

**PHILIPS**

Xitanium

LED drivers



**Reliable, high  
performance  
technology**  
for extreme LED  
applications

For today, for tomorrow



# Xitanium LED Xtreme drivers are ideal for demanding environments

Philips LED Xtreme drivers are designed for LED luminaires which require high reliability in demanding applications as in outdoor and industrial environments.

Outdoor and industrial luminaires must withstand unpredictable conditions in addition to everyday stress resulting from varying temperatures, moisture, and high surge voltages. At the same time, outdoor and industrial luminaires must perform in difficult surroundings.

They need to deliver the right light level at the right time, adjust light levels during critical situations, and withstand potentially damaging forces for a long lifetime. And all this in vulnerable, hard-to-access locations.



# Quality that shines

Quality is one of the key factors that can make a huge difference to your reputation. In fact, the more reliable your solutions, the more you can differentiate your business and develop strong customer relationships.

That's why we're investing even more time and effort into the quality of our Xitanium LED Xtreme drivers. There are six areas in which this is most evident:



## Quality lighting

Enhancing spaces, products and well-being



## Quality assurance

Reliable, thoroughly-tested components



## Quality innovation

World-leading connected lighting



## Quality people

Guidance and inspiration from our industry experts



## Quality support

Technical and operational backup, on and off-line



## Quality leadership

Future-proof, standards-based solutions

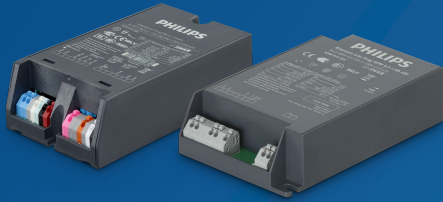
**Our ongoing focus on quality will enable you to offer high-value, reliable solutions. Together we can make sure your customers always have the right LED drivers for the most extreme conditions.**





# The wide range offers solutions for different types of luminaires designs

Compact housing



Wide operating window for maximum flexibility

## Step 2

Voltage is determined by the number of LEDs used. Range should be within min-max level of operating window.



Stretched housing



## Step 1

Current can be changed to set correct lumen-level

## What **Xtreme reliability** in Philips Xitanium drivers means for you

Our robust Xitanium LED Xtreme drivers are specifically designed to withstand powerful vibrations, high moisture levels, driver case temperatures of up to 90°C and severe surges up to 10 kV. This results in an industry-leading 100,000 hour lifetime, a survival rate of 90% and a five year warranty. These are powerful arguments for customers who want to minimize the need for repairs - because they know what that costs.





# Portfolio explained

## Xitanium Xtreme drivers

Our Xitanium Xtreme range of drivers are available in four configurations: single current 1-10V dimmable, lite programmable, full programmable, and SR.

### **Xitanium LED Xtreme single current 1-10V dimmable drivers**

Philips Xitanium Xtreme single current LED drivers bring performance, value for money, long life and reliability to demanding outdoor and industrial LED lighting applications. Ideal for road lighting, urban street lighting, area/flood lighting, high-bay lighting and tunnels, they are designed to be easy to integrate into your luminaires. The drivers are compact, and you can choose between build-in and independent versions that are protected against water and dust ingress to IP67. The range includes 75, 150 and 250 W versions with lifetimes up to 100,000 hours. The light output is fully adjustable via 1 to 10 V analog dimming interface.

### **Xitanium LED Xtreme lite programmable drivers**

Philips Xitanium lite programmable Xtreme LED drivers are value engineered to deliver a carefully selected feature set and high-end performance, making it a preferred choice for many outdoor applications. The portfolio offers

high flexibility with a customizable operating window, enabling differentiation in LED lighting designs via system tuning and being prepared for LED efficacy upgrades. Configuration of programmable drivers has never been easier with the integrated SimpleSet feature, a fast and wireless way to change and read-out settings.

### **Xitanium LED Xtreme full programmable drivers**

Philips Xitanium full programmable Xtreme LED drivers are designed to deliver the highest performance, reliability and configuration possibilities. The portfolio offers both standalone as remotely dimming protocols to further decrease energy use with latest LED technologies. The proven Xtreme technology ensures maximum robustness and protection for a very long lifetime. These drivers are the preferred choice for your demanding applications such as outdoor and industry. Configuration of these drivers can be done via both the universal DALI or with SimpleSet, which is the latest technology for

reliable, fast and easy way to change and read-out the settings.

### **Xitanium LED Xtreme SR drivers**

The new Philips Xtreme SR outdoor drivers are ideal for use in outdoor applications. These robust drivers feature the SR interface and can be used in combination with the new EasyAir outdoor module, intelligent photocells, or the many smart city management systems developed by our SR certified partners. The integrated power supply, accurate energy metering and extended diagnostics reduces the component count and simplifies the design significantly. The integration also increases the system reliability. Combined with the new universal SR connector, these drivers offer future-proof solutions for the phased investment capabilities of municipal authorities.







## **Philips Xitanium SR Xtreme drivers are fundamental to connected systems.**

These simply designed, yet intelligent drivers standardize the connection between driver and sensor, eliminating the need for separate components and ensuring efficient compatibility.”

### **SimpleSet**

Xitanium LED Xtreme programmable drivers with SimpleSet technology can be wirelessly configured at any stage during or after manufacturing without a mains connection. Together with the Philips MultiOne configurator software tool and SimpleSet programming device, you can wirelessly set the exact current level and driver features required for your luminaire. It's even possible to modify settings later if necessary. This makes your luminaire manufacturing and logistics processes faster, more flexible, simpler, and more cost effective.

### **Adjustable Output Current (AOC)**

Adjustable Output Current (AOC) ensures flexible, future-proof luminaire design. It allows operation of LED configurations from different LED manufacturers, giving OEMs the freedom to use one Philips Xitanium LED Xtreme programmable driver to address a range of current demands for years to come.

### **High Surge Capability**

High surges due to lightning strikes or spikes from heavy machinery on mains net are a risk in many outdoor and industrial lighting installations. The Xitanium Xtreme LED drivers

guarantee to up to 10 kV of surge protection – meaning that they can withstand successive indirect lighting strikes and industry's most severe mains nets.

### **SR interface**

To enable you to spend less time and money bringing new connected solutions to market, Philips Xitanium SR Outdoor drivers make quick and easy design-in possible. Once this is done, you can explore the benefits of the SR interface. Via this 'central' SR interface, multiple sensors and ancillary interfaces can be powered; the simple wiring also enables two-way communication to control the driver, and a diagnostic read-out for energy metering accuracy to within 1%. And because the SR interface possesses a powerful auxiliary supply, the use of higher power radio is possible in outdoor applications. Now you can design and manufacture future-proof luminaire solutions, confident that Philips Xitanium SR Outdoor drivers can be configured via SimpleSet to align with the phased investment schedules of municipal authorities. Furthermore, the Xitanium SR Outdoor drivers can be combined with the Philips EasyAir module, and sophisticated City Management Systems such as CityTouch.

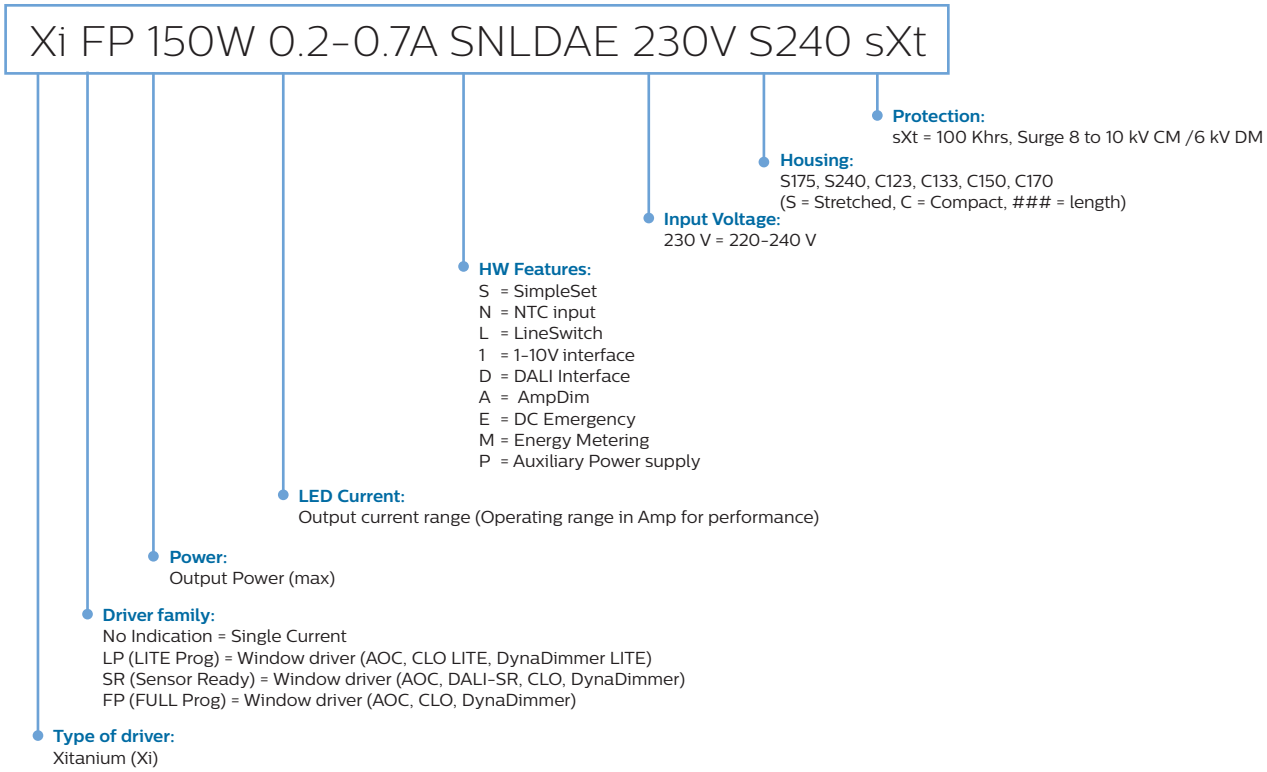


# Features & Benefits overview

Benefit	Feature	Xitanium s. current	Xitanium lite prog	Xitanium full prog	Xitanium SR
<b>Reliability</b>	Long lifetime: 100,000 hrs > 90% survival	✓	✓	✓	✓
	Surge capability CM / DM	8 / 6 kV	10 / 6 kV	10 / 6 kV	8 / 6 kV
	MainsGuard		✓	✓	✓
	DC emergency dimming	150W	165W	✓	✓
<b>Flexibility</b>	SimpleSet & AOC, windows up to 1.5A		✓	✓	✓
	DynaDimmer		5-step	5-step	5-step
	Driver Temperature Limit (DTL)		✓	✓	
	1-10V controls	✓	✓		
	LineSwitch (step dimming)			✓	
	DALI 2.0			✓	✓
	<b>Connectivity</b>	SR interface & 24V auxiliary supply			
Accurate energy metering (1%)					✓
Driver FW upgrade via SR (OTA)					✓
Diagnostics			Full	Full	Extended



# Naming explanation





# The Easy Design-in Tool

Create your ideal configuration in minutes. Design the optimal LED system in the fastest, most simple way.

The Easy Design-in Tool is a powerful, time-saving way to speed up the work of those who design or define LED systems. It's a true solution composer and is ideal for all those involved in delivering added-value LED solutions right through the supply chain.

**Check out our tool online!**

Visit [philips.com/easydesignintool](http://philips.com/easydesignintool)



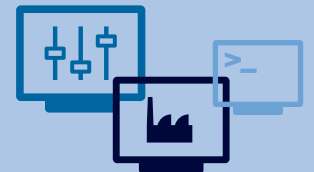
## MultiOne and SimpleSet

The perfect match for simple, fast and wireless configuration

Configuring our portfolio of programmable indoor (point and linear) and outdoor drivers has never been easier! With our intuitive Multione configurator tool, you can configure a wide variety of functions in your lighting solutions. It is a must-have for applications where the lighting system needs to match specific requirements.

Combined with the MultiOne SimpleSet Interface, this is a wireless solution. Depending on the driver type, a combination of features can be configured. With these features, you can create diversity and extra security, as well as cost-down improvements.

### The benefits of our MultiOne Configuration Software and MultiOne SimpleSet Interface



#### ✓ One multi-functional tool

You can program a luminaire, test it, configure it automatically in production, read out its status and do a complete quality analysis if there are returns from the field. All with one intuitive tool compatible with all Philips configurable drivers.

#### ✓ Ultimate flexibility

Access to the features built into the driver offers you the flexibility to configure your drivers to match specific requirements. It enables optimization of installation, last minute changes, easy diagnostics and maintenance.

#### ✓ Innovative

We bring innovation to your business by allowing you to wirelessly program all Xitanium LED drivers using our MultiOne SimpleSet technology.

# Product and ordering information

## SR drivers

Commercial Name	Housing	Output current range	Output power	Surge protection	Order Code
	type	mA	W	kV (CM/DM)	12NC
Xi SR 12W 0.2-0.7A SNEMP 230V C133 sXt	C133	200-700	22	8/6	929001613506
Xi SR 22W 0.2-0.7A SNEMP 230V C133 sXt	C133	200-700	40	8/6	929001598306
Xi SR 22W 0.3-1.0A SNEMP 230V C133 sXt	C133	300-1050	40	8/6	929001573706
Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt	C133	200-700	22	8/6	929001573506
Xi SR 40W 0.3-1.0A SNEMP 230V C133 sXt	C133	300-1050	40	8/6	929001573606
Xi SR 75W 0.2-0.7A SNEMP 230V S240 sXt	S240	200-700	75	8/6	929001507706
Xi SR 75W 0.3-1.0A SNEMP 230V S240 sXt	S240	300-1050	75	8/6	929001507806
Xi SR 150W 0.2-0.7A SNEMP 230V S240 sXt	S240	200-700	150	8/6	929001507506
Xi SR 150W 0.3-1.0A SNEMP 230V S240 sXt	S240	300-1050	150	8/6	929001507606

## Full programmable drivers

Commercial Name	Housing	Output current range	Output power	Surge protection	Order Code
	type	mA	W	kV (CM/DM)	12NC
Xi FP 22W 0.2-0.7A SNLDAE 230V S175 sXt	S175	200-700	1-22	10/6	929001617806
Xi FP 22W 0.3-1.0A SNLDAE 230V S175 sXt	S175	300-1050	1-22	10/6	929000991206
Xi FP 40W 0.2-0.7A SNLDAE 230V S175 sXt	S175	200-700	2-40	10/6	929000989206
Xi FP 40W 0.3-1.0A SNLDAE 230V S175 sXt	S175	300-1050	2-40	10/6	929000989306
Xi FP 75W 0.2-0.7A SNLDAE 230V S240 sXt	S240	200 - 700	3-75	10/6	929001644006
Xi FP 75W 0.3-1.0A SNLDAE 230V S240 sXt	S240	300 - 1050	4-75	10/6	929001644106
Xi FP 100W 0.3-1.0A SNLDAE 230V C165 sXt	C165	200 - 700	5-100	8/6	929001522006
Xi FP 150W 0.2-0.7A SNLDAE 230V S240 sXt	S240	200 - 700	11-150	10/6	929001644206
Xi FP 150W 0.3-1.0A SNLDAE 230V S240 sXt	S240	300 - 1050	11-150	10/6	929001644306
Xi FP 22W 0.2-0.7A SNLDAE 230V C123 sXt	C123	200-700	1-22	10/6	929001617706
Xi FP 22W 0.3-1.0A SNLDAE 230V C123 sXt	C123	300-1050	1-22	10/6	929001518506
Xi FP 40W 0.2-0.7A SNLDAE 230V C123 sXt	C123	200-700	4-40	10/6	929001518606
Xi FP 40W 0.3-1.0A SNLDAE 230V C123 sXt	C123	300-1050	4-40	10/6	929001518706
Xi FP 75W 0.2-0.7A SNLDAE 230V C133 sXt	C133	200-700	2.5-75	10/6	929001408406
Xi FP 75W 0.3-1.0A SNLDAE 230V C133 sXt	C133	300-1050	2.5-75	10/6	929001408506
Xi FP 75W 0.5-1.5A SNLDAE 230V C133 sXt	C133	500-1500	2.5-75	10/6	929001408606
Xi FP 110W 0.2-0.7A SNLDAE 230V C133 sXt	C133	200-700	4-110	10/6	929001639006
Xi FP 110W 0.3-1.0A SNLDAE 230V C133 sXt	C133	300-1050	4-110	10/6	929001639106
Xi FP 165W 0.2-0.7A SNLDAE 230V C170 sXt	C170	200-700	10-165	10/6	929000976206
Xi FP 165W 0.3-1.0A SNLDAE 230V C170 sXt	C170	300-1050	10-165	10/6	929000976306
Xi FP 330W 2.0-0.75A SNDAE 230V C240 sXt	C240	200-750 (x2)	5-165	10/6	929001408306



## Lite programmable drivers

Commercial Name	Housing	Output current range	Output power	Surge protection	Order Code
	type	mA	W	kV (CM/DM)	12NC
Xi LP 22W 0.2-0.7A S1 230V S175 sXt	S175	200-700	1-22	10/6	929001613606
Xi LP 22W 0.3-1.0A S1 230V S175 sXt	S175	300-1050	1-22	10/6	929001613706
Xi LP 40W 0.2-0.7A S1 230V S175 sXt	S175	200-700	2-40	10/6	929000930706
Xi LP 40W 0.3-1.0A S1 230V S175 sXt	S175	300-1050	2-40	10/6	929000940806
Xi LP 75W 0.2-0.7A S1 230V C133 sXt	C133	200-700	75W	10/6	929001654706
Xi LP 75W 0.3-1.0A S1 230V C133 sXt	C133	300-1050	75W	10/6	929001654806
Xi LP 75W 0.5-1.5A S1 230V C133 sXt	C133	500-1500	75W	10/6	929001654906
Xi LP 75W 0.2-0.7A S1 230V S240 sXt	S240	200-700	4-75	10/6	929000963206
Xi LP 75W 0.3-1.0A S1 230V S240 sXt	S240	300-1050	4-75	10/6	929000963306
Xi LP 75W 0.5-1.5A S1 230V S240 sXt	S240	500-1500	4-75	10/6	929001597606
Xi LP 110W 0.2-0.7A S1 230V C133 sXt	C133	200-700	110W	10/6	929001655006
Xi LP 110W 0.3-1.0A S1 230V C133 sXt	C133	300-1050	110W	10/6	929001655106
Xi LP 150W 0.2-0.7A S1 230V S240 sXt	S240	200-700	7-150	10/6	929000962806
Xi LP 150W 0.3-1.0A S1 230V S240 sXt	S240	300-1050	7-150	10/6	929000962906
Xi LP 150W 0.5-1.5A S1 230V S240 sXt	S240	500-1500	7-150	10/6	929001553806
Xi LP 22W 0.2-0.7A S1 230V C123 sXt	C123	200-700	1-22	10/6	929001627006
Xi LP 22W 0.3-1.0A S1 230V C123 sXt	C123	300-1050	1-22	10/6	929001532306
Xi LP 40W 0.2-0.7A S1 230V C123 sXt	C123	200-700	1.8-40	10/6	929001537106
Xi LP 40W 0.3-1.0A S1 230V C123 sXt	C123	300-1050	1.5-40	10/6	929001532406
Xi LP 165W 0.2-0.7A S1 230V C170 sXt	C170	200-700	7-165	10/6	929001535406
Xi LP 165W 0.3-1.0A S1 230V C170 sXt	C170	300-1000	7-165	10/6	929001535506
Xi LP 165W 0.5-1.5A S1 230V C170 sXt	C170	500-1500	7-165	10/6	929001571906

## Basic programmable drivers

Commercial Name	Housing	Output current range	Output power	Surge protection	Order Code
	type	mA	W	kV (CM/DM)	12NC
Xi BP 12W 0.1-0.5A S 230V C100	C100	100-500	12W	6/4	929001657106

## Single current drivers

Commercial Name	Housing	Output current range	Output power	Surge protection	Order Code
	type	mA	W	kV (CM/DM)	12NC
Xitanium 75W 0.70A 1-10V 230V C165 sXt	C165	700	3.7-75	8/6	929001405306
Xitanium 75W 1.05A 1-10V 230V C165 sXt	C165	1050	3.7-75	8/6	929001405406
Xitanium 150W 0.70A 1-10V 230V S240 sXt	S240	700	7-150	8/6	929001405506
Xitanium 150W 1.05A 1-10V 230V S240 sXt	S240	1050	8-150	8/6	929001405606
Xitanium 250W 0.70A 1-10V 230V Q	Q-can	700	25-250	6/6	929000838508
Xitanium 75W 0.70A 1-10V 230V I220	I220	700	4-75W	8/6	929001405706
Xitanium 150W 0.70A 1-10V 230V I220	I220	700	7-150W	8/6	929001405806
Xitanium Dim 250W 0.70A 1-10V 230V I220	I220	700	25-250	6/6	929001404706

For more information see datasheet

## Xitanium and Fortimo FastFlex – partners in performance

Luminaire performance is determined by the sum of its component parts, each carefully designed or selected to meet specific application requirements. In addition to the Xitanium LED drivers featured here, we also offer an extensive range of Fortimo FastFlex LED lighting modules. Pair components from these complementary families and you'll benefit from design-in simplicity, flexibility, compatibility and exceptionally long life. You'll also enjoy the convenience of dealing with just one knowledgeable supplier of these vital luminaire components.





© 2019 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.

[www.philips.com/technology](http://www.philips.com/technology)