simple, two-wire connection is all that is needed to connect to various SR certified devices. As a result, fixtures for connected lighting become less complex, cheaper, and more practical.

## Flexibility: Wide range of applications and SR certified partners

Advance Xitanium SR LED drivers are available for three primary lighting applications: indoor, industrial/high-bay, outdoor. They leverage the established Xitanium footprint for drop-in design for the fixture OEM. To ensure seamless compatibility between Advance Xitanium SR LED drivers and third-party sensors, Advance created the SR certified program. This gives end users the flexibility to choose the type of connected lighting system that best suits their needs.

# 



# Suitable for:



Connected





Industry



For further information visit signify.com/connected lighting





Because light is all around us, the lighting infrastructure is an ideal platform for collecting and carrying information. This is the driving force behind connected lighting. Design an Advance Xitanium SR LED driver into your luminaire, and it can play a bigger role in network connectivity. The Advance Xitanium SR LED drivers are sensor ready, making them perfect for a growing list of smart lighting applications. You can power and interface with sensors directly from the driver without the need for additional modules, devices or power packs. And thanks to the SR certified program, there are a variety of sensor and network system vendors available to suit your needs.

For more information go to signify.com/xitaniumsr/na

## Indoor

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Additional Features	Housing
XI040C110V054VPT1	40	0.1 - 1.1	27 - 54	Yes	120-277	SR	75	85	AOC (SimpleSet/Rset), Class P	T-360
XI075C200V054VPT1	75	0.7 - 2.0	27 - 54	Yes	120 - 277	SR	75	85	AOC (SimpleSet/Rset), Class P	T-425

## Industry/High-bay

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Additional Features	Housing
XI040C110V054VPT1	40	0.1 - 1.1	27 - 54	Yes	120-277	SR	75	85	AOC (SimpleSet/Rset), Class P	T-360
XI075C200V054VPT1	75	0.7 - 2.0	27 - 54	Yes	120 - 277	SR	75	85	AOC (SimpleSet/Rset), Class P	T-425
XI095C275V054VPF1	95	0.1-2.75	20-54	Yes	120-277	SR	85	90	AOC (SimpleSet), 6kV Surge, Class P	F-Can Gen 2
XI095C275V054VSF1	95	0.10 - 2.75	20-54	Yes	120-277	SR	85	90	AOC (SimpleSet), 6kV surge, AUX, LSI, Class P	F-Can Gen 2

### Outdoor

	Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Additional Features	Housing
new	XI075C070V118VSY2	75	0.07 - 0.70	43-118	No	120-277	SR	80	80	AOC (SimpleSet), 6kV surge, AUX, LSI, Class P	Y-Can Gen 2
new	XI075C105V079VSY2	75	0.105 – 1.05	32-79	No	120-277	SR	80	80	AOC (SimpleSet), 6kV surge, AUX, LSI, Class P	Y-Can Gen 2
	XI150C070V235VSF1	150	0.07 - 0.70	78-235	No	120-277	SR	80	80	AOC (SimpleSet), 6kV Surge, AUX, LSI	F-Can Gen 2
	XI150C105V157VSF1	150	0.105 - 1.05	44-157	No	120-277	SR	80	80	AOC (SimpleSet), 6kV Surge, AUX, LSI	F-Can Gen 2
new	XI180C090V285VSF1	180	0.10-0.90	100-285	No	120-277	SR	85	90	AOC (SimpleSet), 6kV Surge, AUX, LSI	F-can Gen 2
new	XI180C125V210VSF1	180	0.10-1.25	70-210	No	120-277	SR	85	90	AOC (SimpleSet), 6kV Surge, AUX, LSI	F-can Gen 2
new	XI180C180V144VSF1	180	0.10-1.80	50-144	No	120-277	SR	85	90	AOC (SimpleSet), 6kV Surge, AUX, LSI	F-can Gen 2

AOC: Adjustable Output Current MTP: Module Temperature Protection AUX: Auxiliary Power Supply LSI: Logic Signal Input

PROG: Programmable, includes DALI, Dynadimmer, Constant Light Output (CLO),

Adjustable Startup Time (AST), Over The Life (OTL)

PROG+: All the above + AMP DIM

### Suitable for:







Industry



For further information visit signify.com/connectedlighting

# Xitanium SR bridge

# Expanding SR (Sensor Ready) to any application

The Advance Xitanium SR bridges are designed to expand the flexibility and application of the SR protocol with SR-certified components. These products enable wireless control of luminaires that are equipped with the full range of Advance Xitanium 0-10V dimming drivers. Primary use cases are:

- For use with multiple 0-10V drivers where managing fixtures as a group is desired or where per-fixture control is not practical. In such application, the SR bridge aggregates all drivers and controls/monitors them as one group.
- For use in combination with 0-10V drivers where Comparable Advance Xitanim SR drivers are not available. This makes deployment of SR practical for any niche application where a 0-10V dimming driver is available.



Product specification										
Input Voltage (Vac)	Max. Power (VA)	Max. Current (A)	Max. Losses (W)	Max. Case Temp (°C)	Surge Protection Common/Diff (KV)					
120	730	6.1								
208	1270	6.1								
240	1270	5.3	1.0	70	2.5					
277	1270	4.6								
347	1280	3.7	_							

# Suitable for:









# **Choose SR certified**

# to drive compatibility

The performance of Advance Xitanium SR drivers is tested and certified to eliminate any interface problems. This means you can offer connected lighting solutions without having to worry about software capabilities and system interoperability. We have a growing list of SR certified third-party sensor and lighting control solutions that are compatible with Advance Xitanium SR LED drivers. They cover a wide range of connected lighting solutions from trusted providers of sensor and connectivity modules, building management systems and city management systems.

# Released SR certified products\*



SR partnerSR certified productNedapLuxon IoT nodeEnlightedCS-D2, FS-D22

CimConiSLC3400 DC photocellDigital LumensDLA-S, DLA-I, DLA-R

**Lutron** Vive Integral Fixture Control DFCSJ-OEM-OCC and DFCSJ-OEM-RF

Magnum Energy Solutions Mx-OPUS-MLDHB, Mx-OPUS-MLD, MX

# **System compatibility**

SR certified products are tested by Signifty for SR and DALI 2.0 interoperability. The SR partners are responsible for the end-to-end system performance guarantee.

## **Compatibility with outdoor CMS systems**

In the outdoor segment, the most cost-effective option is to use the Advance Xitanium SR LED driver in combination with the four-pin SR connector for both the CMS nodes and potentially additional sensors. Advance Xitanium SR LED drivers can also be used in combinatio with the 7-pin NEMA socket. In this situation specific guidelines must be followed. Please consult with your Signify representative for more info.

<sup>\*</sup>For a complete and up to date list of all SR compliant products please visit www.lighting.philips.co.uk/oem-emea/products/driving-connected-lighting-components





# Because people work better in well-lit spaces

**flexible** and efficient

# Linear

### Advance Fortimo LED line

Designed to replace fluorescent lighting in new luminaires for general lighting applications in office, retail, and industry.

# Advance Fortimo LED line high flux high temperature

Ideal for application at elevated installation heights and increased application temperatures where more light is needed, such as high-bay applications.

## Advance Fortimo LED strip

Enabling design of high-performance slim linear LED luminaires, not possible with fluorescent lighting or Advance Fortimo LED Line.

## Advance Fortimo LED strip value offer

Enabling economic fixture design meeting DLC requirements for linear LED applications like troffers replacing T8 lamp equivalents.

# Advance Fortimo LED strip EdgeLit (EL)

Designed to enable slim and uniform architectural lighting applications like suspended panel LED luminaires

# Point

# Advance Fortimo DLM flex L2 G2 DS

Provides the ease of switching defined flux levels via a dip switch on board while still allows tuning the models through Advance Xitanium LED Drivers with SimpleSet technology. Available in CRI 80 and 90 models.

# Advance Fortimo DLM EaseSelect

Integrated module with a 0-10V 1% dimmable driver inside, enabling speed on design, assembly and installation.

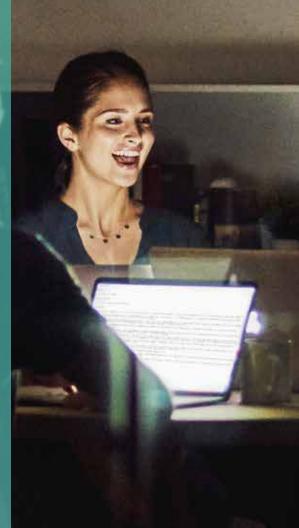
# Advance Fortimo SLM gen 6

Quality of light and performance in a chip-on-board design, ideal for architectural and retail lighting applications.

## <u>Outdoor</u>

### Advance Fortimo FastFlex gen 3

Designed for OEMs looking for a "one-stop shop" where board and lenses are provided to help support a short fixture development cycle while enabling good optical flexibility with FastFlex's eight standard light distributions.





# Just released!

New-to-market LED innovations. For more information, please visit **signify.com/ledmodulesna** 

#### **Advance Fortimo edge**

Part of a perfectly paired system of industrial/ high bay drivers and modules, provides optimal cost and reliability with DLC Premium performance level in extreme application conditions and application heights. See Systems section for more information.

#### Advance Fortimo VO LV2

Pairs with fixed current CertaDrive gen 2 to provide a high quality, ready out of the box integrated solution lighting in troffer fixtures. See Systems section for more information.

# Coming soon!

LED innovations in the pre-launch phase

#### Advance Fortimo InstaFit field-replaceable module

With this innovative and groundbreaking technology, there is no longer a need to dispose of an entire LED troffer fixture in event of failure due to the light source. Advance Fortimo InstaFit gives your end users the ability to easily change out a module in event of failure.

Suitable for:

Indoor Industry

# **Advance Fortimo edge**

Part of a perfectly paired system of Advance industrial/high bay drivers and modules, provides optimal cost and reliability with DLC Premium performance level in extreme application conditions and application heights.



#### **Product information (LV1)**

Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929001749513	Fortimo Edge 21.5in 6150lm 830 LV1	5730	154	80	3000	85
929001749613	Fortimo Edge 21.5in 6150lm 835 LV1	5960	160	80	3500	85
929001749713	Fortimo Edge 21.5in 6150lm 840 LV1	6160	166	80	4000	85
929001749813	Fortimo Edge 21.5in 6150lm 850 LV1	6160	166	80	5000	85
929001749913	Fortimo Edge 21.5in 8000lm 830 LV1	7330	153	80	3000	85
929001750013	Fortimo Edge 21.5in 8000lm 835 LV1	7630	159	80	3500	85
929001750113	Fortimo Edge 21.5in 8000lm 840 LV1	7880	165	80	4000	85
929001750213	Fortimo Edge 21.5in 8000lm 850 LV1	7880	165	80	5000	85
929001750313	Fortimo Edge 21.5in 9900lm 830 LV1	9100	153	80	3000	85
929001750413	Fortimo Edge 21.5in 9900lm 835 LV1	9470	160	80	3500	85
929001750513	Fortimo Edge 21.5in 9900lm 840 LV1	9790	165	80	4000	85
929001750613	Fortimo Edge 21.5in 9900lm 850 LV1	9790	165	80	5000	85

#### **Module driver compatibility**

The Advance Fortimo edge module is compatible with the fixed current Advance edge driver or with Advance Xitanium driver. The edge driver is a fixed current driver that pairs with the edge module without programming. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output efficacy and lifetime.



**Jan Flipkens**Product Manager

#### Suitable for:



Industry



# **Advance Fortimo LED strip**

Advance Fortimo LED strips are the workhorses in our linear modules portfolio. They offer the perfect combination of high efficiency that lasts (to enable good total cost of ownership) with a slim form factor that is easy to design into a multitude of luminaires. As a consequence, they have been growing rapidly in popularity for nearly all indoor general lighting applications.



#### **Product information (LV4)**

Froduct information (EV4)							
Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life	
12 NC		Typical	lm/W	K	CRI	°C	
929000775413	LED Strip 0.5ft 550lm 830 NA LV4	520	170	3000K	80	80	
929000775513	LED Strip 0.5ft 550lm 835 NA LV4	530	175	3500K	80	80	
929000775613	LED Strip 0.5ft 550lm 840 NA LV4	540	179	4000K	80	80	
929000775713	LED Strip 0.5ft 550lm 850 NA LV4	550	181	5000K	80	80	
929000775813	LED Strip 0.5ft 550lm 927 NA LV4	410	133	2700K	90	80	
929000775913	LED Strip 0.5ft 550lm 930 NA LV4	430	141	3000K	90	80	
929000776013	LED Strip 0.5ft 550lm 935 NA LV4	440	145	3500K	90	80	
929000776113	LED Strip 0.5ft 550lm 940 NA LV4	450	148	4000K	90	80	
929000776213	LED Strip 1ft 1100lm 830 NA LV4	1030	170	3000K	80	80	
929000776313	LED Strip 1ft 1100lm 835 NA LV4	1070	175	3500K	80	80	
929000776413	LED Strip 1ft 1100lm 840 NA LV4	1090	179	4000K	80	80	
929000776513	LED Strip 1ft 1100lm 850 NA LV4	1100	181	5000K	80	80	
929000776613	LED Strip 1ft 1100lm 927 NA LV4	810	133	2700K	90	80	
929000776713	LED Strip 1ft 1100lm 930 NA LV4	860	141	3000K	90	80	
929000776813	LED Strip 1ft 1100lm 935 NA LV4	880	145	3500K	90	80	
929000776913	LED Strip 1ft 1100lm 940 NA LV4	900	148	4000K	90	80	
929000777013	LED Strip 2ft 2200lm 830 NA LV4	2070	170	3000K	80	80	
929000777113	LED Strip 2ft 2200lm 835 NA LV4	2130	175	3500K	80	80	
929000777213	LED Strip 2ft 2200lm 840 NA LV4	2170	179	4000K	80	80	
929000777313	LED Strip 2ft 2200lm 850 NA LV4	2200	181	5000K	80	80	
929000777413	LED Strip 2ft 2200lm 927 NA LV4	1620	133	2700K	90	80	
929000777513	LED Strip 2ft 2200lm 930 NA LV4	1720	141	3000K	90	80	
929000777613	LED Strip 2ft 2200lm 935 NA LV4	1770	145	3500K	90	80	
929000777713	LED Strip 2ft 2200lm 940 NA LV4	1800	148	4000K	90	80	
929000777813	LED Strip 24in 2200lm 830 NA LV4	2070	170	3000K	80	80	
929000777913	LED Strip 24in 2200lm 835 NA LV4	2130	175	3500K	80	80	
929000778013	LED Strip 24in 2200lm 840 NA LV4	2170	179	4000K	80	80	
929000778113	LED Strip 24in 2200lm 850 NA LV4	2200	181	5000K	80	80	
929000778213	LED Strip 24in 2200lm 927 NA LV4	1620	133	2700K	90	80	
929000778313	LED Strip 24in 2200lm 930 NA LV4	1720	141	3000K	90	80	
929000778413	LED Strip 24in 2200lm 935 NA LV4	1770	145	3500K	90	80	
929000778513	LED Strip 24in 2200lm 940 NA LV4	1800	148	4000K	90	80	
929000777613	LED Strip 4ft 4400lm 830 NA LV4	4130	170	3000K	80	80	
929000777713	LED Strip 4ft 4400lm 835 NA LV4	4260	175	3500K	80	80	
929000778813	LED Strip 4ft 4400lm 840 NA LV4	4350	179	4000K	80	80	
929000778913	LED Strip 4ft 4400lm 850 NA LV4	4390	181	5000K	80	80	
929000779013	LED Strip 4ft 4400lm 927 NA LV4	3250	133	2700K	90	80	
929000779113	LED Strip 4ft 4400lm 930 NA LV4	3430	141	3000K	90	80	
929000779213	LED Strip 4ft 4400lm 935 NA LV4	3540	145	3500K	90	80	
929000779313	LED Strip 4ft 4400lm 940 NA LV4	3610	148	4000K	90	80	
929000779413	LED Strip 4ft 4400tm 940 NA LV4	3780	163	3000K	80	80	
929000779413	LED Strip 2ft 4000lm 835 NA LV4	3900	168	3500K	80	80	
929000779613	LED Strip 2ft 4000lm 840 NA LV4	3980	171	4000K	80	80	
929000779013	LED Strip 2ft 4000lm 850 NA LV4	4020	173	5000K	80	80	
929000779713	LED Strip 2ft 4000lm 830 NA LV4	7560	163	3000K	80	80	
929000779813	LED Strip 4ft 8000lm 830 NA LV4	7800	168	3500K	80	80	
	<u> </u>		171		80	80	
929000780013	LED Strip 4ft 8000lm 840 NA LV4	7950		4000K			
929000780113	LED Strip 4ft 8000lm 850 NA LV4	8040	173	5000K	80	80	



#### Module driver compatibility

The Advance Fortimo LED linear portfolio is compatible with multiple Xitanium LED drivers. Xitanium driver windows offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

Suitable for:





# Advance Fortimo LED strip value offer (VO)

Advance Fortimo LED strip module value offer (VO) is designed to enable cost breakthrough in recessed ambient LED lighting applications. With its optimized design and high overdrive capability of up to 1,100 lm/ft, it offers high design flexibility to lighting fixture manufacturers, and the module's cost provides excellent price-per-lumen value. With module efficacies of up to 150 lm/W, CRI80, 3SDCM color consistency, 50,000-hour life¹ and a five-year limited system warranty⁶, Advance Fortimo LED strip VO is designed to meet all the basic needs of indoor linear lighting applications for maximum customer satisfaction.

#### **Product information (LV1)**

Part name	Commercial product name	Lumens	Typ module efficacy	ССТ	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929000759413	LED Strip VO LV1 1ft 700lm 830 LV1	640	137	3000K	80	80
929000759513	LED Strip VO LV1 1ft 700lm 835 LV1	670	142	3500K	80	80
929000759613	LED Strip VO LV1 1ft 700lm 840 LV1	700	150	4000K	80	80
929000759713	LED Strip VO LV1 1ft 700lm 850 LV1	700	150	5000K	80	80
929000759813	LED Strip VO LV1 2ft 1400lm 830 LV1	1280	137	3000K	80	80
929000759913	LED Strip VO LV1 2ft 1400lm 835 LV1	1330	142	3500K	80	80
929000760013	LED Strip VO LV1 2ft 1400lm 840 LV1	1400	150	4000K	80	80
929000760113	LED Strip VO LV1 2ft 1400lm 850 LV1	1400	150	5000K	80	80
929000790713	LED Strip VO LV1 2ft 2200lm 830 LV1	2040	148	3000K	80	80
929000790813	LED Strip VO LV1 2ft 2200lm 835 LV1	2160	157	3500K	80	80
929000790913	LED Strip VO LV1 2ft 2200lm 840 LV1	2200	160	4000K	80	80
929000791013	LED Strip VO LV1 2ft 2200lm 850 LV1	2200	160	5000K	80	80
929000791113	LED Strip VO LV1 2ft 4000lm 830 LV1	3720	142	3000K	80	80
929000791213	LED Strip VO LV1 2ft 4000lm 835 LV1	3930	150	3500K	80	80
929000791313	LED Strip VO LV1 2ft 4000lm 840 LV1	4000	153	4000K	80	80
929000791413	LED Strip VO LV1 2ft 4000lm 850 LV1	4000	153	5000K	80	80

#### **Module driver compatibility**

The Advance Fortimo VO LV2 module is compatible with the fixed current Advance CertaDrive gen 2 driver or with Advance Xitanium driver. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output efficacy and lifetime.

#### Product information (LV2 troffer systems)

Part name	Commercial product name	Lumens	Typ module efficacy	ССТ	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929001750713	Fortimo LED Strip VO 22in 2100lm 830 LV2	1920	135	3000	80	80
929001750813	Fortimo LED Strip VO 22in 2100lm 835 LV2	2020	142	3500	80	80
929001750913	Fortimo LED Strip VO 22in 2100lm 840 LV2	2050	145	4000	80	80
929001751013	Fortimo LED Strip VO 22in 2100lm 850 LV2	2050	145	5000	80	80
929001751113	Fortimo LED Strip VO 22in 4200lm 830 LV2	3830	135	3000	80	80
929001751213	Fortimo LED Strip VO 22in 4200lm 835 LV2	4040	142	3500	80	80
929001751313	Fortimo LED Strip VO 22in 4200lm 840 LV2	4110	145	4000	80	80
929001751413	Fortimo LED Strip VO 22in 4200lm 850 LV2	4110	145	5000	80	80
929001751513	Fortimo LED Strip VO 22in 6250lm 830 LV2	5750	135	3000	80	80
929001751613	Fortimo LED Strip VO 22in 6250lm 835 LV2	6060	142	3500	80	80
929001751713	Fortimo LED Strip VO 22in 6250lm 840 LV2	6160	145	4000	80	80
929001751813	Fortimo LED Strip VO 22in 6250lm 850 LV2	6160	145	5000	80	80
929001751913	Fortimo LED Strip VO 44in 4200lm 830 LV2	3830	135	3000	80	80
929001752013	Fortimo LED Strip VO 44in 4200lm 835 LV2	4040	142	3500	80	80
929001752113	Fortimo LED Strip VO 44in 4200lm 840 LV2	4110	145	4000	80	80
929001752213	Fortimo LED Strip VO 44in 4200lm 850 LV2	4110	145	5000	80	80
929001752313	Fortimo LED Strip VO 44in 8400lm 830 LV2	7670	135	3000	80	80
929001752413	Fortimo LED Strip VO 44in 8400lm 835 LV2	8080	142	3500	80	80
929001752513	Fortimo LED Strip VO 44in 8400lm 840 LV2	8220	145	4000	80	80
929001752613	Fortimo LED Strip VO 44in 8400lm 850 LV2	8220	145	5000	80	80
929001752713	Fortimo LED Strip VO 44in 12500lm 830 LV2	11500	135	3000	80	80
929001752813	Fortimo LED Strip VO 44in 12500lm 835 LV2	12120	142	3500	80	80
929001752913	Fortimo LED Strip VO 44in 12500lm 840 LV2	12330	145	4000	80	80
929001753013	Fortimo LED Strip VO 44in 12500lm 850 LV2	12330	145	5000	80	80

Suitable for:





# **Advance Fortimo LED strip EdgeLit (EL)**

Designed to enable slim and uniform architectural lighting applications like suspended panel LED luminaires.

#### **Product information (LV4)**

Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929000789413	LED Strip 23in 2600lm 830 EL LV4	2530	171	3000K	80	80
929000789513	LED Strip 23in 2600lm 835 EL LV4	2580	171	3500K	80	80
929000789613	LED Strip 23in 2600lm 840 EL LV4	2610	173	4000K	80	80
929000789713	LED Strip 23in 2600lm 850 EL LV4	2580	171	5000K	80	80
929000789813	LED Strip 23in 2600lm 927 EL LV4	2610	173	2700K	90	80
929000789913	LED Strip 23in 2600lm 930 EL LV4	1930	128	3000K	90	80
929000790013	LED Strip 23in 2600lm 935 EL LV4	2100	139	3500K	90	80
929000790113	LED Strip 23in 2600lm 940 EL LV4	2150	142	4000K	90	80

#### Module driver compatibility

The Advance Fortimo LED linear portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

Suitable for:



Indoor

# **Advance Fortimo LED line high flux**

Advance Fortimo LED line LV3 offers best-in-class module efficiency up to 165 lm/W, an increase of approximately 10% versus the previous generation. The new generation offers an improved color consistency of 3 SDCM. A 1,100 lm option is added to the 3R portfolio, which serves the need for higher output.

Ideal for application at elevated installation heights and increased application temperatures where more light is needed, such as high-bay applications.



#### **Product information (PR LV3)**

Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929000798113	LED Line 2ft PR 2500lm 830 1R NA LV3	2090	174	3000K	80	90
929000798213	LED Line 2ft PR 2500lm 835 1R NA LV3	2140	178	3500K	80	90
929000798313	LED Line 2ft PR 2500lm 840 1R NA LV3	2200	183	4000K	80	90
929000798413	LED Line 2ft PR 2500lm 850 1R NA LV3	2200	185	5000K	80	90
929000797713	LED Line 2ft PR 4000lm 830 1R NA LV3	3840	171	3000K	80	90
929000797813	LED Line 2ft PR 4000lm 835 1R NA LV3	3930	175	3500K	80	90
929000797913	LED Line 2ft PR 4000lm 840 1R NA LV3	4000	178	4000K	80	90
929000798013	LED Line 2ft PR 4000lm 850 1R NA LV3	4090	182	5000K	80	90
929000797313	LED Line 2ft PR 7500lm 830 2R NA LV3	7230	173	3000K	80	90
929000797413	LED Line 2ft PR 7500lm 835 2R NA LV3	7390	177	3500K	80	90
929000797513	LED Line 2ft PR 7500lm 840 2R NA LV3	7520	180	4000K	80	90
929000797613	LED Line 2ft PR 7500lm 850 2R NA LV3	7690	184	5000K	80	90

#### **Module driver compatibility**

The Advance Fortimo LED linear portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

#### Suitable for:





Industry



## **Advance Fortimo LED line LV4**

Advance Fortimo linear LED systems are the ideal solution for LED luminaires that traditionally would have been equipped with fluorescent lamps.

The wide range of system offerings provides a solution for all the different types of luminaires, including recessed and surface-mounted office luminaires, trunking and profile luminaires in retail and waterproof luminaires in industrial applications.









#### **Product information (LV4)**

Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
	Typical	lm/W	K	CRI	°C
LED Line 1ft 1100lm 830 1R LV4	1045	163	3000	80	80
LED Line 1ft 1100lm 835 1R LV4	1078	168	3500	80	80
LED Line 1ft 1100lm 840 1R LV4	1100	172	4000	80	80
LED Line 1ft 1100lm 850 1R LV4	1111	174	5000	80	80
LED Line 1ft 1100lm 830 3R LV4	1045	174	3000	80	80
LED Line 1ft 1100lm 835 3R LV4	1078	180	3500	80	80
LED Line 1ft 1100lm 840 3R LV4	1100	183	4000	80	80
LED Line 1ft 1100lm 850 3R LV4	1111	185	5000	80	80
	LED Line 1ft 1100lm 830 1R LV4 LED Line 1ft 1100lm 835 1R LV4 LED Line 1ft 1100lm 840 1R LV4 LED Line 1ft 1100lm 850 1R LV4 LED Line 1ft 1100lm 830 3R LV4 LED Line 1ft 1100lm 835 3R LV4 LED Line 1ft 1100lm 835 3R LV4 LED Line 1ft 1100lm 840 3R LV4	Typical LED Line Ift 1100lm 830 1R LV4 1045 LED Line Ift 1100lm 835 1R LV4 1078 LED Line Ift 1100lm 840 1R LV4 1100 LED Line Ift 1100lm 850 1R LV4 1111 LED Line Ift 1100lm 830 3R LV4 1045 LED Line Ift 1100lm 835 3R LV4 1078 LED Line Ift 1100lm 840 3R LV4 1100	Efficacy   Typical   Im/W	Efficacy   Fifting   Fif	efficacy         rendering           Typical         lm/W         K         CRI           LED Line Ift 1100lm 830 1R LV4         1045         163         3000         80           LED Line Ift 1100lm 835 1R LV4         1078         168         3500         80           LED Line Ift 1100lm 840 1R LV4         1100         172         4000         80           LED Line Ift 1100lm 850 1R LV4         1111         174         5000         80           LED Line Ift 1100lm 830 3R LV4         1045         174         3000         80           LED Line Ift 1100lm 835 3R LV4         1078         180         3500         80           LED Line Ift 1100lm 840 3R LV4         1100         183         4000         80

#### **Module driver compatibility**

The Advance Fortimo LED linear portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

Suitable for:





# Advance Fortimo LED downlight module (DLM) L2

Advance Fortimo LED downlight module (DLM) flex L2 expands application possibilities beyond downlight commercial fixtures, bringing even more possibilities than the previous DLM flex generation. Advance Fortimo DLM flex L2 expands applications to include high-bay and other sectors. We provide you with a system proposition ranging from 1,100 lm to 10,000 lm, from high performance to low cost, all in one flexible portfolio. Models can be easily tuned to meet your needs through Advance Xitanium LED drivers with SimpleSet technology.

- Wide lumen output range: from 1,100 to 10,000 lm
- Variation of color temperatures (2700K, 3000K, 3500K and 4000K)
- Lifetime > 50,000 hrs (B50L70 atTc 85°C)<sup>1</sup>
- High color consistency: 3SDCM
- · Various mechanical interface options
  - Enabling standard or slim designs
  - Self-cooled option for up to 3,000 lm<sup>11</sup>
  - No additional heat sink needed<sup>12</sup>

#### **Product information**

Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929001729113	Fortimo LED DLM Flex DS L2 830 36 G2 NA	1139/1304/1801/2441	164/162/156/149	3000	80	85
929001729213	Fortimo LED DLM Flex DS L2 835 36 G2 NA	1179/1351/1866/2528	169/167/161/154	3500	80	85
929001729313	Fortimo LED DLM Flex DS L2 840 36 G2 NA	1220/1397/1930/2615	175/173/167/159	4000	80	85
929001730113	Fortimo LED DLM Flex DS L2 927 36 G2 NA	1097/1259/1731/2326	133/130/123/114	2700	90	85
929001730213	Fortimo LED DLM Flex DS L2 930 36 G2 NA	1142/1311/1803/2422	139/136/128/119	3000	90	85
929001730313	Fortimo LED DLM Flex DS L2 935 36 G2 NA	1175/1348/1854/2491	143/140/132/123	3500	90	85
929001729413	Fortimo LED DLM Flex DS L2 830 54 G2 NA	3120/3488/4069/4759	153/150/146/141	3000	80	85
929001729513	Fortimo LED DLM Flex DS L2 835 54 G2 NA	3231/3613/4214/4929	158/155/151/146	3500	80	85
929001729613	Fortimo LED DLM Flex DS L2 840 54 G2 NA	3343/3737/4360/5099	164/161/156/151	4000	80	85
929001729713	Fortimo LED DLM Flex DS L2 830 84 G2 NA	5296/5957/7125/8421	151/147/142/136	3000	80	85
929001729813	Fortimo LED DLM Flex DS L2 835 84 G2 NA	5485/6170/7380/8723	156/153/147/141	3500	80	85
929001729913	Fortimo LED DLM Flex DS L2 840 84 G2 NA	5674/6382/7635/9024	161/158/152/146	4000	80	85
929001730013	Fortimo LED DLM Flex DS L2 850 84 G2 NA	1910/2337/3584/6024	180/178/171/160	5000	80	85
929001730413	Fortimo LED DLM Flex DS L2 927 84 G2 NA	3719/4127/5881/7042	127/124/114/107	2700	90	85
929001730513	Fortimo LED DLM Flex DS L2 930 84 G2 NA	3873/4297/6124/7334	132/129/118/111	3000	90	80
929001730613	Fortimo LED DLM Flex DS L2 935 84 G2 NA	3983/4420/6299/7544	136/133/122/114	3500	90	80
929001730713	Fortimo LED DLM Flex DS L2 940 84 G2 NA	4070/4516/6437/7710	139/136/124/117	4000	90	80

#### Module driver compatibility

The Advance Fortimo LED downlight portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.



**Ali Qureshi** Product Manager

#### Suitable for:





Industr



# Advance Fortimo LED DLM EaseSelect (ES)

The Advance Fortimo downlight module (DLM) EaseSelect (ES) is an integrated module with a 0-10V 1% dimmable driver inside, enabling speed on design and assemble and installation. It also offers a self-cooling solution for up to 1500 lm. Advance Fortimo DLM EaseSelect represents a new approach to LED system design that delivers unmatched efficiency, flexibility and value for OEMs looking to offer quality lighting solutions at competitive prices.

#### **Product information**

Part name	Commercial product name	Lumens	Typ module efficacy	ССТ	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929000791513	Fortimo LED DLM ES 1100 830 0-10V G1 NA	1080	98	3000	80	75
929000791613	Fortimo LED DLM ES 1100 835 0-10V G1 NA	1100	100	3500	80	75
929000791713	Fortimo LED DLM ES 1100 840 0-10V G1 NA	1140	104	4000	80	75
929000791813	Fortimo LED DLM ES 1500 830 0-10V G1 NA	1460	97	3000	80	75
929000791913	Fortimo LED DLM ES 1500 835 0-10V G1 NA	1490	99	3500	80	75
929000792013	Fortimo LED DLM ES 1500 840 0-10V G1 NA	1540	103	4000	80	75
929000792113	Fortimo LED DLM ES 2000 830 0-10V G1 NA	1970	99	3000	80	75
929000792213	Fortimo LED DLM ES 2000 835 0-10V G1 NA	2000	100	3500	80	75
929000792313	Fortimo LED DLM ES 2000 840 0-10V G1 NA	2060	103	4000	80	75

Suitable for:





# Advance Fortimo LED spotlight module (SLM) gen 6

Advance Fortimo LED spotlight module (SLM) gen 6 continues to focus on the combination of quality of light and performance. By offering the CoB separate from the holder, even more flexibility in possible system combinations and specifications is achieved. This results in an extensive portfolio of lumen ranges, CCTs and spectra.

Color

- Excellent quality of light available for all applications
- · Extensive range of CCT
- · Small LES for narrow beam angles and small reflector designs
- Flexibility to select a different lumen output between 800 lm and 10,000 lm
- · State-of-the-art chip-on-board (CoB) technology, enabling high system efficacy
- System proposition (CoB + holder + driver)
- Flexibility to optimize luminaire performance (lm/W or high lumen output)
- · Advance Xitanium LED window drivers with SimpleSet technology for maximum flexibility
- Mini drivers for small luminaire designs
- Three dedicated product lines:
  - SLM gen 6 premium white
  - SLM gen 6 crisp white
  - SLM gen 6 food



Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929001454506	Fortimo SLM C 827 1203 L09 1619 G6	1370	133	2700	>80	85
929001454606	Fortimo SLM C 830 1203 L09 1619 G6	1410	136	3000	>80	85
929001454706	Fortimo SLM C 835 1203 L09 1619 G6	1430	139	3500	>80	85
929001454806	Fortimo SLM C 840 1203 L09 1619 G6	1490	144	4000	>80	85
929001455106	Fortimo SLM C 927 1203 L09 1619 G6	1140	110	2700	>90	85
929001455206	Fortimo SLM C 930 1203 L09 1619 G6	1170	114	3000	>90	85
929001458706	Fortimo SLM C 827 1205 L13 2024 G6	2330	158	2700	>80	85
929001458806	Fortimo SLM C 830 1205 L13 2024 G6	2420	144	3000	>80	85
929001458906	Fortimo SLM C 835 1205 L13 2024 G6	2470	146	3500	>80	85
929001459006	Fortimo SLM C 840 1205 L13 2024 G6	2530	150	4000	>80	85
929001459306	Fortimo SLM C 927 1205 L13 2024 G6	1930	114	2700	>90	85
929001459406	Fortimo SLM C 930 1205 L13 2024 G6	2010	119	3000	>90	85
929001445806	Fortimo SLM C 740 1208 L15 2024 G6	4090	160	4000	>70	85
929001445906	Fortimo SLM C 827 1208 L15 2024 G6	3490	137	2700	>80	85
929001446006	Fortimo SLM C 830 1208 L15 2024 G6	3640	143	3000	>80	85
929001446106	Fortimo SLM C 835 1208 L15 2024 G6	3710	143	3500	>80	85
929001446206	Fortimo SLM C 840 1208 L15 2024 G6	3790	148	4000	>80	85
929001446306	Fortimo SLM C 850 1208 L15 2024 G6	3790	148	5000	>80	85
929001446406	Fortimo SLM C 857 1208 L15 2024 G6	3710	143	5000	>90	85
929001446506	Fortimo SLM C 927 1208 L15 2024 G6	2890	113	2700	>90	85
929001446606	Fortimo SLM C 930 1208 L15 2024 G6	3000	118	3000	>90	85
929001447206	Fortimo SLM C 740 1211 L19 2828 G6	6570	158	4000	>70	85
929001447306	Fortimo SLM C 827 1211 L19 2828 G6	5610	135	2700	>80	85
929001447406	Fortimo SLM C 830 1211 L19 2828 G6	5770	139	3000	>80	85
929001447506	Fortimo SLM C 835 1211 L19 2828 G6	5890	142	3500	>80	85
929001447606	Fortimo SLM C 840 1211 L19 2828 G6	6090	146	4000	>80	85
929001447706	Fortimo SLM C 850 1211 L19 2828 G6	6090	146	5000	>80	85
929001447806	Fortimo SLM C 857 1211 L19 2828 G6	5890	142	5000	>90	85
929001447906	Fortimo SLM C 927 1211 L19 2828 G6	4640	112	2700	>90	85
929001448006	Fortimo SLM C 930 1211 L19 2828 G6	4860	117	3000	>90	85
929001455706	Fortimo SLM C 930 CW 1203 L09 1619 G6	980	92	3000	>90	85
929001459906	Fortimo SLM C 930 CW 1205 L13 2024 G6	1710	99	3000	>90	85
929001447106	Fortimo SLM C 930 CW 1208 L15 2024 G6	2540	98	3000	>90	85
929001448506	Fortimo SLM C 930 CW 1211 L19 2828 G6	4110	97	3000	>90	85
929001452680	Fortimo SLM C 925 FWW 1208 L15 2024 G6	2170	85		>92	85





#### **Module driver compatibility**

The Advance Fortimo LED point portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

Suitable for:



#### Product information (G6) – continued

Part name	Commercial product name	Lumens	Typ module efficacy	ССТ	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929001452980	Fortimo SLM C 930 FPR 1208 L15 2024 G6	2250	88		>87	85
929001452280	Fortimo SLM C 925 FWW 1211 L19 2828 G6	3460	84		>93	85
929001452580	Fortimo SLM C 930 FPR 1211 L19 2828 G6	3620	85		>88	85
929001455306	Fortimo SLM C 830 PW 1203 L09 1619 G6	1390	133	3000	>82	85
929001455406	Fortimo SLM C 930 PW 1203 L09 1619 G6	1170	113	3000	>92	85
929001455506	Fortimo SLM C 935 PW 1203 L09 1619 G6	1240	119	3500	>92	85
929001455606	Fortimo SLM C 940 PW 1203 L09 1619 G6	1270	122	4000	>92	85
929001459506	Fortimo SLM C 830 PW 1205 L13 2024 G6	2380	139	3000	>80	85
929001459606	Fortimo SLM C 930 PW 1205 L13 2024 G6	2030	119	3000	>90	85
929001459706	Fortimo SLM C 935 PW 1205 L13 2024 G6	2130	125	3500	>90	85
929001459806	Fortimo SLM C 940 PW 1205 L13 2024 G6	2190	128	4000	>90	85
929001446706	Fortimo SLM C 830 PW 1208 L15 2024 G6	3580	140	3000	>80	85
929001446806	Fortimo SLM C 930 PW 1208 L15 2024 G6	3040	119	3000	>90	85
929001446906	Fortimo SLM C 935 PW 1208 L15 2024 G6	3200	125	3500	>90	85
929001447006	Fortimo SLM C 940 PW 1208 L15 2024 G6	3290	129	4000	>90	85
929001448106	Fortimo SLM C 830 PW 1211 L19 2024 G6	5740	139	3000	>80	85
929001448206	Fortimo SLM C 930 PW 1211 L19 2024 G6	4920	119	3000	>90	85
929001448306	Fortimo SLM C 935 PW 1211 L19 2828 G6	5130	124	3000	>90	85
929001448406	Fortimo SLM C 940 PW 1211 L19 2828 G6	5270	128	4000	>90	85

Suitable for:







## **Advance Fortimo FastFlex**

The Advance Fortimo LED system FastFlex gen 3 portfolio has been designed to offer a solution to OEMs who want to distinguish themselves through their fixture design and speed to market, as well as OEMs wanting to differentiate their propositions based on optical performance.



#### **Product information**

Part name	Commercial product name	Lumens	Typ module efficacy	CCT	Color rendering	Case temp. Tc life
12 NC		Typical	lm/W	K	CRI	°C
929000955406	Fortimo FastFlex LED board 2x8/730 DS Gen3	3245	137	3045	70	75
929000955506	Fortimo FastFlex LED board 2x8/740 DS Gen3	3505	148	3985	70	75
929000955606	Fortimo FastFlex LED board 2x8/757 DS gen3	3575	151	5685	70	75
929001522206	Fortimo FastFlex 2x2/730 gen 3 DA LED board	811	137	3045	70	75
929001522306	Fortimo FastFlex 2x2/740 gen 3 DA LED board	875	148	3985	70	75
929001521606	Fortimo FastFlex 2x4/730 gen 3 DA LED board	1623	137	3045	70	75
929001521706	Fortimo FastFlex 2x4/740 gen 3 DA LED board	1753	150	3985	70	75
929001521806	Fortimo FastFlex 2x4/840 gen 3 DA LED board	1653	137	3818	80	75
929000955706	Fortimo FastFlex 2x8/730 gen 3 DA LED board	3245	137	3045	70	75
929000955806	Fortimo FastFlex 2x8/740 gen 3 DA LED board	3505	148	3985	70	75
929000955906	Fortimo FastFlex 2x8/757 gen 3 DA LED board	3575	151	5685	70	75
929001521906	Fortimo FastFlex 2x8/840 gen 3 DA LED board	3245	137	3985	80	75
929000955206	Fortimo FastFlex LED board 2x4/730 DA gen3	1623	137	3045	70	75
929000955306	Fortimo FastFlex LED board 2x4/740 DA gen3	1753	148	3985	70	75
929000954706	Fortimo FastFlex LED board 2x8/730 DA gen3	3245	137	3045	70	75
929000954806	Fortimo FastFlex LED board 2x8/740 DA gen3	3505	148	4000	70	75
929000954906	Fortimo FastFlex LED board 2x8/757 DA gen3	3575	151	5685	70	75
929000955006	Fortimo FastFlex LED board 2x8/840 DA gen3	3245	137	3985	80	75

#### Module driver compatibility

The Advance Fortimo LED linear portfolio is compatible with multiple Xitanium LED drivers. Xitanium window drivers offer the freedom to adjust current settings and to differentiate in terms of lumen output, efficacy and lifetime.

Suitable for:



Outdoor







# A proven portfolio

powering growth

M'I Van II M

LED light sources require reliable LED drivers for optimal performance that is long-lasting with low maintenance. Our wide range of Advance Xitanium, SR (Sensor Ready) and CertaDrive<sup>13</sup> LED drivers are specifically designed to operate LEDs in a variety of indoor and outdoor lighting applications while meeting a variety of customer application needs. All Advance LED drivers lead the transformation with:

#### Benefits:

- Reliable and consistent operation
- · High efficiency >90% in some cases
- Greater than 0.9 PF and less than 20% THD
- · Class P on select models
- Greater than 50k hours lifetime<sup>5</sup>
- 5-year limited warranty<sup>6</sup>
- · RoHS compliance7

All Advance LED drivers comply with Part 15 of the FCC rules. For Canada: CAN ICES-005 (A) / NMB-005 (A).

#### Simpleset technology

Advance's proven SimpleSet wireless programming technology for Xitanium LED drivers is designed to help OEMs quickly and easily program LED drivers at any time during the manufacturing, distribution or installation process. The flexibility of the drivers with SimpleSet technology enables an OEM to cover a large performance window with a handful of drivers. Visit <a href="https://www.signify.com/simpleset">www.signify.com/simpleset</a> for more information.

#### **Advance Xitanium drivers**

Advance Xitanium LED drivers are designed to maximize performance with unmatched flexibility to handle the varying demands of potential LED lighting configurations. Rated for long life with efficient performance, these drivers are excellent design choices for LED fittings, offering the benefits of long-lasting energy savings with low maintenance costs.

#### Advance Xitanium edge drivers

Advance Xitanium edge drivers are designed to work with the Fortimo edge modules to create an off the shelf component solution for entry level DLC premium HighBays. These fixed current drivers have been optimized for performance without removing ANSI compliant surge or high operating temperature.



CertaDrive drivers

Advance CertaDrive indoor LED drivers are designed to meet basic indoor lighting needs. These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application, making LED conversion even more affordable.

**Dave Eichstadt**Product Marketeer

# Just released!

For more information, please visit **signify.com/leddrivers** 



Delivering greater value for your customers. This family of drivers brings all of the options you need for your customers, Dim to Off, auxiliary power supply, customizable start and fade profiles, and output voltage range of 16 to 56V.

#### Xitanium 30W outdoor drivers



Class 2 drivers with an adjustable output current via SimpleSet. Bring the flexibility of SimpleSet to lower lumen applications such as bollards and wall packs.

#### CertaDrive gen 2 drivers



A refresh of our popular fixed current drivers for stock and flow linear applications. Designed to work with the Advance Fortimo VO linear module family to create 0–10V dimmable solutions at common lumen packages.

#### Xitanium 190W industrial driver for 347-480V



A high input voltage version of our popular 190W Class 2 driver. This two channel programmable driver enables lumen Class 2 drivers with an adjustable output current via SimpleSet. Bring the flexibility of SimpleSet to lower lumen applications such as bollards and wall packs.

# Coming soon!

LED innovations in the pre-launch phase

#### **Edge drivers**

The edge LED drivers are designed to work with the Advance Fortimo edge modules to create cost-effective supply fixtures with high quality, DLC Premium efficiency level light. Drivers are available in the 75, 95, 126, and 150W output for 12K, 16K, 18K, 22K Lumen outputs fixtures



Suitable for:







Industry

Outdoor

# SimpleSet wireless programming technology



#### Wireless programming for Xitanium drivers

Advance Xitanium LED drivers with SimpleSet technology are designed to help OEMs quickly and easily program LED drivers at any time during the manufacturing, distribution or installation process. As a result, OEMs and their customers can meet orders faster with greater confidence while potentially reducing costs and inventory.

# MINI own

#### Accelerate LED programming

Currently, there are a variety of methods used to adjust output current of LED drivers.

One method is putting a resistor on the driver that allows you to set the desired drive current. Other methods include DIP switches or adjustable potentiometers. These solutions are cumbersome to incorporate into high volume production environments because the driver either has to be powered for programming or needs to be wired to a programming device.

Using our Xitanium LED drivers with SimpleSet technology, on the other hand, you are able to quickly and easily program drive current and set specific lumen levels without the driver being powered or wired. This simplicity and flexibility enables setting and resetting of driver parameters easily and quickly.

#### Accelerate LED programming

 Take the driver out of the box. Locate the designated communication area on the driver.



2. Touch the LED driver to the programming device. Programming confirmation will appear on he monitor.



3. Install the driver into the fixture.



#### Stay ahead of business demands

SimpleSet technology enables you to do more for your customers and your business. OEMs can quickly meet a broad range of customer requirements and order variations. In addition, wireless programming is flexible so it can be incorporated directly into any and all areas of your product development process, warehouse and distribution. You now have never-before-available possibilities to create customized lighting solution for your customers.

#### Benefits of Xitanium with SimpleSet and OEMs

- Speed: program fixtures faster without requiring complex and time-consuming wiring mechanics or the need to power up drivers
- Flexibility: program at any stage
- in the manufacturing process, from one to multiple drivers at once
- Reduced costs: meet a diverse set of lighting requirements without overextending
- managing different driver SKUs
- intuitive for anyone to use regardless of experience, and easy to deploy anywhere in the assembly
- and protect
  proprietary
  information
  with dedicated
  memory space
  for OEMs
  with password
  protection

#### Suitable for:







Industry

For further information visit signify.com/leddrivers

Visit www.signify.com/simpleset or call your local Advance sales representative for more information.

# **Catalog number explanation**

#### **Date codes**

Most date codes are stamped on the back of the driver (opposite the label side). The date code is part of a larger group of numbers and letters that call out the various codes for the factory where the driver was manufactured. Depending upon which Advance Lighting factory manufactured the driver, the date stamp can vary slightly in terms of its position on the driver and the number sequence.

For plastic case drivers the date code will appear as a label.

693POMMA 06127M50 53301707 F2104571

The date code is the 5th day of the 33rd week of 2001

The date code is the 127th day of 2006 stamped on the back of the ballast.

Stamped on the back of the ballast.

#### After January 2011

X	ı	075	C070	V105	С	N	Υ	1	М
									Packaging:
									M=Midpack
								Version	on Control:
								1=Ver	sion 1, 2=Version 2,
							Enclos	ure De	signation
						Featu	res:		
							grammi	_	S=SimpleSet
						N=No	n-Progr	ammin	g
						or Dimn			
					B=0-10 C=0-10	OV, AOC	-		R=Leading Edge & Trailing Edge Dimming
						ov OV, AOC	^ MTP		S=Step Dim V=Sensor Ready
					F=Fixe		٠, ١٠١١١		X=0-10V, AOC, MTP, CLO (linear)
							V, MTP		X=TE, O-10V, AOC, MTP, FAN (downlight)
							V, AOC,	MTP	Y=DALI, AOC, MTP, CLO
						Power	Supply		
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			1	0mA, 07	'0=700n	nA, 053	3=530m <i>A</i>	۹, 105=	1050mA
		Max Po	ower:						
		Examp	oles:						
		025=25	5W, 060=	60W, 30	0=300V	V			
	Input \	/oltage:							
	·   I=120-:	_	5=347V						
	R=120\		H=347-48	BOV					
	V=277\	/							

General:

X= Xitanium LED Driver, C=CertaDrive

### **CertaDrive indoor LED drivers**

Advance CertaDrive indoor LED drivers are designed to meet basic lighting needs, thus, making LED conversion even more attainable. Advance CertaDrive drivers are offered in the following categories:

#### Fixed

IntelliVolt models are designed for basic indoor applications that do not require dimming, while still meeting the energy-saving benefits from LED.

# 

#### Optimized troffer system

These drivers are offered with specific voltage-current settings and are, thus, optimized with specifications that are appropriately suited for the application. The CertaDrive LED drivers along with the Advance Fortimo LED strip value offer (VO) boards cater to the varying lighting needs in both non-dimming and dimming applications for economically designed luminaires.

#### A new generation of CertaDrive

Output currents are updated for improvements in LED efficacy, designed to work with LED Strip VO LV 2 for optimized troffer systems, improved output current ripple, 10% min dim level.



Oscar Velderrain Garcia Product Manager

#### **Benefits**

- use with Advance offer (VO) modules
- Small form-factor
- · Class P Listing
- range of 120-277V
- · 5% or 10%
- for maximum

#### Suitable for:



#### Gen 1

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
CI035C075V046FNN1	35	0.75	30 - 46	Class 2/P	120 - 277	No	65	75	N-Can
CI036C078V046FNN1	36	0.78	40 - 46	Class 2/P	120 - 277	No	65	75	N-Can
CI023C048V046CNN1	23	0.48	30 - 46	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI024C045V052CNN1	24	0.45	35 - 52	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI026C055V046CNN1	26	0.55	30 - 46	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI030C065V046CNN1	30	0.65	30 - 46	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI037C082V045CNN1	37	0.82	30 - 45	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI039C075V052CNN1	39	0.75	35 - 52	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI041C087V046CNN1	41	0.87	30 - 46	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI042C092V045CNN1	42	0.92	30 - 45	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can
CI045C096V046CNN1	45	0.96	30 - 46	Class 2/P	120 - 277	0-10V, 5%	65	75	N-Can

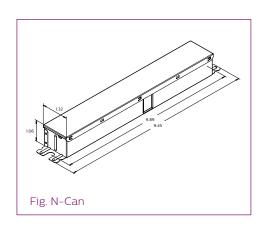


#### Gen 2

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
CI018C037V048CNN2	18	0.37	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI018C037V048FNN2	18	0.37	35-48	Class 2/P	120-277	No	65	75	N-Can
CI023C047V048CNN2	23	0.47	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI027C055V048CNN2	27	0.55	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI029C060V048FNN2	29	0.60	35-48	Class 2/P	120-277	No	65	75	N-Can
CI029C060V048CNN2	29	0.60	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI031C065V048CNN2	31	0.65	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI032C067V048CNN2	32	0.67	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI036V075V048CNN2	36	0.75	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI040C082V048CNN2	40	0.82	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI047C097V048CNN2	47	0.97	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can
CI049C102V048CNN2	49	1.02	35-48	Class 2/P	120-277	0-10V, 10%	65	75	N-Can



# **CertaDrive indoor LED driver dimensions**



### Xitanium indoor linear LED drivers

Advance Xitanium LED drivers for linear applications are available in three types:

#### Dimmable and SimpleSet

Dimmable drivers include 0-10V, step-dim or leading-edge dimming to integrate into common dimming systems used in commercial applications. Dimming improve energy savings and can help to enhance worker comfort. SimpleSet technology permits easy, basic programming of current levels and dimming curves, allowing a few SKUs to cover a wide range of applications.

#### DALI programmable

These drivers are easily managed through a programmable interface. This allows the OEM to customize a light fixture for a wide range of applications, using a minimum number SKUs to reduce lighting design complexity and simplify installation logistics.

Advance Xitanium LED drivers are available in wattages up to 95W. The form factor is perfectly suited to applications in which LED luminaires need to be compatible with the mechanical aspects of traditional fluorescent fixtures. Visit www.signify.com/leddrivers for more information.

# Benefits Applications Adjustable output current dimming on select models Wide operating windows Class P on select models UL Class 2 High efficiency Input voltage range of 120-277V, 347V, or 347-480V Applications Retail Hospitality Meeting rooms

# Suitable for: Indoor

### **ComfortFade drivers**

#### Delivering **greater value** for your customers

These drivers are setting a new standard for performance, versatility, and reliability.

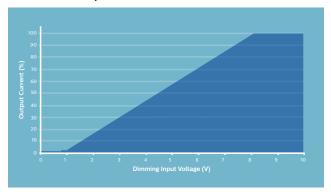
- · The ComfortFade feature delivers smooth transitions from light to dark and dark to light
- Built-in auxiliary power allows the addition of occupancy and daylight sensors and small radios without an additional power pack
- SimpleSet programming can allow OEMs to customize the profile to match customer applications in seconds



This is on top of the existing features that have made Xitanium drivers the choice for OEMs:

- · Low-ripple output current (<4%) for camera and scanner compatibility
- · Class P listings to ensure interchangeability without extensive compliance retesting
- Efficient designs with performance ranges to enable easy DLC compliance
- 5-year limited warranty<sup>6</sup>

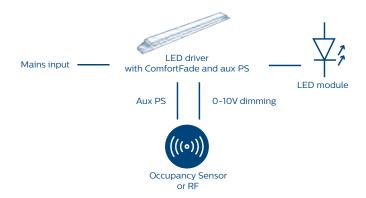
#### 1% Dim-to-off capable

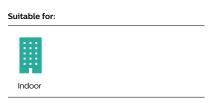


#### A simple solution for fixture-level control

Adding occupancy sensors, simple radios, or daylight harvesting controls is a great way to reduce energy consumption and meet regulatory requirements. Advance Xitanium LED drivers make it easy with a built-in 24V auxiliary output for fixture-level control.

The auxiliary output is compatible with a wide range of off-the-shelf 0–10V controls, and it eliminates the need for an additional power pack — all while maintaining the original linear Xitanium footprint.





For further information visit signify.com/comfortfade

	Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Additional Features	Housing
	1% SimpleSet Progr	ammable									4
	XI020C056V054BST2	20	0.1 - 0.56	22.5 - 54	Class 2/P	120 - 277	0-10V	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-254
	XI040C110V054BST1	40	0.1 - 1.1	22.5 - 54	Class 2/P	120 - 277	0-10V	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
new	XI040C110V054BST2	40	0.1 - 1.1	16 - 54	Class 2/P	120 - 277	0-10V Dim to Off	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
new	XI050C140V054PST1	50	0.1 - 1.4	16 - 54	Class 2/P	120 - 277	0-10V Dim to Off	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
	XI054C150V054BST1	54	0.1 - 1.5	27 - 54	Class 2/P	120 - 277	0-10V	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
	XI075C200V054BST1	75	0.1 - 2.0	27 - 54	Class 2/P	120 - 277	0-10V	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-425
	1% ComfortFade wi	th Aux									4 .
ming soon	XIO40C110V054PST1	40	0.1 - 1.1	16 - 54	Class 2/P	120 - 277	0-10V Dim to Off	75	85	Comfort Fade,Dim to Off,0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
new	XI050C140V054PST1	50	0.1 - 1.4	16 - 54	Class 2/P	120 - 277	0-10V Dim to Off	75	85	Comfort Fade,Dim to Off,O-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
	Step Dim										4.00
	XI040C110V054SST1	40	0.1 - 1.1	22.5 - 54	Class 2/P	120 - 277	Step	75	85	Programable Step DIM, AOC	T-360
	XI054C150V054SST1	54	0.1 - 1.5	27 - 54	Class 2/P	120 - 277	Step	75	85	Programable Step DIM, AOC	T-360
	XI075C200V054SST1	75	0.1 - 2.0	27 - 54	Class 2/P	120 - 277	Step	75	85	Programable Step DIM, AOC	T-425
	347 input voltage										500
	XG020C056V054BST1	20	0.1 - 0.56	27 - 54	Class 2/P	347	0-10V	75	80	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-254
	XG040C110V054BST1	40	0.1 - 1.1	27 - 54	Class 2/P	347	0-10V	75	80	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
	XG054C150V054BST1	54	0.1 - 1.5	27 - 54	Class 2/P	347	0-10V	75	80	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-360
	XG075C200V054BST1	75	0.1 - 2.0	27 - 54	Class 2/P	347	0-10V	75	80	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-425
	Industrial										-
	XI095C275V054BSS1	95	0.1 - 2.75	20 - 54	Class 2/P	120 - 277	0-10V	85	90	0-10V, AOC (SimpleSet), 5% min dimming	S-Can
	XI095C275V054DNF1	95	1.0 - 2.75	27 - 54	Class 2	120 - 277	0-10V	85	90	0-10V, AOC, MTP	F-Can
	XH095C275V054BSF1	95	0.1 - 2.75	20 - 54	Class 2/P	347-480	0-10V	85	90	0-10V, AOC (SimpleSet)	F-Can
	XI190C275V054BSG1	190	0.1 - 2.75	27 - 54	Class 2/P	347-480	0-10V	85	90	0-10V, AOC (SimpleSet), Dual Channel, 5% Min dimming	G-Can
	XH190C275V054BSG1	190	0.1 - 2.75	27 - 54	Class 2/P	347-480	0-10V	85	90	0-10V, AOC (SimpleSet), Dual Channel, 5% Min dimming	G-Can
	XI075C200V054BST1	75	0.1 - 2.0	27 - 54	Class 2/P	120 - 277	0-10V	75	85	0-10V, AOC (SimpleSet/Rset), 1% Dim	T-425
	DALI Programmabl	e									
	XI040C110V054YPT2	40	O.1 - 1.1	27-54	Class 2/P	120-277	DALI	75	85	AOC (SimpleSet/RSET), Class P	T-360
	XI075C200V054YPT2	75	0.1 - 2.0	27-54	Class 2/P	120-277	DALI	75	85	AOC (SimpleSet/RSET), Class P	T-425

AOC: Adjustable Output Current MTP: Module Temperature Protection PROG: Programmable, includes Constant Light Output (CLO)

#### Suitable for:

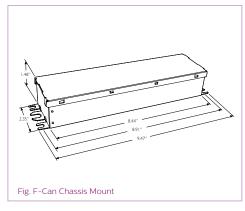


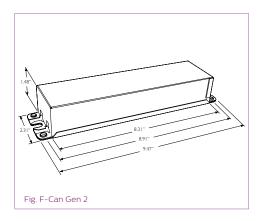


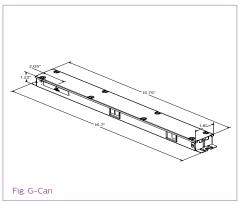
Indoor

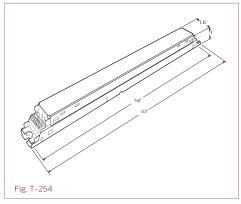
Industry

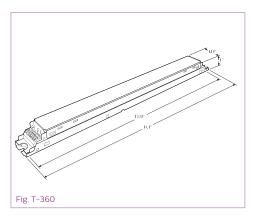
# **Xitanium linear LED driver dimensions**

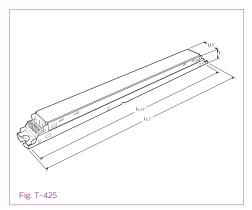












## Xitanium indoor downlight and track LED drivers

Advance Xitanium LED drivers for indoor downlight and track applications are available in three types:

#### Fixed output

Fixed output LED drivers set the standard for reliability and performance needed for indoor downlight and track lighting.

#### Dimmable and SimpleSet

Dimmable drivers include 0-10V or leading-edge dimming to integrate into common dimming systems used in commercial applications. Dimming enables maximum energy savings and can help to facilitate worker comfort. Advance SimpleSet technology permits easy, basic programming of current levels and dimming curves, allowing a few SKUs to cover a wide range of applications.

#### DALI programmable

These drivers provide a feature set managed through a programmable interface. This allows the OEM to create a fixture portfolio to meet specific needs for a wide range of applications, using a minimum number SKUs to reduce complexity and simplify logistics.

Advance Xitanium LED drivers for indoor downlight and track applications are available in wattages up to 95W for hard-wired integration into recessed downlights and track light fixtures. These LED drivers are available in the familiar SmartMate housing for junction-box mounting in downlights and slim housings for incorporation into track housings. Visit www.philips.com/leddrivers for more information.



#### **Benefits**

- · Wide operating windows
- UL Class 2
- Input voltage range of 120-277V
- · 1% 0-10V dimming on select models
- Class P on
  - for maximum

#### **Applications**

- Office
- Retail

#### Suitable for:



#### **Fixed Output**

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
LEDUNIA0350C12F	4	0.35	2.8 - 12	Class 2	120 - 230	60	69	8W
LEDUNIA0700C12F	6.5	0.70	2.4 - 12	Class 2	120 - 230	60	69	8W
LED120A0024V07F	17	0.10 - 0.70	24	Class 2	120	70	80	V-Can Indoor
LED120A0700C24F	17	0.70	2.8 - 24	Class 2	120	75	85	V-Can Indoor
LED120A1400C24F	34	1.40	2.8 - 24	Class 2	120	75	85	J-Box Indoor

#### Dimmable

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
XR009C022V042RNO2	9	0.22	25 - 42	Class 2	120	LE, TE	1% Dimming	85	85	O-Can
XR013C033V042RNO2	13	0.33	25 - 42	Class 2	120	LE, TE	1% Dimming	85	85	O-Can
XI013C030V042RNP1	13	0.15/0.2/0.25/0.3	20 -42	Class 2/P	120- 277	LE, TE	Dip Switch	75	85	P1-Can
XI020C050V042RNP2	20	0.35, 0.4, 0.45, 0.5	20 - 42	Class 2/P	120 - 277	LE, TE	AOC (Dip Switch), 1% Dimming	75	80	P1-Can
XI020C070V030RNP2	20	0.4, 0.5, 0.6, 0.7	15 - 30	Class 2/P	120 - 277	LE, TE	AOC (Dip Switch), 1% Dimming	75	80	P1-Can
XI042C080V052RNP1	42	0.5/0.6/0.7/ 0.8	25 - 52	Class 2/P	120- 277	LE, TE	Dip Switch	75	85	P2-Can
XI055C130V042RNP1	55	1.0/1.1/1.2/1.3	20 - 42	Class 2/P	120- 277	LE, TE	Dip Switch	75	85	P2-Can
XI013C036V054DNM1	13	0.1 - 0.36	27 - 54	Class 2/P	120 - 277	0-10V	AOC (Rset), MTP, SREC, 1% Dimming	80	90	M1 BS-Can
XI095C275V054DNF5	95	1.0 - 2.75	27 - 54	Class 2	120 - 277	0-10V	AOC (Rset), MTP, 1% Dimming	85	90	F-Can Bottom Stud

#### SimpleSet

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
XI025C070V054DSM1	25	0.1 - 0.70	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M1 BS-Can
XI025C070V054DSM5	25	0.1 - 0.70	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming, Class P	80	90	M1 LD-Can
XI025C100V036DSM1	25	0.1 - 1.0	18 - 36	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M1 BS-Can
XI025C100V036DSM5	25	0.1 - 1.0	18 - 36	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M1 LD-Can
XI036C100V054DSM1	36	0.1 - 1.0	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M1 BS-Can
XI036C100V054DSM5	36	0.1 - 1.0	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M1 LD-Can
XI050C140V054DSM1	50	0.1 - 1.4	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M5 BS-Can
XI050C140V054DSM5	50	0.1 - 1.4	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, SREC, 1% Dimming	80	90	M5 LD-Can
XI075C200V054DSM1	75	0.007 - 2.0	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, 1% Dim	80	90	M6-BS
XI075C200V054DSM5	75	0.007 - 2.0	27 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet/Rset), MTP, Side entry, 1% Dim	80	90	M6-LD

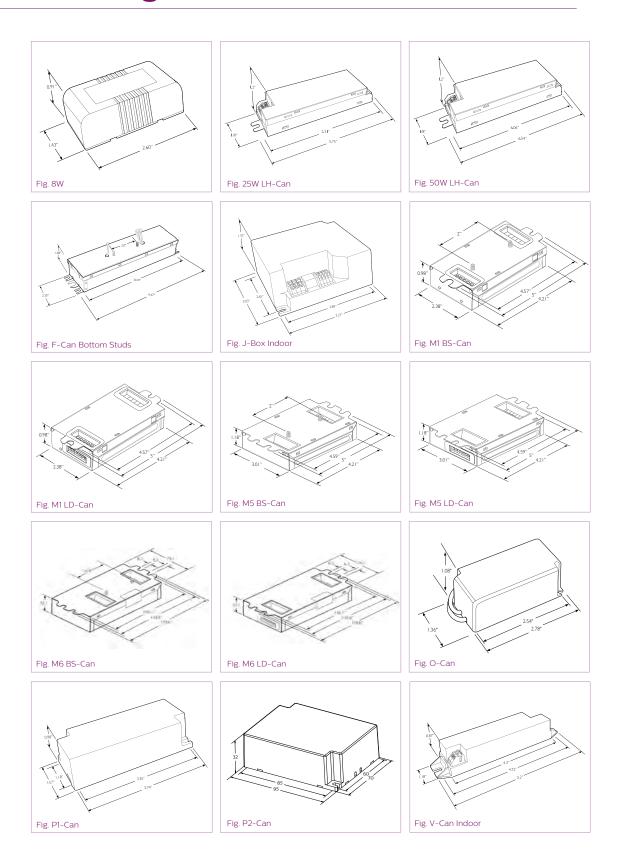
AOC: Adjustable Output Current MTP: Module Temperature Protection SREC: Safety Related Electrical Circuit

SREC: Safety Related Electrical Circuit
FAN: 12V auxiliary voltage to power an active cooling device

Suitable for:



# **Xitanium downlight LED driver dimensions**



## Xitanium outdoor and industrial LED drivers

Advance Xitanium LED drivers for outdoor applications are available in wattages up to 300W for hard-wired integration into outdoor luminaires for rugged applications. They operate to specification under wide temperature and electrical ranges to help ensure reliability. Visit www.philips.com/leddrivers for more information.

Advance Xitanium LED drivers for outdoor applications are available in four types:

#### Fixed output

Fixed output LED drivers set the standard for reliability and performance needed for outdoor lighting.

#### Edge high bay components

Class 2 0-10V drivers with fixed output currents designed to work with Advance Fortimo edge modules for an off the shelf high bay solution that meets DLC premium.

#### Dimmable and SimpleSet

These 0-10V dimming drivers help address the growing demand for controllability and flexibility, allowing the lighting system to be used with various controls to maximize energy savings. SimpleSet technology enables easy, basic programming of current levels and dimming curves, allowing a few SKUs to cover a wide range of applications.

#### **DALI** programmable

Programmable DALI LED drivers provide a feature set managed through a programmable interface. This allows the OEM to create a fixture portfolio to meet specific needs for a wide range of applications, using a minimum number SKUs to reduce complexity and simplify logistics.





**John Boehm**Product Manager

# Benefits Applications Adjustable output current Protection Roadway Roadway UL Class 1 or Class 2 High efficiency Class 2 High reliability Input voltage range of 120-277V or 347-480V Applications Area Area Parking garage Gas station canopy Wallpacks Floodlights

Suitable for:





Industry Outo



#### **Fixed Output**

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
LED120A0350C28FO	10	0.35	2.8 - 28	Class 2	120	80	90	V-Can
LED120A0012V10F	12	1.00	12	Class 2	120	80	90	V-Can
LED120A0700C24FO	17	0.70	2.8 - 24	Class 2	120	80	90	V-Can
LED120A0700C28FO	20	0.70	2.8 - 28	Class 2	120	80	90	V-Can
LED277A0700C28FO	20	0.70	2.8 - 28	Class 2	277	80	90	V-Can
LED120A0024V14FO	34	1.40	2.8 - 24	Class 2	120	80	90	J-Box
LED120A0024V18FO	40	1.75	2.8 - 24	Class 2	120	80	85	J-Box
LEDINTA0024V20FLO	48	0.10 - 2.0	24	Class 2	120 - 277	75	85	F-Can Bump
LEDINTA0024V22FO	53	2.20	24	Class 2	120 - 277	80	90	S-Can
LED120A0012V50F	60	0.8 - 5.0	12	Class 2	120	80	90	S-Can
LEDINTA0012V50FO	60	0.10 - 5.0	12	Class 2	120 - 277	80	90	S-Can
LEDINTA0024V28FO	67	0.10 - 2.8	24	Class 2	120 - 277	80	90	S-Can
XI072C300V024CNS1	72	3	12 - 24	Class 2/P	120- 277	85	85	S-Can
XI077C320V024FNS1	77	3.2	12 - 24	Class 2/P	120- 277	85	85	S-Can
LED120A0024V33F	80	0.8 - 3.3	24	Class 2	120	80	85	S-Can
XI100C410V024FNS1	100	0.4 - 4.1	12 - 24	Class 2/P	120 - 277	85	85	S-Can
LEDHCNA0024V41FLO	100	4.16	3.5 - 24	Class 2	347 - 480	75	85	F-Can Bump
LEDINTA0350C425FO	150	0.35	120 - 425	No	120 - 277	80	80	F-Can Bump
LEDHCNA0350C425FO	150	0.35	120 - 425	No	347 - 480	80	80	F-Can Bump
LEDINTA0700C210FO	150	0.70	60 - 210	No	120 - 277	80	80	F-Can Bump
XH150C070V210FNF1	150	0.70	60 - 210	No	347 - 480	80	80	F-Can Gen 2



#### Dimmable and SimpleSet

	Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
	LED120A0700C28DO	20	0.70	10 - 28	Class 2	120	0-10V		80	90	V-Can
	LED277A0700C30DO	21	0.70	15 - 30	Class 2	277	0-10V		80	90	V-Can
new	XI030C080V054BSJ1	30	0.1-0.8	20-54	Class 2/P	120 - 277	0-10V	6kV Surge, AOC (SimpleSet)			
new	XI030C120V040BSJ1	30	0.1-1.2	12-40	Class 2/P	120 - 277	0-10V	6kV Surge, AOC (SimpleSet)			
	XI040C070V056CNJ1	40	0.70	12 - 54	Class 2	120 - 277	0-10V		75	80	J-Can
	XI040C105V042CNJ1	40	1.05	14 - 42	Class 2	120 - 277	0-10V		80	80	J-Can
	XI040C120V035CNJ1	40	1.20	12 - 36	Class 2	120 - 277	0-10V		80	80	J-Can
	LEDINTA0024V20DLO	48	2.00	24	Class 2	120 - 277	0-10V		75	85	F-Can Bump
	XI055C180V054BSJ1	55	0.1 - 1.8	18 - 54	Class 2/P	120 - 277	0-10V	6kV Surge, AOC (SimpleSet)	85	90	J-Can
new	XH055C180V054BSY1	55	0.1 - 1.8	18 - 54	Class 2/P	120 - 277	0-10V	6kV Surge, AOC (SimpleSet)	85	90	Y-Can
	XI063C150V042CNS1	63	1.50	21 - 42	Class 2	120 - 277	0-10V		80	90	S-Can
new	XI072C300V024CNS1	72	3.00	24	Class 2	120 - 277	0-10V		75	85	F-Can Bump
	XI075C070V105CNY2	75	0.70	43 - 107	No	120 - 277	0-10V		80	80	Y-Can Gen 2
	929000708003	75	0.10 - 0.70	54 - 107	No	120 - 277	0-10V	AOC (Rset), MTP	80	80	Y-Can
	XI075C105V070CNY2	75	1.05	32 - 72	No	120 - 277	0-10V		80	80	Y-Can Gen 2
	XH075C105V070CNF1	75	1.05	24 - 71	No	347 - 480	0-10V		80	80	F-Can Gen 2
	XI075C150V050CNY1	75	1.50	25 - 50	No	120 - 277	0-10V		80	80	Y-Can Gen 2
	XI080V070V054CNH1	80	0.70	27 - 54	Class 2	120 - 277	0-10V	Dual Channel	80	80	H-Can
	XI095C275V054BSS1	95	0.1 - 2.75	20 - 54	Class 2/P	120 - 277	0-10V	AOC (SimpleSet)	85	90	S-Can
	XH095C275V054BSF1	95	0.1 - 2.75	20 - 54	Class 2/P	347 - 480	0-10V	AOC (SimpleSet)	85	90	F-Can
	XI095C275V054BSF1	95	0.1 - 2.75	20 - 54	Class2/P	120 - 277	0-10V	AOC (SimpleSet), 6kV Surge	85	90	F-Can Chassis Mount



#### Dimmable and SimpleSet (continued)

(	Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2 and Class P	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
_;	XI100C110V143BSY1	100	0.1 - 1.10	48 - 143	Class P	120 - 277	0-10V	AOC (SimpleSet), 6kV Surge	85	85	Y-Can Gen
-	XI100C150V091BSY1	100	0.1-1.5	30- 91	Class P	120-277	0-10	AOC SimpleSet, 6kV Surge	85	85	Y- Can Ger
)	KH100C150V091BSY1	100	0.1-1.5	30- 91	Class P	347-480	0-10	AOC SimpleSet, 6kV Surge	85	85	Y- Can Ger
-	KH100C110V143BSY1	100	0.1-1.1	48-143	Class P	347-480	0-10	AOC SimpleSet, 6kV Surge	85	85	Y- Can Gei
-	XI100C150V038CNH1	100	1.50	20 - 36	Class 2	120 - 277	0-10V	Dual Channel	80	80	H-Can
)	XI100C410V024CNS1	100	0.4 - 4.1	12 - 24	Class 2/P	120 - 277	0-10V	4kV Surge	85	85	S-Can
ī	LEDHCNA0024V41DLO	100	4.10	15 - 24	Class 2	347 - 480	0-10V		75	85	F-Can Bun
-	_EDINTA0350C425DO	150	0.35	120 - 425	No	120 - 277	0-10V	6kV Surge	80	80	F-Can Bur
ı	_EDHCNA0350C425DN	150	0.35	120 - 425	No	347 - 480	0-10V	6kV Surge	80	80	F-Can Bun
-	LEDINTA0530C280DO	150	0.53	120 - 280	No	120 - 277	0-10V	6kV Surge	80	80	F-Can Bun
_;	XH150C053V280CNF1	150	0.53	120 - 280	No	347 - 480	0-10V	6kV Surge	80	80	F-Can Ger
-	LEDINTA0700C210DO	150	0.70	60 - 210	No	120 - 277	0-10V		80	80	F-Can Bun
_	XH150C070V210CNF1	150	0.70	60 - 210	No	347 - 480	0-10V	6kV Surge	80	80	F-Can Ger
_;	XI150C105V140CNF1	150	1.05	44 - 140	No	120 - 277	0-10V	6kV Surge	80	80	F-Can Ger
_	XH150C105V140CNF1	150	1.05	47 - 142	No	347 - 480	0-10V	6kV Surge	80	80	F-Can Ger
_	XI150C150V100CNF1	150	1.50	30 - 100	No	120 - 277	0-10V	6kV Surge	80	80	F-Can Ger
	XI180C090V285BSF1	180	0.1 - 0.90	100 - 285	Class P	120 - 277	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
	XI180C125V200PSF1	180	0.1-1.25	70-210	Class P	120-277	0-10	AOC SimpleSet, 6kV Surge, Aux Power supply for basic devices	85	85	F-Can Ger
_	XH180C125V200PSF1	180	0.1-1.25	70-210	Class P	347-480	0-10	AOC SimpleSet, 6kV Surge, Aux Power supply for basic devices	85	85	F-Can Ger
-	XH180C090V285BSF1	180	0.1 - 0.90	100 - 285	Class P	347 - 480	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
-	XI180C125V200BSF1	180	0.1 - 1.25	70 - 210	Class P	120 - 277	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
_;	XH180C125V200BSF1	180	0.1 - 1.25	70 - 210	Class P	347 - 480	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
- :	XI180C180V144BSF1	180	0.1 - 1.80	50 - 144	Class P	120 - 277	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
_;	XH180C180V144BSF1	180	0.1 - 1.80	50 - 144	Class P	347 - 480	0-10V	0-10V, AOC (SimpleSet), 6kV Surge, Class P	85	90	F-Can Ger
2	XI190C275V054BSG1	190	0.1 - 2.75	27-54	Class 2/P	120 - 277	0-10V	2x95W Channel AOC (SimpleSet), 6kV Surge, Class P	85	90	G-Can
-	XH190C275V054BSG1	190	0.1 - 2.75	27-54	Class 2/P	347 - 480	0-10V	2x95W Channel AOC (SimpleSet), 6kV Surge, Class P	85	90	G-Can
- 3	XI220C105V210CNA1	220	1.05	105-210	Class P	120-277	0-10	6kV Surge	85	85	A-Can
:	XH220C105V210CNA1	220	1.05	105-210	Class P	347-480	0-10	6kV Surge	85	85	A-Can
- :	XI300C150V300BSR1	300	0.10 - 1.50	100 - 300	No	120 - 277	0-10V	AOC (SimpleSet)	85	85	R-Can
	XH300C150V300BSR1	300	0.10 - 1.50	100 - 300	Class P	347-4 80	0-10V	AOC (SimpleSet), 6kV Surge	85	85	R-Can

AOC: Adjustable Output Current MTP: Module Temperature Protection



#### Edge driver - Designed for use with Advance Fortimo edge modules

	Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
new	XI075C160V050CNS1	75	1.6	30 - 50	Class 2/P	120-277	0-10V	6kV Surge	85	85	S-Can
new	XI095C210V050CNS1	95	2.1	30 - 50	Class 2/P	120-277	0-10V	6kV Surge	85	85	S-Can
new	XI126C129V050CNF1	126	1.29	30 - 50	Class 2/P	120-277	0-10V	2x63W Channels, 6kV Surge	85	85	F-Can
new	XI150C160V050CNF1	150	1.6	30 - 50	Class 2/P	120-277	0-10V	2x75W Channels, 6kV Surge	85	85	F-Can

#### **DALI Programmable**

Catalog Number	Max Output Power (W)	Output Current (Adc)	Output Voltage (Vdc)	UL/CSA Class 2	Input Voltage (Vac)	Dimming	Additional Features	Max Tcase for Warranty (°C)	Max Tcase for UL (°C)	Housing
929000710303	40	0.10 - 0.53	38 - 76	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	80	80	J-Can
929000708803	40	0.10 - 0.70	29 - 57	Yes	120 - 277	0-10V, DALI	AOC, MTP, PROG+	80	80	J-Can
929000702302	75	0.35 - 0.70	80 - 152	No	120 - 277	0-10V, DALI	AOC, MTP, PROG	80	80	F-Can Flat
929000710103	75	0.10 - 0.70	54 - 107	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	75	80	Z-Can
929000708903	75	0.10 - 1.05	36 - 75	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	80	80	F-Can Flat
929000710403	100	0.10 - 0.53	94 - 189	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	75	80	Z-Can
929000708703	100	0.10 - 0.70	71 - 143	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	75	80	Z-Can
929000702202	150	0.35 - 0.70	125 - 280	No	120 - 277	0-10V, DALI	AOC, MTP, PROG	80	80	F-Can Flat
929000709003	150	0.10 - 1.05	70 - 148	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	80	80	F-Can Flat
929000712703	300	0.10 - 1.50	80 - 280	No	120 - 277	0-10V, DALI	AOC, MTP, PROG+	75	80	R-Can

AOC: Adjustable Output Current

AUC: Adjustable Output Current
MTP: Module Temperature Protection
AUX: Auxiliary Power Supply
LSI: Logic Signal Input
PROG: Programmable, includes DALI, Dynadimmer, Constant Light Output (CLO), Adjustable Startup Time (AST), Over The Life (OTL)
PROG+: All the above + AMP DIM

# **Xitanium outdoor LED driver dimensions**







# With the premium light quality.

"The key need of food and fashion retailers is to make merchandise shine at the point-of-purchase while consuming less power. That's why we have developed our InteGrade LED system gen 3 portfolio that brings unrivaled product visibility, attractiveness and efficiency."

#### Premium light quality, throughout the store

Our new InteGrade gen 3 family offers you superior visual display with best-in-class efficiency. And you can lower energy costs at the same time. We offer two color ranges: premium white color range and standard color range. The premium white color lights up shoppers' desire with an optimized color spectrum for enhanced white performance and astonishingly lively rich color with typical CRI 93 while providing an outstanding efficacy up to 125 lm/W to enable lower power consumption. Combined with our premium white spotlighting solutions the InteGrade LED system premium white gen 3 enables you to create a single look and feel for the whole store, for the ultimate shopping experience. The standard color range enables product colors to look natural by means of its specially formulated CRI 90 LEDs, including the food version featuring a single color line of light.

Also great news: introducing the InteGrade high flux family, with its breathtaking performance and exceptional uniform light distribution brings the light right down to the lowest shelf. The bright, high-quality light displays products more attractively even when behind a glass door. Its miniaturized design means the light source itself is placed out of sight, which further maximizes attention on the products. InteGrade high flux is now available in premium white to combine the best of both worlds.

#### **Maximum design flexibility**

We offer you maximum design flexibility thanks to a range of engine lengths, color temperatures, accessories and Advance constant voltage LED drivers. The modular components fit together easily to simplify design-in and ensure hassle-free installation.



**Zachary Eagleton**Product Manager





## Just released!

CertaFlux RDL gen 1



Discount and price-fighter retail chains focus on costs. They leverage purchasing power to deliver value, and the customer expects affordable prices and a functional shopping experience. The lighting must support this image, which is where the Advance CertaFlux RDL portfolio comes in. It has established itself as an energy-efficient way to deliver the quality of light this cost-sensitive retail sector is looking for, especially in cooler and shelf applications.

## Coming soon!

Fortimo LEDFlex gen 1

Extending RDL business from refrigeration display lighting to retail display lighting!

Fortimo LEDFlex gen 1 combined with our premium white spotlighting solutions the InteGrade LED system premium white gen 3 will enable you to create a single look and feel for the whole store, for the ultimate shopping experience.

## **Advance InteGrade LED products**

#### InteGrade LED system gen 3 (premium white range)

The InteGrade LED system gen 3 has been designed for ultimate product attractiveness through a combination of a superior light quality, best light distribution and state-of-art efficacy. This range offers two color range: premium white color range and standard color range. Premium white color range offers an optimized color spectrum enabling enhanced white performance and astonishing lively rich colors for superior visual display of the merchandise with typical CRI 93 while providing an outstanding efficacy up to 125 lm/W to enable lower power consumption. Standard color range enables product colors look natural by means of its specially formulated CRI 90 LEDs, including the food version featuring a single color line of light.

The third generation of the very successful InteGrade range includes the brand new canopy version featuring a slim and miniaturized design with a breakthrough optical design enabling a perfect uniform light distribution in the chillers. Furthermore new InteGrade engine and fixture narrow beam vision provides higher lumen levels and yet maintaining its slim design suitable for aesthetic integration in the applications like chiller doors, where there is no room to place a sizable lighting solution. What is more exciting is InteGrade high flux is available also in premium white to combine the best of both worlds: high flux with premium white takes the product visibility and product attractiveness to the ultimate level, and stimulates the desire to buy.

Moreover an ultimate shopping experience can be created by the combination of the InteGrade LED system premium white and already available premium white spot lighting solutions enabling one look and feel in the store. InteGrade LED engines have been designed to match the most common application lengths, reducing the number of components needed per installation; yet maintaining the outstanding flexibility that its modular approach offers, enabling the creation of odd size lighting solutions to match every project specification. Thanks to a range of engine lengths, fixtures, accessories like mounting profiles, mounting clips, power cables, and Xitanium constant voltage LED power drivers the InteGrade LED system gen 3 offers maximum design flexibility and plug and play simplicity to enable a vast variety of innovative systems with style, modernity and functionality according to the needs of the stores.

#### For shelf lighting

#### InteGrade engine value premium white gen 3

Product specification								
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code			
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	К	GPC			
InteGrade engine Va 140mm 930 PW G3	0.8	85	93	3000	929001567506			
InteGrade engine Va 575mm 930 PW G3	3.4	380	93	3000	929001567606			
InteGrade engine Va 855mm 930 PW G3	4.9	550	93	3000	929001567706			
InteGrade engine Va 1150mm 930 PW G3	6.7	760	93	3000	929001567806			
InteGrade engine Va 140mm 940 PW G3	0.8	90	93	4000	929001567906			
InteGrade engine Va 575mm 940 PW G3	3.4	420	93	4000	929001568006			
InteGrade engine Va 855mm 940 PW G3	4.9	600	93	4000	929001568106			
InteGrade engine Va 1150mm 940 PW G3	6.7	840	93	4000	929001568206			

 $<sup>^{\</sup>ast}$  Correlated color temperature within 5 SDCM range

#### InteGrade engine vision premium white gen 3

Product specification								
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code			
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC			
InteGrade engine Vi 140mm 930 PW G3	1.6	170	93	3000	929001568306			
InteGrade engine Vi 575mm 930 PW G3	6.9	750	93	3000	929001568406			
InteGrade engine Vi 855mm 930 PW G3	10.1	1090	93	3000	929001568506			
InteGrade engine Vi 1150mm 930 PW G3	13.8	1500	93	3000	929001568606			
InteGrade engine Vi 140mm 940 PW G3	1.6	180	93	4000	929001568706			
InteGrade engine Vi 575mm 940 PW G3	6.9	800	93	4000	929001568806			
InteGrade engine Vi 855mm 940 PW G3	10.1	1160	93	4000	929001568906			
InteGrade engine Vi 1150mm 940 PW G3	13.8	1600	93	4000	929001569006			

 $<sup>^{</sup>st}$  Correlated color temperature within 5 SDCM range

#### For canopy lighting

#### InteGrade engine uniform beam value premium white gen 3

Product specification							
Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code			
W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC			
9,6	940	93	3000	929001626606			
12,8	1250	93	3000	929001626806			
9,6	1025	93	4000	929001626706			
12,8	1350	93	4000	929001626906			
	consumption W, typical ± 20% 9,6 12,8 9,6	consumption  W, typical ± 20%	consumption         index           W, typical ± 20%         lm, typical ± 20%         CRI, typical           9,6         940         93           12,8         1250         93           9,6         1025         93	consumption         index         temperature*           W, typical ± 20%         Im, typical ± 20%         CRI, typical         K           9,6         940         93         3000           12,8         1250         93         3000           9,6         1025         93         4000			

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade engine uniform beam vision premium white gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC
InteGrade engine UB Vi 140mm 930 PW G3	2,5	250	93	3000	929001572506
InteGrade engine UB Vi 575mm 930 PW G3	10	1000	93	3000	929001569706
InteGrade engine UB Vi 855mm 930 PW G3	15	1500	93	3000	929001569806
InteGrade engine UB Vi 1150mm 930 PW G3	20	2000	93	3000	929001569906
InteGrade engine UB Vi 140mm 940 PW G3	2,5	280	93	4000	929001572606
InteGrade engine UB Vi 575mm 940 PW G3	10	1100	93	4000	929001570006
InteGrade engine UB Vi 855mm 940 PW G3	15	1650	93	4000	929001570106
InteGrade engine UB Vi 1150mm 940 PW G3	20	2200	93	4000	929001570206

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### For canopy and chillers with doors

#### InteGrade engine high flux premium white gen 3

Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
W, typical ± 20%	lm, typical ± 20%	CRI, typical	К	GPC
4.4	400	93	3000	929001605606
17.5	1575	93	3000	929001605706
34.9	3150	93	3000	929001605806
4	400	93	4000	929001605906
16.1	1575	93	4000	929001606006
32.2	3150	93	4000	929001606106
	consumption W, typical ± 20% 4.4 17.5 34.9 4 16.1	consumption  W, typical ± 20%	consumption         index           W, typical ± 20%         Im, typical ± 20%         CRI, typical           4.4         400         93           17.5         1575         93           34.9         3150         93           4         400         93           16.1         1575         93	consumption         index         temperature*           W, typical ± 20%         Im, typical ± 20%         CRI, typical         K           4.4         400         93         3000           17.5         1575         93         3000           34.9         3150         93         3000           4         400         93         4000           16.1         1575         93         4000

<sup>\*</sup> Correlated color temperature within 5 SDCM range

Note: InteGrade high flux engines are not standalone engines and they might need to be integrated with a heatsink for thermal management and to achieve 50 khrs lifetime.

#### InteGrade engine high flux gen3 (standard color)

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
InteGrade engine HF 140mm 930 G3	4.4	375	90	3000	929001622106
InteGrade engine HF 575mm 930 G3	17.5	1550	90	3000	929001622206
InteGrade engine HF 1150mm 930 G3	35.0	3100	90	3000	929001622306
InteGrade engine HF 140mm 940 G3	3.9	400	90	4000	929001622406
InteGrade engine HF 575mm 940 G3	15.5	1575	90	4000	929001622506
InteGrade engine HF 1150mm 940 G3	31.1	3150	90	4000	929001622606
InteGrade engine HF 140mm WWR G3	4.4	375	90		929001622706
InteGrade engine HF 575mm WWR G3	17.5	1500	90		929001622806
InteGrade engine HF 1150mm WWR G3	35.1	3000	90		929001622906

<sup>\*</sup> Correlated color temperature within 5 SDCM range

Note: InteGrade high flux engines are not standalone engines and they might need to be integrated with a heatsink for thermal management and to achieve 50 khrs lifetime.



#### For chillers with doors

#### InteGrade engine narrow beam value premium white gen 3

Product specification Product specification							
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code		
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
InteGrade engine NB Va 140mm 930 PW G3	1	115	93	3000	929001569106		
InteGrade engine NB Va 575mm 930 PW G3	4.5	500	93	3000	929001569206		
InteGrade engine NB Va 1430mm 930 PW G3	11	1230	93	3000	929001569306		
InteGrade engine NB Va 140mm 940 PW G3	1	120	93	4000	929001569406		
InteGrade engine NB Va 575mm 940 PW G3	4.5	530	93	4000	929001569506		
InteGrade engine NB Va 1430mm 940 PW G3	11	1300	93	4000	929001569606		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade engine narrow beam vision premium white gen 3

Product specification							
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code		
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
InteGrade engine NB Vi 140mm 930 PW G3	2.7	280	93	3000	929001605406		
InteGrade engine NB Vi 1430mm 930 PW G3	27.2	2850	93	3000	929001571706		
InteGrade engine NB Vi 140mm 940 PW G3	2.7	300	93	4000	929001605506		
InteGrade engine NB Vi 1430mm 940 PW G3	27.2	3100	93	4000	929001571806		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade fixture narrow beam value premium white gen 3

Product specification							
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code		
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
InteGrade F NB Va 1500mm 930 PW SD G3	11	1230	93	3000	929001572006		
InteGrade F NB Va 1500mm 930 PW CTR G3	22	2460	93	3000	929001572106		
InteGrade F NB Va 1500mm 940 PW SD G3	11	1300	93	4000	929001572206		
InteGrade F NB Va 1500mm 940 PW CTR G3	22	2600	93	4000	929001572306		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade fixture narrow beam vision premium white gen 3

Product specification							
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code		
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
InteGrade F NB Vi 1500mm 930 PW SD G3	26.2	2850	93	3000	929001570306		
InteGrade F NB Vi 1500mm 930 PW CTR G3	52.4	5700	93	3000	929001570406		
InteGrade F NB Vi 1500mm 940 PW SD G3	26.3	3100	93	4000	929001570506		
InteGrade F NB Vi 1500mm 940 PW CTR G3	52.6	6200	93	4000	929001570606		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### Suitable for:



Retail

## **Advance InteGrade LED products**

#### InteGrade LED system gen 3 (standard color range)

The InteGrade LED system gen 3 has been designed for ultimate product attractiveness through a combination of a superior light quality, best light distribution and state-of-art efficacy.

This range offers two color range: premium white color range and standard color range. Premium white color range offers an optimized color spectrum enabling enhanced white performance and astonishing lively rich colors for superior visual display of the merchandise with typical CRI 93 while providing an outstanding efficacy up to 125 lm/W to enable lower power consumption. Standard color range enables product colors look natural by means of its specially formulated CRI 90 LEDs, including the food version featuring a single color line of light.

The third generation of the very successful InteGrade range includes the brand new canopy version featuring a slim and miniaturized design with a breakthrough optical design enabling a perfect uniform light distribution in the chillers. Furthermore new InteGrade engine and fixture narrow beam vision provides higher lumen levels and yet maintaining its slim design suitable for aesthetic integration in the applications like chiller doors, where there is no room to place a sizable lighting solution.

InteGrade LED engines have been designed to match the most common application lengths, reducing the number of components needed per installation; yet maintaining the outstanding flexibility that its modular approach offers, enabling the creation of odd size lighting solutions to match every project specification. Thanks to a range of engine lengths, fixtures, accessories like mounting profiles, mounting clips, power cables, and Xitanium constant voltage LED power drivers the InteGrade LED system gen 3 offers maximum design flexibility and plug and play simplicity to enable a vast variety of innovative systems with style, modernity and functionality according the needs of the stores.

#### For shelf lighting

#### InteGrade engine value gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	K	GPC
InteGrade engine Va 140mm 930 G3	0.9	85	90	3000	929001574606
InteGrade engine Va 575mm 930 G3	3.9	380	90	3000	929001574706
InteGrade engine Va 855mm 930 G3	5.7	550	90	3000	929001574806
InteGrade engine Va 1150mm 930 G3	7.8	760	90	3000	929001574906
InteGrade engine Va 140mm 935 G3	0.8	80	90	3500	929001641006
InteGrade engine Va 575mm 935 G3	3.6	355	90	3500	929001641106
InteGrade engine Va 855mm 935 G3	5.2	510	90	3500	929001641206
InteGrade engine Va 1150mm 935 G3	7.2	710	90	3500	929001641306
InteGrade engine Va 140mm 940 G3	0.9	90	90	4000	929001575006
InteGrade engine Va 575mm 940 G3	3.9	420	90	4000	929001575106
InteGrade engine Va 855mm 940 G3	5.7	600	90	4000	929001575206
InteGrade engine Va 1150mm 940 G3	7.8	840	90	4000	929001575306
InteGrade engine Va 140mm 956 G3	1.0	105	90	5600	929001617906
InteGrade engine Va 575mm 956 G3	3.9	420	90	5600	929001618006
InteGrade engine Va 855mm 956 G3	5.8	630	90	5600	929001618106
InteGrade engine Va 1150mm 956 G3	7.8	840	90	5600	929001618206
InteGrade engine Va 140mm WWR G3	0.7	70	90		929001575406
InteGrade engine Va 575mm WWR G3	3.2	310	90		929001575506
InteGrade engine Va 855mm WWR G3	4.7	450	90		929001575606
InteGrade engine Va 1150mm WWR G3	6.4	620	90		929001575706

<sup>\*</sup> Correlated color temperature within 5 SDCM range



#### InteGrade engine vision gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
InteGrade engine Vi 140mm 930 G3	1.7	170	90	3000	929001575806
InteGrade engine Vi 575mm 930 G3	7.3	750	90	3000	929001575906
InteGrade engine Vi 855mm 930 G3	10.7	1090	90	3000	929001576006
InteGrade engine Vi 1150mm 930 G3	14.6	1500	90	3000	929001576106
InteGrade engine Vi 140mm 935 G3	1.6	155	90	3500	929001641406
InteGrade engine Vi 575mm 935 G3	6.9	680	90	3500	929001641506
InteGrade engine Vi 855mm 935 G3	10.1	990	90	3500	929001641606
InteGrade engine Vi 1150mm 935 G3	13.8	1365	90	3500	929001641706
InteGrade engine Vi 140mm 940 G3	1.7	180	90	4000	929001576206
InteGrade engine Vi 575mm 940 G3	7.3	800	90	4000	929001576306
InteGrade engine Vi 855mm 940 G3	10.7	1160	90	4000	929001576406
InteGrade engine Vi 1150mm 940 G3	14.6	1600	90	4000	929001576506
InteGrade engine Vi 140mm 956 G3	1.9	200	90	5600	929001618306
InteGrade engine Vi 575mm 956 G3	7.4	800	90	5600	929001618406
InteGrade engine Vi 855mm 956 G3	11.1	1200	90	5600	929001618506
InteGrade engine Vi 1150mm 956 G3	14.9	1600	90	5600	929001618606
InteGrade engine Vi 140mm WWR G3	1.5	150	90		929001576606
InteGrade engine Vi 575mm WWR G3	6.6	650	90		929001576706
InteGrade engine Vi 855mm WWR G3	9.7	950	90		929001576806
InteGrade engine Vi 1150mm WWR G3	13.2	1300	90		929001576906
InteGrade engine Vi HL 140mm 935 G3	2.4	240	90	3500	929001651506
InteGrade engine Vi HL 575mm 935 G3	9.6	950	90	3500	929001651606
InteGrade engine Vi HL 855mm 935 G3	14.4	1425	90	3500	929001651706
InteGrade engine Vi HL 1150mm 935 G3	19.2	1875	90	3500	929001651806

 $<sup>^{</sup>st}$  Correlated color temperature within 5 SDCM range

#### For canopy lighting

#### InteGrade engine uniform beam value gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	K	GPC
InteGrade engine UB Va 855mm 930 G3	9.4	890	90	3000	929001603706
InteGrade engine UB Va 1150mm 930 G3	13	1200	90	3000	929001603806
InteGrade engine UB Va 855mm 940 G3	9.4	970	90	4000	929001603906
InteGrade engine UB Va 1150mm 940 G3	13	1300	90	4000	929001604006
InteGrade engine UB Va 855mm WWR G3	7.9	700	90		929001604106
InteGrade engine UB Va 1150mm WWR G3	11	900	90		929001604206

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade engine uniform beam vision gen 3

Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
nteGrade engine UB Vi 140mm 930 G3	2.6	240	90	3000	929001578506
nteGrade engine UB Vi 575mm 930 G3	10	950	90	3000	929001578606
nteGrade engine UB Vi 855mm 930 G3	15	1450	90	3000	929001578706
nteGrade engine UB Vi 1150mm 930 G3	20	1950	90	3000	929001578806
nteGrade engine UB Vi 140mm 935 G3	2.4	245	90	3500	929001642106
nteGrade engine UB Vi 575mm 935 G3	9.6	990	90	3500	929001642006
nteGrade engine UB Vi 855mm 935 G3	14.4	1500	90	3500	929001641906
nteGrade engine UB Vi 1150mm 935 G3	19.2	1975	90	3500	929001641806
nteGrade engine UB Vi 140mm 940 G3	2,6	260	90	4000	929001578906
nteGrade engine UB Vi 575mm 940 G3	10	1050	90	4000	929001579006
nteGrade engine UB Vi 855mm 940 G3	15	1600	90	4000	929001579106
nteGrade engine UB Vi 1150mm 940 G3	20	2100	90	4000	929001579206
nteGrade engine UB Vi 140mm WWR G3	1.9	175	90		929001579306
nteGrade engine UB Vi 575mm WWR G3	7.5	700	90		929001579406
nteGrade engine UB Vi 855mm WWR G3	11	1050	90		929001579506
nteGrade engine UB Vi 1150mm WWR G3	15	1400	90		929001579606

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### For chillers with doors

#### InteGrade engine narrow beam value gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	K	GPC
InteGrade engine NB Va 140mm 930 G3	1,2	125	90	3000	929001577006
InteGrade engine NB Va 575mm 930 G3	4,8	500	90	3000	929001577106
InteGrade engine NB Va 1430mm 930 G3	11,9	1230	90	3000	929001577206
InteGrade engine NB Va 140mm 940 G3	1,2	130	90	4000	929001577306
InteGrade engine NB Va 575mm 940 G3	4,8	530	90	4000	929001577406
InteGrade engine NB Va 1430mm 940 G3	11,9	1300	90	4000	929001577506
InteGrade engine NB Va 140mm 956 G3	1,1	120	90	5600	929001618706
InteGrade engine NB Va 575mm 956 G3	4,3	480	90	5600	929001618806
InteGrade engine NB Va 1430mm 956 G3	10,7	1200	90	5600	929001618906
InteGrade engine NB Va 140mm WWR G3	1,3	125	90		929001577606
InteGrade engine NB Va 575mm WWR G3	5,1	500	90		929001577706
InteGrade engine NB Va 1430mm WWR G3	12,7	1230	90		929001577806

<sup>\*</sup> Correlated color temperature within 5 SDCM range

InteGrade engine narrow beam vision gen 3

D 1 1 10 11					
Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	K	GPC
InteGrade engine NB Vi 140mm 930 G3	2.7	260	90	3000	929001605106
InteGrade engine NB Vi 1430mm 930 G3	27.3	2600	90	3000	929001580306
InteGrade engine NB Vi 140mm 940 G3	2.7	280	90	4000	929001605206
InteGrade engine NB Vi 1430mm 940 G3	27.3	2800	90	4000	929001580406
InteGrade engine NB Vi 140mm WWR G3	2.7	260	90		929001605306
InteGrade engine NB Vi 1430mm WWR G3	26.6	2600	90		929001580506

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade fixture narrow beam value gen 3

Product specification						
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code	
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC	
InteGrade F NB Va 1500mm 930 SD G3	11.7	1230	90	3000	929001577906	
InteGrade F NB Va 1500mm 930 CTR G3	23.4	2460	90	3000	929001578006	
InteGrade F NB Va 1500mm 940 SD G3	11.7	1300	90	4000	929001578106	
InteGrade F NB Va 1500mm 940 CTR G3	23.4	2600	90	4000	929001578206	
InteGrade F NB Va 1500mm 956 SD G3	10.7	1200	90	5600	929001619006	
InteGrade F NB Va 1500mm 956 CTR G3	21.3	2400	90	5600	929001619106	
InteGrade F NB Va 1500mm WWR SD G3	12.7	1230	90		929001578306	
InteGrade F NB Va 1500mm WWR CTR G3	25.5	2460	90		929001578406	

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### InteGrade fixture narrow beam vision gen 3

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
InteGrade F NB Vi 1500mm 930 SD G3	26.1	2600	90	3000	929001579706
InteGrade F NB Vi 1500mm 930 CTR G3	52.3	5200	90	3000	929001579806
InteGrade F NB Vi 1500mm 940 SD G3	26.2	2800	90	4000	929001579906
InteGrade F NB Vi 1500mm 940 CTR G3	52.4	5600	90	4000	929001580006
InteGrade F NB Vi 1500mm WWR SD G3	26.6	2600	90		929001580106
InteGrade F NB Vi 1500mm WWR CTR G3	53.2	5200	90		929001580206

<sup>\*</sup> Correlated color temperature within 5 SDCM range

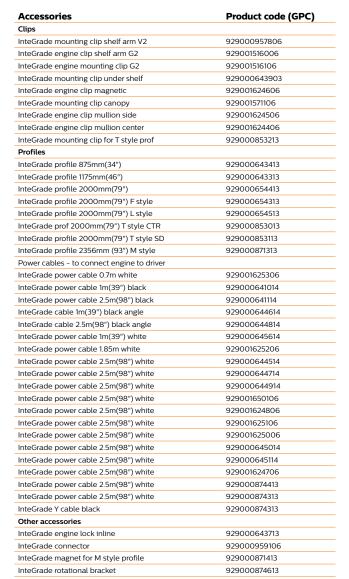
## Integrade accesories and drivers

**Constant voltage drivers** 

Product name	Product code (GPC)
LED Power driver 20W 24V	929000654006
LED Power driver 80W 24V	929000653906
LED Power driver 100W 24V 100/240V	929001430080
LED Power Driver 75W - 24V PP ItG-N plug*	929000869613
Xitanium 77W 100-277V 3.2A XI077C320V024FNS1M *	929001708113
Xitanium 100W 100-277V 4.1A XI100C410V024FNS1M*	929000771913
LED driver outdoor 100W 100-240V 24V**	929000485303

<sup>\*</sup> Only for NAM region

<sup>\*\*</sup> Only for Japan





Accessories	Product code (GPC)
RDL track	
RDL track 1800mm G 929001653706	929001653706
RDL track 1200mm G 929001653806	929001653806
RDL track 600mm G 929001653906	929001653906
Power cables – to connect the RDL track to the driver	
InteGrade track power cable 1.5m G	929001654006
InteGrade track power cable 1.5m G angle	929001654106
Track cables – to connect the engines to the RDL track	
InteGrade track cable M 0.7m G angle 929001654206	929001654206
InteGrade track cable 0.7m G angle 929001654306	929001654306
InteGrade track cable 0.3m T angle 929001654406	929001654406
InteGrade track cable 0.4m T angle 929001654506	929001654506
InteGrade track cable 0.5m T angle 929001654606	929001654606

<sup>\*</sup> G = Gray, M = Magnetic, T = Transparent



#### Suitable for:



Retail

## **Advance CertaFlux RDL LED products**

#### CertaFlux RDL LED system gen 3

Discount and price-fighter retail chains focus on costs. They leverage purchasing power to deliver value, and the customer expects affordable prices and a functional shopping experience. The lighting must support this image, which is where the Advance CertaFlux RDL portfolio comes in. It has established itself as an energy-efficient way to deliver the quality of light this cost-sensitive retail sector is looking for, especially in cooler and shelf applications.

CertaFlux RDL portfolio is optimized for standard applications lengths with options for main cooler applications. A carefully-selected range of accessories is also available including glare shields, mounting clips and cables.

The quality of light and performance are everything a retail discounter needs. With a CRI of >80 and a lumen efficacy up to 120 lm per watt, CertaFlux RDL illuminates products with a uniform, attractive light. What's more, the LEDs have minimal output degradation and color shift over time, so the light remains consistent throughout their long service life.

#### For shelf lighting

#### CertaFlux RDL shelf gen 1

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
CertaFlux RDL shelf 575mm 830 G1	3	370	80	3000	929001665006
CertaFlux RDL shelf 855mm 830 G1	4.7	550	80	3000	929001665106
CertaFlux RDL shelf 1150mm 830 G1	6.2	740	80	3000	929001665206
CertaFlux RDL shelf 575mm 835 G1	3	370	80	3500	929001665306
CertaFlux RDL shelf 855mm 835 G1	4.7	550	80	3500	929001665406
CertaFlux RDL shelf 1150mm 835 G1	6.2	740	80	3500	929001665506
CertaFlux RDL shelf 575mm 840 G1	3	370	80	4000	929001665606
CertaFlux RDL shelf 855mm 840 G1	4.7	550	80	4000	929001665706
CertaFlux RDL shelf 1150mm 840 G1	6.2	740	80	4000	929001665806
CertaFlux RDL shelf 575mm MC G1	3	278	80		929001665906
CertaFlux RDL shelf 855mm MC G1	4.7	413	80		929001666006
CertaFlux RDL shelf 1150mm MC G1	6.2	555	80		929001666106

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### For canopy lighting

#### CertaFlux RDL shelf gen 1

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
CertaFlux RDL canopy 575mm 830 G1	8.6	1000	80	3000	929001667406
CertaFlux RDL canopy 855mm 830 G1	12.9	1500	80	3000	929001667506
CertaFlux RDL canopy 1150mm 830 G1	17.2	2000	80	3000	929001667606
CertaFlux RDL canopy 575mm 835 G1	8.6	1000	80	3500	929001667706
CertaFlux RDL canopy 855mm 835 G1	12.9	1500	80	3500	929001667806
CertaFlux RDL canopy 1150mm 835 G1	17.2	2000	80	3500	929001667906
CertaFlux RDL canopy 575mm 840 G1	8.6	1000	80	4000	929001668006
CertaFlux RDL canopy 855mm 840 G1	12.9	1500	80	4000	929001668106
CertaFlux RDL canopy 1150mm 840 G1	17.2	2000	80	4000	929001668206
CertaFlux RDL canopy 575mm MC G1	8.6	700	80		929001668306
CertaFlux RDL canopy 855mm MC G1	12.9	1050	80		929001668406
CertaFlux RDL canopy 1150mm MC G1	17.2	1400	80		929001668506

 $<sup>^{\</sup>ast}$  Correlated color temperature within 5 SDCM range

Suitable for:



<sup>\*</sup> MC : meat color

<sup>\*</sup> MC : meat color

#### For chillers with doors

#### CertaFlux RDL vertical with glareshield gen 1

Product specification					
Product name	Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code
	W, typical ± 20%	lm, typical ± 20%	CRI, min	К	GPC
CertaFlux RDL vrt 1500mm 830 SD WGS G1	9.4	1155	80	3000	929001666206
CertaFlux RDL vrt 1500mm 830 CTR WGS G1	19.8	2420	80	3000	929001666506
CertaFlux RDL vrt 1500mm 840 SD WGS G1	9.4	1155	80	4000	929001666306
CertaFlux RDL vrt 1500mm 840 CTR WGS G1	19.8	2420	80	4000	929001666606
CertaFlux RDL vrt 1500mm MC SD WGS G1	12.8	1090	80		929001666406
CertaFlux RDL vrt 1500mm MC CTR WGS G1	26.5	2260	80		929001666706
CertaFlux RDL vrt 1650mm 830 SD WGS G1	10.8	1270	80	3000	929001666806
CertaFlux RDL vrt 1650mm 830 CTR WGS G1	21.6	2640	80	3000	929001667106
CertaFlux RDL vrt 1650mm 840 SD WGS G1	10.8	1270	80	4000	929001666906
CertaFlux RDL vrt 1650mm 840 CTR WGS G1	21.6	2640	80	4000	929001667206
CertaFlux RDL vrt 1650mm MC SD WGS G1	14.2	1200	80		929001667006
CertaFlux RDL vrt 1650mm MC CTR WGS G1	28.9	2480	80		929001667306
CertaFlux RDL vrt 1650mm MC SD WGS G1  CertaFlux RDL vrt 1650mm MC CTR WGS G1	<u> </u>				

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### **Constant voltage drivers**

Product specification	
Product name	Power consumption
	W, typical ± 20%
LED Power driver 20W 24V	929000654006
LED Power driver 80W 24V	929000653906
LED Power driver 100W 24V 100/240V	929001430080
LED Power Driver 75W - 24V PP ItG-N plug*	929000869613
CertaDrive 35W/24VDC 220-240V	929001424006
CertaDrive 60W/24VDC 220-240V	929001424106
CertaDrive 100W/24VDC 220-240V	929001424206
CertaDrive 120W/24VDC 220-240V	929001424306
Xitanium 77W 100-277V 3.2A XI077C320V024FNS1M *	929001708113
Xitanium 100W 100-277V 4.1A XI100C410V024FNS1M*	929000771913

<sup>\*</sup> Only for NAM region

#### Accessories

Product specification	Product code (GPC)
CertaFlux RDL clip canopy 0° surface	929000957806
CertaFlux RDL clip canopy 30° surface	929001516006
CertaFlux RDL clip shelf front	929001516106
CertaFlux RDL clip shelf arm	929000643903
CertaFlux RDL clip shelf magnetic	929001624606

#### Power cables - to connect engine to driver

InteGrade power cable 0.7m white	929001625306
InteGrade power cable 1m (39") black	929000641014
InteGrade power cable 2.5m (98") black	929000641114
InteGrade cable 1m (39") black angle	929000644614
InteGrade cable 2.5m (98") black angle	929000644814
InteGrade power cable 1m (39") white	929000645614
InteGrade power cable 1.85m white	929001625206
InteGrade power cable 2.5m (98") white	929000644514
InteGrade cable 1m (39") white angle	929000644714
InteGrade cable 2.5m (98") white angle	929000644914
InteGrade power cable 3m black angle	929001650106
InteGrade power cable 6m white	929001624806
InteGrade spacer cable 113mm white	929001625106
InteGrade spacer cable 0.3m black	929001625006
InteGrade spacer cable 0.5m black	929000645014
InteGrade spacer cable 0.5m white	929000645114
InteGrade spacer cable M 0.7m 5.5c black	929001624706
InteGrade extension cab 1.5m (59")black	929000874413
InteGrade Y cable black	929000874313

#### **RDL** track system

RDL track	Product code (GPC)
RDL track 1800mm G 929001653706	929001653706
RDL track 1200mm G 929001653806	929001653806
RDL track 600mm G 929001653906	929001653906

#### Power cables - to connect the RDL track to the driver

InteGrade track power cable 1.5m G	929001654006
InteGrade track power cable 1.5m G angle	929001654106

#### Track cables - to connect the engines to the RDL track

InteGrade track cable M 0.7m G angle 929001654206	929001654206
InteGrade track cable 0.7m G angle 929001654306	929001654306
InteGrade track cable 0.3m T angle 929001654406	929001654406
InteGrade track cable 0.4m T angle 929001654506	929001654506
InteGrade track cable 0.5m T angle 929001654606	929001654606

<sup>\*</sup> G = Gray, M = Magnetic, T = Transparent

#### Suitable for:



<sup>\*</sup> MC : meat color

## **LED** display modules

Advance LED lighting for refrigeration cases is a sustainable and energy-efficient way to create an enjoyable shopping experience for customers – while at the same time supporting retailers' brand values. RDL500 and RDL510 modules can be vertically integrated in full-height glass-door refrigeration cabinets.



#### **RDL500**

#### Value

Product specification							
Product name	Power consumption	Lumen	Color Rendering Index	Correlated Color Temperature*	Product Code		
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
PrimeSet RDL 500 1200 mm (47") 841 G1	7.9	900	85	4100	929000891106		
PrimeSet RDL 500 1200 mm (47") 856 G1	9	1000	85	5600	929000891006		
PrimeSet RDL 500 1500 mm (59") 841 G1	9.9	1200	85	4100	929000890706		
PrimeSet RDL 500 1500 mm (59") 856 G1	11.7	1300	85	5600	929000890606		
PrimeSet RDL 500 1700 mm (67") 841 G1	11	1300	85	4100	929000890306		
PrimeSet RDL 500 1700 mm (67") 856 G1	12.9	1400	85	5600	929000890206		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### Vision

Product specification								
Product name	Power consumption	Lumen	Color Rendering Index	Correlated Color Temperature*	Product Code			
	W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC			
PrimeSet RDL 500 Vision 1200 mm (47") 841 G1	15.4	1900	85	4100	929001501806			
PrimeSet RDL 500 Vision 1200 mm (47") 856 G1	17	2000	85	5600	929001501906			
PrimeSet RDL 500 Vision 1500 mm (59") 841 G1	19.4	2200	85	4100	929000934106			
PrimeSet RDL 500 Vision 1500 mm (59") 856 G1	22	2400	85	5600	929000934006			
PrimeSet RDL 500 Vision 1700 mm (67") 841 G1	21.9	2500	85	4100	929000933906			
PrimeSet RDL 500 Vision 1700 mm (67") 856 G1	24.7	2700	85	5600	929000933806			

<sup>\*</sup> Correlated color temperature within 5 SDCM range

Suitable for:



## **LED display modules**



#### RDL510

#### Vision

Product specification Product specification						
Power consumption	Lumen	Color rendering index	Correlated color temperature*	Product code		
W, typical ± 20%	lm, typical ± 20%	CRI, typical	K	GPC		
9.3	1100	85	4100	929000934506		
10.2	1200	85	5600	929000934406		
10.8	1300	85	4100	929001502006		
12	1400	85	5600	929001502106		
11.8	1400	85	4100	929000934306		
12.9	1500	85	5600	929000934206		
	consumption  W, typical ± 20%  9.3  10.2  10.8  12  11.8	consumption       W, typical ± 20%     lm, typical ± 20%       9.3     1100       10.2     1200       10.8     1300       12     1400       11.8     1400	consumption         index           W, typical ± 20%         lm, typical ± 20%         CRI, typical           9.3         1100         85           10.2         1200         85           10.8         1300         85           12         1400         85           11.8         1400         85	consumption         index         temperature*           W, typical ± 20%         lm, typical ± 20%         CRI, typical         K           9.3         1100         85         4100           10.2         1200         85         5600           10.8         1300         85         4100           12         1400         85         5600           11.8         1400         85         4100		

<sup>\*</sup> Correlated color temperature within 5 SDCM range

#### **Constant voltage drivers**

Product name	Product code (GPC)
Xitanium constant voltage LED power driver 20W - 24V	9290 006 54006
Xitanium constant voltage LED power driver 80W - 24V	9290 006 53906
Xitanium constant voltage LED power driver 100W 24V 100/240V	9290 014 30080
Xitanium 77W 100-277V 3.2A XI077C320V024FNS1M *	929001708113
Xitanium 100W 4.1A 24V FIX INT -S*	9290 007 71913

<sup>\*</sup> Only for NAM region

Accessories	Product code (GPC)
Profiles	
PrimeSet RDL-mount prof CTR 750mm	9290 008 94006
PrimeSet RDL-mount prof CTR 850mm	9290 015 07306
PrimeSet RDL-mount prof CTR 950mm	9290 008 94106
PrimeSet RDL-mount prof CTR 1200mm	9290 008 94206
PrimeSet RDL-mount prof CTR 1500mm	9290 008 94306
PrimeSet RDL-mount prof CTR 1700mm	9290 008 94406
PrimeSet RDL-mount prof SD 750mm	9290 008 94706
PrimeSet RDL-mount prof SD 850mm	9290 015 07406
PrimeSet RDL-mount prof SD 950mm	9290 008 94806
PrimeSet RDL-mount prof SD 1200mm	9290 008 94906
PrimeSet RDL-mount prof SD 1500mm	9290 008 95006
PrimeSet RDL-mount prof SD 1700mm	9290 008 95106
PrimeSet RDL-mount prof CTR 1200mm-47" B*	929000897706
PrimeSet RDL-mount prof CTR 1500mm-59" B*	929000894506
PrimeSet RDL-mount prof CTR 1700mm-67" B*	929000894606
PrimeSet RDL-mount prof SD 1200mm-47" B*	929000897806
PrimeSet RDL-mount prof SD 1500mm-59" B*	929000895206
PrimeSet RDL-mount prof SD 1700mm-67" B*	929000895306
Power cables - to connect engine to driver	
PrimeSet RDL - centre cable 1m (39") B	9290 008 92706
PrimeSet RDL - side cable 1m (39") B	9290 008 92806
PrimeSet RDL - centre cable 2.5m (98") B	9290 009 57206
PrimeSet RDL - side cable 2.5m (98") B	9290 009 57306

<sup>\*</sup> Only for NAM region









# Instant backup that complements original lighting designs.

Emergency lighting plays an important role in every facility's life safety program. Local, state and national building codes, such as the NFPA® 101® Life Safety Code® and National Electrical Code®, require reliable and sufficient emergency illumination for commercial, industrial and institutional buildings in the United States<sup>7</sup>. When normal power fails for any reason, emergency lighting provides critical illumination.

#### Advance Bodine emergency lighting provides instant backup

Advance Bodine emergency LED drivers and inverters provide instant backup lighting whenever normal power fails. They deliver 90 minutes of battery-supplied power.

#### Complements original designs

Advance Bodine emergency lighting units complement original lighting designs. Because they can be installed inconspicuously inside, on top of, near or remote from the fixture – depending on factors such as fixture, emergency lighting product and product model – they do not detract from fixture or interior design. Advance Bodine emergency lighting is emergency lighting you'll never see until you need it.



**90 minute** battery power supply



**Melody Ramsey** Product Marketeer



## Emergency code

AC power failures occur for a variety of reasons. Storms and other extreme weather conditions can affect AC power. Vehicular accidents, fires or equipment failure can also result in power outages. When this happens, liability concerns are inevitable. Serious accidents or mishaps could occur when occupants are left in total darkness during a power failure. In such instances, the first area of inquiry is often, "Did this building meet code?"

#### Laws, codes and regulations

Although state and local building codes vary, most are based upon:

- 1. National Electrical Code®, NFPA 70®, Article 700;
- 2. Life Safety Code®, NFPA 101®, Section 7.9;
- 3. Occupational Safety and Health Act (OSHA) regulations.

These codes provide complete information about emergency lighting requirements. However, a basic starting point is provided in the LSC 7.9.2.1 - 7.9.2.1.3 (2015), which states:

7.9.2.1 Emergency illumination shall be provided for a minimum of 11/2 hours in the event of failure of normal lighting.

7.9.2.1.1 Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 ft-candle (10.8 lux) and, at any point, not less than 0.1 ft-candle (1.1 lux), measured along the path of egress at floor level.

7.9.2.1.2 Illumination levels shall be permitted to decline to not less than an average of 0.6 ft-candle (6.5 lux) and, at any point, not less than 0.06 ft-candle (0.65 lux) at the end of 11/2 hours.

7.9.2.1.3 The maximum-to-minimum illumination shall not exceed a ration of 40 to 1.

It is important to remember that codes generally set minimum standards. Specifiers, building owners, facility management or municipalities may choose to go beyond minimums in their effort to keep people and property safe.

#### **Maintenance**

Codes mandate periodic monitoring of emergency lighting equipment once it is installed. Emergency operation must be tested monthly for a minimum of 30 seconds, and, for batterypowered systems, a 90-minute discharge test must be conducted once a year. Additionally, the NFPA requires that records be kept as proof of maintenance.8

Specifiers, building owners or facility management may choose to go beyond minimums in their effort

to keep people and property safe.

**Coming** soon! bodie ELLS-10

**Advance Bodine ELI-S-10** emergency lighting inverter

#### **Key features:**

10 VA output power

Automatically regulates AC dimming drivers to 10 VA Works with LED and fluorescent luminaires Compatible with Type B TLED and LED screw-base lamps Meets CEC Title 20

Expected launch: Q1 2019

## ance Bodine emergency lighting

## **Emergency LED drivers**

The Advance Bodine emergency LED driver line allows LED fixtures to serve as emergency lighting sources. The product line includes drivers designed for a variety of applications: indoor, outdoor egress, damp, cold temperatures, steplights, downlights, Class 2 installations and more. Recently, combination drivers that provide both AC and emergency operation have been added.

As with other types of lighting, LED lighting must meet life safety code requirements for emergency lighting when it is used in an emergency capacity. This includes runtime. Therefore, LED fixtures serving as emergency lighting sources must provide 90 minutes of illumination in the event of a power failure.

When normal AC power fails, the emergency LED drivers switch into emergency mode and support LED fixtures for 90 minutes. When AC power is restored, the drivers automatically return to the charging mode.



#### Emergency LED drivers

	Model	Class Rating	Output Voltage (VDC)	Average Output Power	Dimensions	(JL)	(BC)	<b>71</b> 2	Feature / Benefit
-	BAC40EM6	Class 2	22.5 - 54	40W AC / 6W EM	14.1" x 1.18" x 1.0" + battery			•	Combination AC and emergency driver SimpleSet AC output programming Separate battery design
	BAC40EM10	Class 2	22.5 - 54	40W AC / 10W EM	14.1" x 1.18" x 1.0" + battery			•	Combination AC and emergency driver SimpleSet AC output programming Separate battery design
new	BSL4L	Class 2	15 - 54	4.0 W	16.7" x 1.18" x 1.0"	•	•		Compact design
new	BSL4SB	Class 2	15 - 50	4.0 W	6.57" x 2.25" x 1.18" + battery	•	•		Cold temps (-4° F to +131° F) Separate battery design
	BSL6LST	Class 2	15 - 54	6.0 W	14.1" x 1.18" x 1.0"	•	•		Self-testing Compact design
new	BSL8SB	Class 2	15 - 50	8.0 W	6.57" x 2.25" x 1.18" + battery	•	•		Cold temps (-4° F to +131° F) Separate battery design
	BSL10LST	Class 2	15 - 54	10.0 W	16.6" x 1.18" x 1.0"	•	•		Self-testing Compact design
	BSL10 Cold-Pak	Class 2	24 - 52	14.0 W	8.97" x 3.5" x 2.9"	•			Cold temps (-4° F to +131° F)
_	BSL17C-C2 (conduit) BSL17-C2 (non-conduit)	Class 2	15 - 50	7.0 W	12" x 2.4" x 1.5"	•	•		Multiple mounting configurations
	BSL17C-C2ST	Class 2	15 - 50	7.0 W	12" x 2.4" x 1.5"	•	•		Self-testing Multiple mounting configurations
	BSL17C (conduit) BSL17 (non-conduit)	non Class 2	30 - 130	7.0 W	12" x 2.4" x 1.5"	•	•		Multiple mounting configurations
_	BSL20LV	Class 2	20 - 50	20.0 W	16.6" x 2.8" x 2.85"	•	•		High output Dual flex option
_	BSL20MV BSL20HV	non Class 2	50 - 130 125 - 200	20.0 W	16.6" x 2.8" x 2.85"	•	•		High output Dual flex option on HV model
	BSL36 Cold-Pak	Class 2	15 - 52	6.0 W	9.4" x 2.6" x 1.5"	•			Cold temps (-4° F to +131° F)
	BSL310 (non-conduit)	Class 2	15 - 50	10.0 W	14.5" x 2.25" x 1.18"	•	•		Polycarbonate case
	BSL310C (conduit) BSL310M (non-conduit)	Class 2	15 - 50	10.0 W	15.34" x 2.25" x 1.16"	•	•		Universal input
	BSL310C-DF (conduit)	Class 2	15 - 50	10.0 W	15.34" x 2.25" x 1.16"	•	•		Universal input Dual flex conduit on one end
	BSL310LP	Class 2	15 - 52	10.0 W	22.5" x 1.18" x 1.18"	•	•		For low-profile fixtures Universal input
	BSL310LPST	Class 2	15 - 52	10.0 W	22.5" x 1.18" x 1.18"	•	•		For low-profile fixtures Universal input, Self-testing
-	BSL310SB	Class 2	15 - 50	10.0 W	6.57" x 2.25" x 1.18" + battery	•	•		Universal input Separate battery
	BSL310HAZ	Class 2	15 - 50	10.0 W	15.34" x 2.25" x 1.16"		•	•	Suitable for hazardous locations
-	BSL718	Class 2	20 - 50	18.0 W	9.4" x 2.2" x 1.05" + battery	•	•		Normal or extreme temps (-4° F to +140° F) Separate battery design
	BSL722 (non-conduit)	Class 2	28 - 33	23.1 W	9.4" x 2.2" x 1.05" + battery			•	Universal input Drives two LED arrays in parallel Separate battery design
_	BSL722 Cold (non-conduit)	Class 2	28 - 33	23.1 W	9.4" x 2.2" x 1.05" + battery			•	Universal input, Cold temps (-4° F to +140° F) Drives two LED arrays in parallel Separate battery design

Additional product information can be found on the model specification sheets at www.signify.com/bodine.

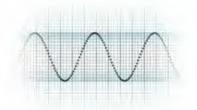


## Inverters for emergency lighting applications

Advance Bodine emergency lighting inverters are sinusoidal (sine wave) units that support LED, TLED and fluorescent fixtures during loss of normal AC power. The inverters sense the loss and immediately begin supplying emergency power. Advance Bodine inverters support emergency lighting for 90 minutes, in accordance with code-established runtime requirements (NFPA® 101® Life Safety Code®).

When an emergency LED driver cannot be used in an application, line voltage inverters, such as the Advance Bodine ELI-S-20, may be the best solution.

A key feature of Advance Bodine emergency lighting inverters is sinusoidal output. Sinusoidal output is especially important for LED applications and is characterized by low harmonic distortion and by clean power similar to that produced by utility-supplied electricity.





## **ELI-S-20** emergency lighting inverter

ELI-S-20 includes auto select (120/277 VAC) to help reduce wiring errors. With the convenient auto select feature, ELI-S-20 automatically detects input voltage and sets the output voltage accordingly.

The Advance Bodine 25VA ELI-S-20 emergency lighting inverter transforms LED, TLED and fluorescent fixtures into code-compliant emergency lighting.

It is the ideal emergency backup for the Edison-base (screw-base) LED lamps that are commonly replacing CFLs in retrofit applications and is a superior choice for office, retail, hospitality and other similar spaces.

ELI-S-20 allows fixtures to be on, off, switched or dimmed. It supports 100% of AC rated output throughout its 90-minute runtime so fixtures operate at full brightness during emergency operation. The device is designed for use with indoor applications.

The ELI-S-20 features an LED-friendly sinusoidal (sine) waveform and is designed for new and retrofit lighting projects.

#### **Benefits**

- Works with LED, TLED and fluorescent fixtures up to 25VA
- Supplies 90 minutes of emergency illumination at full brightness
- · Ideal for but not limited to screw-base LED lamps
- Compatible with Advance 22W TLED linear LED lamps and most manufacturers' LED lamps<sup>10</sup>
- · Suitable for indoor, dry and damp applications
- · Features fused output load connections
- AC input power rating: 9.5W; output voltage 120/277 VAC (auto select), 60 Hz
- Dimensions: 16.6" x 2.8" x 2.85"
- · Remote mounting distance: 250 feet max.
- 5-year limited warranty<sup>9</sup>
- · UL Listed for up to 25VA / CSA Certified for up to 20VA



Model	Power (VA)	Feature
ELI-S-20	25	For LED, TLED and fluorescent lamps

Consult the product specification sheet for more information.

#### **Emergency lighting contact information**

#### Phone

Sales: 800-223-5728 Tech Support: 888-263-4638 Local: 901-853-7211

Fax: 901-853-5009

#### E-mail

For technical questions, contact tech support at BodineTech@signify.com or visit the Tech Support page (http://www.bodine.com/tech/tech.html) on our website, www.bodine.com.







## Lighting definitions explained

Legend technical specifications	Symbol	Definition
Backward compatible		It can work with an older product or technology
Beam angle	(⁰)	Exit angle of the light beam
Central beam candela		Power emitted by a light source in a particular direction. A common candle emits light with a luminous intensity of roughly one candela
Chip on board	СоВ	Refers to the semiconductor assembly technology wherein the microchip or die is directly mounted on and electrically interconnected to its final circuit board, instead of undergoing traditional assembly or packaging as an individual IC
Correlated color temperature	K	CCT; describes whether white light appears warm (reddish), neutral or cool (bluish)
Color rendering index	CRI	The ability to reproduce the colors of various objects fainthfully in reference to an ideal light source
Color consistency (initial)	SDCM	Standard Deviation of Color Matching; describing the difference between two colors. e.g. a differente of 1-3 SDCM is virtually imperceptible; a difference of 4 or more is readily visable
Connectivity		The capacity to be connected to other appliances, facilities and the Internet
Digital		A collection of evolving technologies that enables generation, collection, analysis, storage in real-time and data exchange
Dimmable average lifetime 10% failure	hrs	Lifetime in hours, defined by reaching 10% failures (i.e. 90% survivors) when dimmed
Dimming range		Dimming range in which the system will perfom as specified
Driver power factor		Indicating how effective the driver converts electric current to usefull power output
Efficiency range max load		Efficiency when operated at maximum power (not dimmed)
GPC code		European Product code
Frequency	Hz	See line frequency
Housing color		Color of housing
Input Voltage	V	Voltage required as input for the product
IP classification		Ingress protection defined in terras of object size and water beam protected against
Inrush current peak		Highest current the capacitative components operate at start up
Lifetime	hrs	Lifetime in hours, associated with specific conditions (e.g. lumen maintenance, Tc, failure)
Lifetime 10% failure	hrs	Lifetime in hours, defined by reaching 10% failures (i.e. 90% survivors) for a population
Light output	lm	Output of luminous flux
Lumen maintenance @ 50,000 hrs		% of the original lumen flux remaining after indicated (life-) time for a defined population; e.g. B50/L70 indicates 50% of the population retaining 70% of the orginal light output
Luminous flux	lm	Total energy emitted by a light source across the visible wavelengths of light
Module efficacy	lm/VV	Efficiency module; lumen output per Watt input
Module power	W	Energy required to operate the module
Module temperature control		Protective feature with which the driver is regulating down the module power when a certain critical temperature of the module is passed
Passive cooling		Cooling without power consumption
Passive Infrared (PIR)		All objects with a temperature above absolute zero emit heat energy in the form of radiation. PIR technology enables the detection of infrared radiation emitted by or reflected from the objects.
Power factor	Pf	See: driver power factor
Relative humidity	%	Portion of water vapor in a mixture of air and water vapor
Smart fixture		Lighting fixtures that are enabled for connectivity becoming a node in the network by containing one or more sensors and having the ability to change behaviour as a response to a stimulus
System efficacy	lm/W	Efficiency module + driver
System power	W	Energy required to operate the system
Tc life driver	°C	Temperature of indicated point on the product on which the lifetime is based
Tc life module	°C	Temperature of indicated point on the product on which the lifetime is based
Zhaga		Zhaga is an industry-wide cooperation between companies aimed at enabling the interchangeability of LED light sources made by different manufacturers

#### **Footnotes**

- 1. Average rated life is based on engineering data testing and probability analysis. The hours are at the B50, L70 50,000 hours life with 70% lumen maintenance at Tc of 56°C for 3R and 61°C for 1R.
- 2. Restrictions on Hazardous Substances (RoHS) is a European directive (2002/95/EC) designed to limit the content of 6 substances [lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)] in electrical and electronic products. For products used in North America compliance to RoHS is voluntary and self-certified.
- 3. Indicates that the LEDs are components recognized with UL and complies with UL8750 Standard for LEDs.
- 4. Advance Fortimo LED linear module is a Zhaga certified light engine. For more information visit www.zhagastandard.org.
- 5. 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 MTBF modeling.
- 6. View limited warranty at www.signify.com/warranties for details and restrictions.
- 7. NFPA® 101® Life Safety Code® e.g., 14.2.9 Emergency Lighting, 18.2.9 Emergency Lighting, 28.2.9 Emergency Lighting, 2015.
- 8. NFPA® 101® Life Safety Code® 7.9.3 Periodic Testing of Emergency Lighting Equipment, 2015.
- 9. Warranty information is available at www.bodine.com/sales/warranty.html.
- 10. Contact Advance Bodine technical support at 888-236-4638 for compatibility information.
- 11. When combined with Fortimo LED thermal accessory G1. Please refer to product design-in guide for design instructions and restrictions.
- 12. When combined with the Fortimo thermal accessory G1, the need for an external heat sink is eliminated (for up to 3,000 lm, according to the product design-in guide rules), resulting in simplified thermal management design and testing.
- 13. For indoor linear applications.

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