

**PHILIPS**

LED drivers



2017 H1

# Lighting the future with LED technology

Flexible and reliable range of LED drivers





“Innovation  
for you”

For more than 120 years Philips has been the thought leader in innovation. Our leadership is based upon a deep understanding of customer needs. We listen to and learn from them. It is our ambition to support, guide and innovate together with our OEM customers to enable them in creating value towards their customers. We offer them total reliability, superior quality of light and a wide range of product solutions for each application and every customer requirement.

“Welcome in the era of connectivity”

Whilst being in the midst of LED transformation, the next innovation wave has already started: lighting that connects people. Connected lighting brings tremendous opportunities for energy and maintenance management. It enhances user comfort and enables substantial cost benefits. It is my commitment to continue our investments in value creation. We focus on meaningful innovations and customer service offers, such as design-in support, easy design-in tools, My Technology Portal and Connected Building Blocks. These are key pillars of our OEM strategy.

**Bob Esmeijer**  
Business Leader LED Electronics



# Content

<b>Introduction Bob Esmeijer Business Leader LED Electronics</b>	<b>3</b>	<b>Outdoor drivers</b>	<b>19</b>	Xitanium single current (Mini Family)	31	CertaDrive single current	44
<b>Content</b>	<b>4</b>	Xitanium full programmable	20	Xitanium single current	32	TrustSight LED emergency systems	45
<b>Beyond illumination</b>	<b>6</b>	Xitanium lite programmable	21	CertaDrive single current	34	<b>LED Transformer</b>	<b>47</b>
<b>Why Philips LED drivers?</b>	<b>9</b>	Xitanium adjustable output current	22	CertaDrive single current (LPF Family)	35	Performance	48
<b>Application areas</b>	<b>10</b>	Xitanium dim single current	24	TrustSight LED emergency systems point/downlight	36	Mainstream	49
<b>LED drivers portfolio</b>	<b>12</b>	Xitanium single current	25	<b>Indoor linear drivers</b>	<b>39</b>	<b>MultiOne configurator</b>	<b>51</b>
<b>Our range</b>	<b>13</b>	<b>Indoor point drivers</b>	<b>27</b>	Xitanium programmable	40	<b>LED drivers selection pointers</b>	<b>52</b>
<b>Philips Xitanium SR driver Driving connected lighting</b>	<b>14</b>	Xitanium programmable	28	Xitanium adjustable output current (LH Family)	29	<b>Explanation of drivers namings</b>	<b>55</b>
		Xitanium adjustable output current (Mini Family)	30	Xitanium single current	42		



# Beyond illumination

At Philips, we have been working hard to illuminate the world since 125 years ago. We are constantly listening to you, our customers and also to our end-users, to drive the latest transformation in LED lamps, in LED electronics and drivers.

By using digital innovation and connecting LED lights to controls, networks, devices and apps, we help our customers create novel lighting experiences with outstanding business results and energy savings.

With our global network, we can offer customers a global perspective supported by strong local know-how and technical expertise. Our experienced team is always on hand to design-in, spec-in and propose solutions best suited to your needs, complete with supply chain considerations and aftersales support.

Whatever your lighting needs, whether it's increased efficiency, quality, cost-effectiveness or environmental benefits, our team can put together the best plan possible for you.

## Leaders in LED.

Locally present with a global footprint.  
Coming together to service your needs.

innovation  you



# Why Philips **LED drivers?**



Long-lasting and requiring almost no maintenance, LED based light sources are excellent for all lighting applications. However to achieve optimal performance, reliable and robust drivers are needed to match the long lifetime of the LEDs. Driver solutions must always accommodate new generations of LEDs, to also make them 'future-proof' for use in more sustainable applications.

- 1 Innovation leader in LED drivers technology**  
State-of-the-art portfolio, continuously upgraded and enhanced based on the latest technology.
- 2 Reliability and trustworthy service**  
We are a one-stop shop taking care of comprehensive design services, manufacturing needs, supply chain management and customer care concerns.
- 3 Excellent portfolio and an efficient platform approach**  
Complete range of drivers from the intelligent to the affordable, and a fast-lane launch approach to address your urgent requirements and specifications.



# Application areas

## Outdoor drivers



Flood light for carpark



Streetlight for roads

## Indoor linear drivers



Highbay for warehouses



Panel light for hospitals



Highbay for factories

## Indoor point drivers



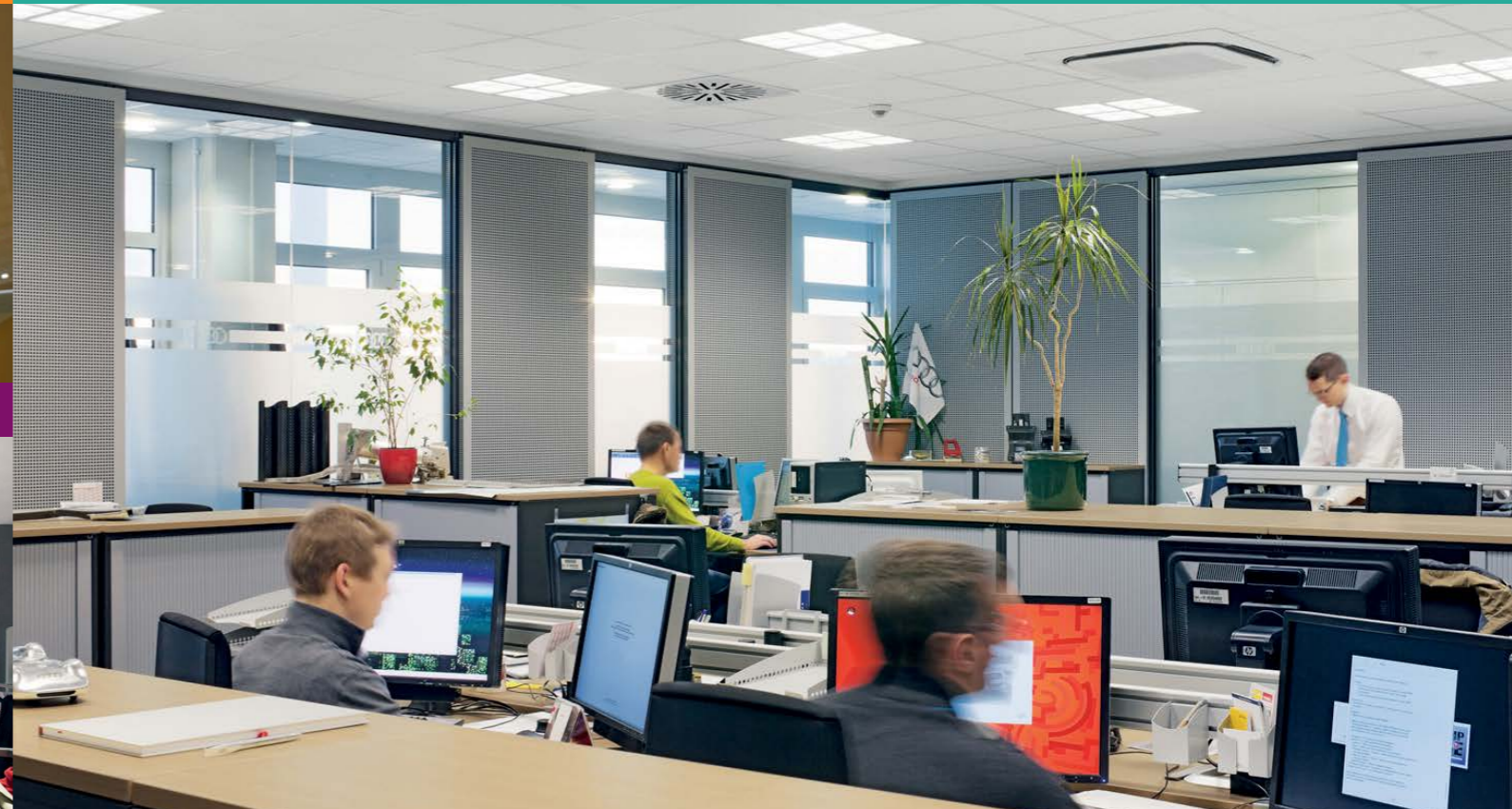
Track light for museums



Downlight for hospitality



Spotlight for retail



Troffer light for offices

# LED drivers portfolio

Our range of Philips LED drivers are categorized for you to match your business requirements with ease. Refer to each range description to find out more.

	Outdoor drivers	Point drivers	Linear drivers
<b>S</b> <b>Statement</b> Connected and programmable	Xitanium Full Programmable  S175 S240	Xitanium Programmable  L200 L224	Xitanium Programmable  L280 L360
<b>P</b> <b>Performance</b> Flexible and future-proof	Xitanium Lite Programmable  S175 S240 I175 Xitanium Adjustable Output Current  I220 I250	Xitanium Adjustable Output Current (LH Family)  L150 L190 Xitanium Adjustable Output Current (Mini Family)  L97	Xitanium Adjustable Output Current  L280 L360 L425
<b>C</b> <b>Core</b> Performance and reliability	Xitanium Dim Single Current  Y-can I175 I165  I240 Q-can I220	Xitanium Single Current (Mini Family)  L97 Xitanium Single Current  L115 L108	Xitanium Single Current  L280
<b>E</b> <b>Entry</b> Foundation	Xitanium Single Current  S157 I160  Y-can I175	CertaDrive Single Current  L115 L108 Certadrive Single Current (LPF Family)  L88	CertaDrive Single Current  L138 L210  L150 L280 L195

## Our range

Philips has designed these main range to help you with your application segmentation, and to facilitate easy selection of the most appropriate drivers to meet your needs.



### Xitanium LED Drivers

Xitanium LED drivers are reliable, robust and offer flexibility through the operating window and its smart features. They are designed for indoor and outdoor applications, and are available in various form factors with fixed light output, dimmable and programmable options. Offering the flexibility of carrying out late stage programming and drivers configuration, when required.

#### Features and benefits

Low ripple current. Camera-friendly and minimizes flickering.

Lifetime: Up to 100,000hours lifetime.

Intelligent, DALI 2.0 compliant, enabling connectivity/Internet of Things (IoT).

SimpleSet: Wireless configuration technology.

Best in class performance and energy efficient. Comes in spec-grade performance (THD/PF).

### CertaDrive LED Drivers

CertaDrive LED drivers are designed to meet the market needs for basic lighting. They are ideal for high volume applications together with CertaFlux LED modules. Offering basic specifications, such as specific current and voltage settings, they come with a standard system warranty for your peace of mind.



Philips Xitanium SR driver

# Driving **connected lighting**



Connected lighting brings opportunities for energy saving, data collection, space management, and more. It enhances user comfort and enables cost benefits. The Philips Xitanium SR LED driver plays an important role as a building block for connected luminaires. It works seamlessly with a range of sensors, and smooths the path to the Internet of Things. With the Xitanium SR LED driver, it's easier to create luminaires for connected lighting applications.



### **Simplified luminaire design**

The Xitanium SR LED driver is sensor ready. This means it doesn't just provide power conversion for LED lighting, it also features integrated sensor controllers, power supplies and energy metering functionality. Everything is integrated, hence very few external components are required. As a result, luminaire design, manufacture and installation are greatly simplified and more cost effective.

### **Every luminaire becomes a node**

By delivering actionable operational data such as energy consumption, daylight harvesting and occupancy patterns to a building management

system, every luminaire becomes a connected lighting node. The Xitanium SR LED driver is a simple and cost effective way of stepping into the rapidly growing world of connected lighting.

### **Accelerate your connected lighting business**

Standard DALI 2.0 communications between driver and sensor means that you can choose from a wide range of sensor manufacturers to design the solutions that are right for you and your customers. By working together and matching technologies, OEMs, sensor manufacturers and system integrators help realize seamless connectivity.



# SR Certified program

For the ultimate reassurance of connectivity, Philips has also introduced the SR Certified program, which is a list of all companies, components and sensors that are certified to work with the Xitanium SR LED driver. It's the seal of approval you need for putting together a connected solution from participating parts suppliers and service providers. The world of connected lighting is growing fast. You can play a role in accelerating its growth.

The SR Certified program is a foundation for successful partnerships. Let's connect.



## EasyAir office sensor the wireless solution



The Philips EasyAir office sensor wireless sensor range is compatible with the Xitanium SR LED driver. These sensors provide cost effective, mainstream sensing, as well as easy integration.

Adding sensors to luminaires brings huge benefits in terms of energy management and building regulation conformity. Existing sensors are bulky, expensive and difficult to design-in. The Philips EasyAir office sensor changes all this. The sensor's single-box, luminaire-mounting format and two wire connection helps you to save time and costs when integrating occupancy

sensing and daylight harvesting into your luminaires. The EasyAir office sensor is designed to be luminaire-integrated which reduces the likelihood of errors during installation.

EasyAir office sensor helps to reduce time to market thanks to its full compatibility with Xitanium SR LED drivers. This eliminates the need for auxiliary devices and eliminates time consuming configuration issues. The simple, two-wire connection from driver to sensor also helps reduce design-in complexity.

For project specifiers, EasyAir office sensor helps to increase efficiency by enabling energy saving and compliance without impacting project time or aesthetic. There's no need to wire sensors outside the ceiling fixture, eliminating mistakes when placing the sensors and luminaires. Projects can be completed quickly, while the integrated sensors leave the ceiling uncluttered.

Another EasyAir office sensor breakthrough is the ability to configure via SimpleSet which means the sensors

can leave your factory fully configured, ready for app-based commissioning on site. The Android based app simplifies programming occupancy and daylight sensing parameters, while enabling you to fine-tune lumen levels.

The EasyAir office sensor is ready for the future. By integrating the EasyAir office sensor into your luminaire, you are now ready to enter the connected world of tomorrow.

The new EasyAir office sensor SNS200 Advanced Grouping sensor is the latest addition to the EasyAir office sensor range. This sensor has on-board Zigbee and infrared communication to enable Advanced Grouping behavior in offices. It offers a perfect solution for applications where multiple luminaires need to be grouped together to respond to motion and daylight changes. All this without pulling wires and opening ceilings. Scenes can be used to create different settings in combination with Zigbee Green Power wireless dimmer switches. With your smartphone you can commission the groups with ease using our Philips Field Apps.

## Connectivity in linear lighting

The Xitanium SR LED driver is designed for use with sensors in building management systems. Through an integrated power supply, sensors and wireless modules are powered directly from the driver. The driver also features integrated energy metering for use in building management systems from the SR Certified partner program.

The EasyAir office sensor wireless Zigbee sensor is a presence and daylight sensor that can be used with the Xitanium SR LED driver to create a cost-effective, easy-to-use and mainstream dimming system with a short payback. Powered by the driver, it is easy to integrate into your luminaire.

### In line with your requirements

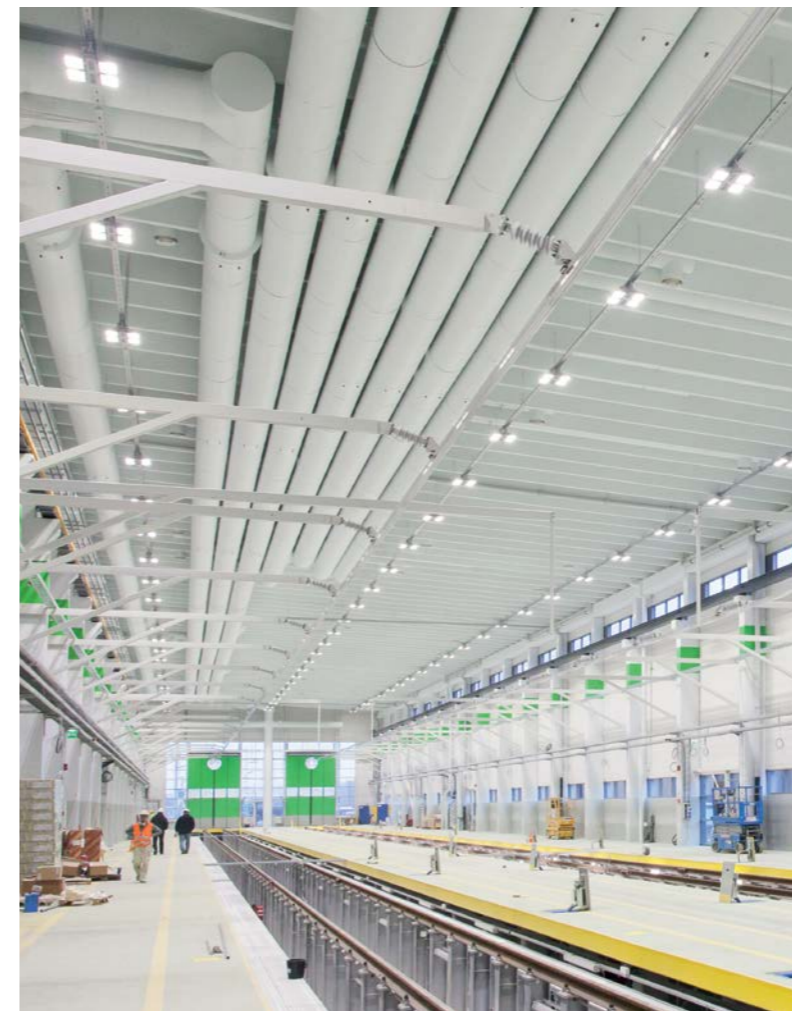
- Cost effective - fewer components, simpler supply chain and faster installation
- Design-in simplicity - unified interface lets you choose sensors and network partners
- Flexible - can be connected to a range of sensors for system integration
- Luminaire-based data collection - gather valuable sensor data for the network
- Installation friendly - fewer components, less ceiling wiring, less time on the ladder

### Xitanium SR driver

Product type	Housing type mm	Output current mA	Output voltage V	Dimming %	DALI power supply max. supply current mA	Energy metering accuracy %	Order code 12NC
Xitanium SR 36W 0.3-1.0A 54V	360 x 30 x 21	300-1000	27-54	100-1	52	4	929001516303
Xitanium SR 75W 0.7-2.0A 54V	360 x 30 x 21	700-2000	27-54	100-1	52	4	929001505006

### EasyAir office sensor

Product type	Housing (Volume inside luminaire) mm	Req. Luminaire hole mm	Occupancy technology	Detection area at 3m height (minor movement) m	Detection area at 2.4m height (minor movement) m	Viewing angle	Full light dim level %	Operating Ambient temperature °C	Order code 12NC
EasyAir office sensor StandAlone SNS100	50 x 19 x 31.5 (50 x 19 x 24)	44 x 17	Passive IR	3.6 x 3.4	2.9 x 2.7	X=72°Y=86°	5-100	0-55	929000738303
EasyAir office sensor Advanced Grouping SNS200	50 x 19 x 31.5 (50 x 19 x 24)	44 x 17	Passive IR	3.6 x 3.4	2.9 x 2.7	X=72°Y=86°	5-100	0-55	929000766803





# Outdoor drivers

Philips outdoor LED drivers offer extreme reliability and maximum flexibility, enabling you to get the best out of LED lighting applications.

## Portfolio

Outdoor drivers	Dimming		Basic features and performance		
	DALI Dim	1-10V	SimpleSet	Adjustable output current (AOC)	Housing/ installation
<b>S</b> Statement	Yes	No	Yes	Yes	Built-in
<b>P</b> Performance	No	Yes	Yes	Yes	IP67/Built-in
	No	No	No	Yes	IP65
<b>C</b> Core	No	Yes	No	No	IP67/Built-in
<b>E</b> Entry	No	No	No	No	IP67/Built-in



# Xitanium Full Programmable

Outdoor

Philips Xitanium full programmable LED drivers are specifically designed to deliver the highest performance, protection and configurability. The portfolio offers both central and standalone dimming protocols further increasing the energy savings and CO2 reductions achieved with LED lighting. The technology ensures maximum robustness and protection combined with a very long lifetime.

In this product family Philips introduces new drivers in a stretched form factor with state-of-the-art features, which offer high value for both OEM customers and end-users. The products can replace the existing programmable outdoor LED drivers and will bring significant improvement in programming, assembly into a luminaire and electrical performance. One of the key features is SimpleSet, an easy and fast way to configure the drivers in a production environment, without the need to power the driver.

## Features

- SimpleSet, wireless configuration interface
- High surge protection (CM/DM)
- Long lifetime and robust protection against moisture, vibration and temperature
- Configurable operating windows (AOC)
- Multiple control interfaces: DALI, LineSwitch, AmpDim
- Autonomous dimming via integrated DynaDimmer
- Suitable for central DC operation (DCemDim)
- Thermal protection for driver and for module (MTP)
- Constant Light Output (CLO)
- Adjustable Start-up time (AST)
- Adjustable Light Output (ALO)
- End-Of-Life indicator (EOL)

## Benefits

- Ultimate robustness, offering peace of mind and lower maintenance costs
- Fully programmable LED drivers designed for the new digital and connected lighting world
- Extended diagnostics via SimpleSet and MultiOne
- Easy to design-in, configure and install for Class I and Class II applications
- Energy savings through high efficiency and via multiple dimming options

## Applications

- Road and street lighting
- Area lighting
- Industry lighting



## Product specifications

Product type	SimpleSet	Housing type	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
Xi FP 22W 0.3-1.0A SNLDAE 230V S175 sXt	Yes	Built-in	S175	22	0.3-1.0	10-32	175 x 46 x 34	DALI/LineSwitch/DynaDimmer	929000991206
Xi FP 40W 0.3-1.0A SNLDAE 230V S175 sXt	Yes	Built-in	S175	40	0.3-1.0	20-54	175 x 46 x 34	DALI/LineSwitch/DynaDimmer	929000989306
Xi FP 75W 0.3-1.0A SNLDAE 230V S240 sXt	Yes	Built-in	S240	75	0.3-1.0	35-105	240 x 58 x 38	DALI/LineSwitch/DynaDimmer	929000962506
Xi FP 150W 0.3-1.0A SNLDAE 230V S240 sXt	Yes	Built-in	S240	150	0.3-1.0	70-214	240 x 58 x 38	DALI/LineSwitch/DynaDimmer	929000962306

# Xitanium Lite Programmable

Outdoor

Philips Xitanium lite programmable 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 design via system tuning and being prepared for LED efficacy upgrades.

In this product family Philips introduces new drivers in a stretched form factor with a balanced features set, which offer high value for both OEM customers and end-users. The products can replace the existing programmable outdoor LED drivers and will bring significant improvement in programming, assembly into a luminaire and electrical performance. One of the key features is SimpleSet, an easy and fast way to configure the drivers in a production environment, without the need to power the driver.

## Features

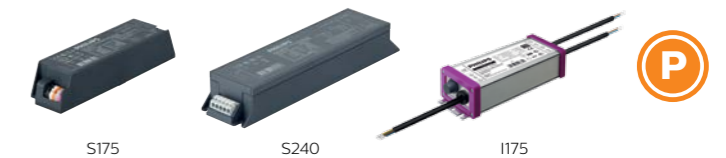
- SimpleSet, wireless configuration interface
- High surge protection
- Long lifetime and robust protection against moisture, vibration and temperature
- Configurable operating windows (AOC)
- External control interface (1-10V) available
- 1 step autonomous dimming via integrated DynaDimmer LITE
- Integrated driver thermal protection
- Simplified linear version of Constant Light Output (CLO LITE)

## Benefits

- Ultimate robustness, offering peace of mind and lower maintenance costs
- Balanced configurable feature set covering the most common applications
- Easy to design-in, configure and install for Class I and Class II applications
- Energy savings through high efficiency and via multiple dimming options
- Consistent waterproof performance through the lifecycle

## Applications

- Road and street lighting
- Area lighting
- Tunnel lighting
- Highbay lighting



## Product specifications

Product type	SimpleSet	Housing type	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
Xi LP 40W 0.3-1.0A S1 230V S175 sXt	Yes	Built-in	S175	40	0.3-1.0	4-40	175 x 46 x 34	1-10V / Dynadimmer LITE	929000940806
Xi LP 75W 0.3-1.0A S1 230V S240 sXt	Yes	Built-in	S240	75	0.3-1.05	35-108	240 x 58 x 38	1-10V / Dynadimmer LITE	929000963306
Xi LP 100W 0.3-1.05A S1 230V I175	Yes	IP67	I175	100	0.3-1.05	46-143	175 x 68 x 45	1-10V / Dynadimmer LITE	929001407280
Xi LP 150W 0.3-1.0A S1 230V S240 sXt	Yes	Built-in	S240	150	0.3-1.05	70-214	240 x 58 x 38	1-10V / Dynadimmer LITE	929000962906
Xi LP 150W 0.3-1.05A S1 230V I175	Yes	IP67	I175	150	0.3-1.05	71-214	175 x 68 x 45	1-10V / Dynadimmer LITE	929001407080

# Xitanium Adjustable Output Current

Outdoor

Philips Xitanium LV LED adjustable current drivers are specifically designed for maximum flexibility and reliability in low voltage outdoor applications. With superior surge protection, these durable, independently housed drivers deliver consistent, high performance to luminaires even after multiple indirect lightning strikes – an ideal solution for OEMs that need reliable, adjustable output in a rugged independent form factor.

## Features

- Proven robustness and reliable electronic driver design
- Adjustable output current with wide window
- Long lifetime to withstand harsh outdoor conditions
- Compact size, fitting with varied and critical luminaires.
- Suitable for Class I isolated luminaires
- Authorized certificate: ENEC, CB, CE and CCC

## Benefits

- Low voltage/high current output fits the application of LED strings connecting in parallel
- AOC (Adjustable Output Current) gives the full flexibility to output different currents to spec-in different projects
- Easy adjustment of output current/voltage by only one screwdriver
- Various power wattage drivers that are related to the lumen packages/applications
- Consistent waterproof performance through the lifecycle
- IP rated housing support luminaires without fully sealed gearbox

## Applications

- Road and street lighting
- Area and flood lighting
- Tunnel lighting
- High bay lighting



## Product specifications

Product type	SimpleSet	Housing type	Housing	Max output power			Dimensions	Dimming	Order code
				W	A	V			
Xitanium 100W 2.1-4.2A AOC 230V I220	No	IP65	I220	100	2.1-4.2	12-48	220 x 68 x 45	No	929001404580
Xitanium 150W 2.45-4.9A AOC 230V I220	No	IP65	I220	150	2.45-4.9	15-61	220 x 68 x 45	No	929001404480
Xitanium 185W 3.0-3.8A AOC 230V I220	No	IP65	I220	182	3.0-3.8	34-48	220 x 68 x 45	No	929001408180
Xitanium 200W 2.8-5.6A AOC 230V I250	No	IP65	I250	200	2.8-5.6	18-71	220 x 68 x 45	No	929001404680



# Xitanium Dim Single Current

Outdoor

LED-based light sources are an excellent solution for outdoor environment. They are long-lasting and require low maintenance. However, to get the best out of the LEDs, these light sources require highly reliable and efficient LED Drivers. The new Philips Xitanium Dimmable (1-10V) LED Outdoor Drivers are specifically designed to deliver reliable performance and protection while meeting the strict performance, approbation and application requirements

## Features

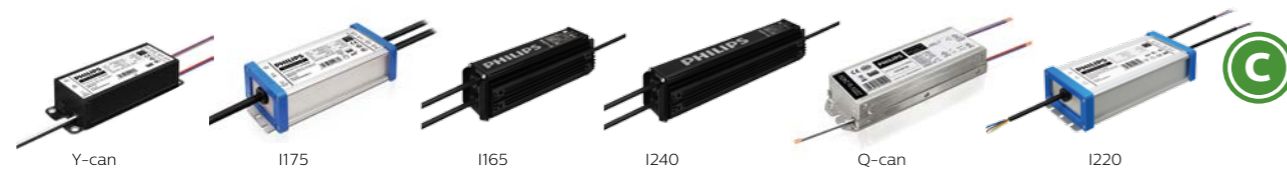
- Proven robustness and reliable electronic driver design
- Achieving highest efficiencies based on advance technology
- Long lifetime, 50K hours@Tc max
- Extreme compact size, fitting with varied and critical luminaires
- Suitable for Class I isolated luminaires
- Authorized certificate: ENEC, CB, CE and CCC

## Benefits

- Robust design, capable of withstanding harsh outdoor conditions
- Long lifetime and high survival rate
- Superior thermal management suitable for outdoor application
- Backed by 5 year warranty from a company you can trust
- Consistent waterproof performance through the lifecycle
- Component integration in advanced IC enables cost effective design
- Proven robustness and reliability secure the lowest luminaire maintenance over time
- Extreme compact size, fitting with varied luminaires
- Easy to design-in based on the good thermal management and extra EMI margin

## Applications

- Road and street lighting
- Area and flood lighting
- Tunnel lighting
- High bay lighting



## Product specifications

Product type	SimpleSet	Housing type	Housing type	Max output power	Output			Dimensions	Dimming	Order code
					W	A	V			
Xitanium Dim 100W 0.7A 1-10V 230V Y	No	Built-in	Y-can	100W	0.7	64-143	168x60x38	1-10V	929001402280	
Xitanium Dim 100W 1.05A 1-10V 230V Y	No	Built-in	Y-can	100W	1.05	42-95	168x60x38	1-10V	929001402380	
Xitanium Dim 100W 0.7A 1-10V 230V I175	No	IP67	I175	100W	0.7	64-143	175x68x45	1-10V	929001401880	
Xitanium Dim 100W 1.05A 1-10V 230V I175	No	IP67	I175	100W	1.05	42-95	175x68x45	1-10V	929001402080	
Xitanium Dim 100W 1.05A 1-10V 230V I165C	No	IP67	I165	100W	1.05	42-95	165x73x65	1-10V	929001407980	
Xitanium Dim 150W 0.7A 1-10V 230V Y	No	Built-in	Y-can	150W	0.7	96-214	168x60x38	1-10V	929001401680	
Xitanium Dim 150W 1.05A 1-10V 230V Y	No	Built-in	Y-can	150W	1.05	62-142	168x60x38	1-10V	929001401780	
Xitanium Dim 150W 0.7A 1-10V 230V I175	No	IP67	I175	150W	0.7	96-214	175x68x45	1-10V	929001401280	
Xitanium Dim 150W 1.05A 1-10V 230V I175	No	IP67	I175	150W	1.05	62-142	175x68x45	1-10V	929001401480	
Xitanium Dim 150W 1.05A 1-10V 230V I165C	No	IP67	I165	150W	1.05	62-142	165x73x65	1-10V	929001407880	
Xitanium Dim 220W 1.05A 1-10V 230V I240C	No	IP67	I240	220W	1.05	100-210	241x73x65	1-10V	929001407780	
Xitanium Dim 250W 0.7A 1-10V 230V Q	No	Built-in	Q-can	250W	0.7	178-357	241x90x42	1-10V	929000838508	
Xitanium Dim 250W 1.05A 1-10V 230V Q	No	Built-in	Q-can	250W	1.05	118-238	241x90x42	1-10V	929001404280	
Xitanium Dim 250W 0.7A 1-10V 230V I220	No	IP67	I220	250W	0.7	178-357	220x94x49	1-10V	929001404706	
Xitanium Dim 250W 1.05A 1-10V 230V I220	No	IP67	I220	250W	1.05	118-238	220x94x49	1-10V	929001405080	

# Xitanium Single Current

Outdoor

LED-based light sources are an excellent solution for outdoor environment. They are long-lasting and require low maintenance. However, to get the best out of the LEDs, these light sources require highly reliable and efficient LED Drivers. The new Philips Xitanium fixed output LED outdoor drivers are specifically designed to deliver reliable performance and protection while meeting the strict performance, approbation and application requirements.

## Features

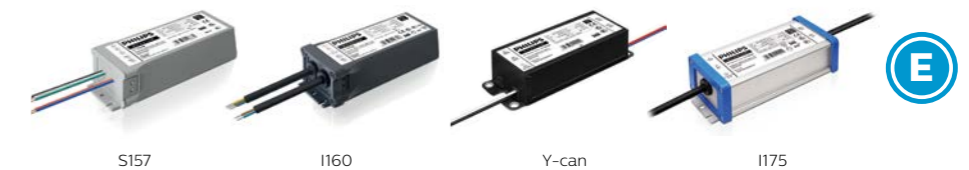
- Proven robustness and reliable electronic driver design
- Achieving highest efficiencies based on advance technology
- Long lifetime, 50K hours@Tc max
- Extreme compact size, fitting with varied and critical luminaires
- Suitable for Class I isolated luminaires
- Authorized certificate: ENEC, CB, CE and CCC

## Benefits

- Robust design, capable of withstanding harsh outdoor conditions
- Long lifetime and high survival rate
- Superior thermal management suitable for outdoor application
- Backed by 5 year warranty from a company you can trust
- Consistent waterproof performance through the lifecycle
- Component integration in advanced IC enables cost effective design
- Proven robustness and reliability secure the lowest luminaire maintenance over time
- Extreme compact size, fitting with varied luminaires
- Easy to design-in based on the good thermal management and extra EMI margin

## Applications

- Road and street lighting
- Area and flood lighting
- Tunnel lighting
- High bay lighting



## Product specifications

Product type	SimpleSet	Housing type	Housing type	Max output power	Output			Dimensions	Dimming	Order code
					W	A	V			
Xitanium 65W 0.7A 230V S157	No	Built-in	S157	65	0.7	65-93	157 x 59 x 39	No	929001406280	
Xitanium 65W 1.05A 230V S157	No	Built-in	S157	65	1.05	42-62	157 x 59 x 39	No	929001406380	
Xitanium 65W 0.7A 230V I160	No	IP67	I160	65	0.7	65-93	160 x 63 x 41	No	929001405980	
Xitanium 65W 1.05A 230V I160	No	IP67	I160	65	1.05	42-62	160 x 63 x 41	No	929001406080	
Xitanium 100W 0.7A 230V Y	No	Built-in	Y-can	100	0.7	64-143	168 x 60 x 38	No	929001401080	
Xitanium 100W 1.05A 230V Y	No	Built-in	Y-can	100	1.05	42-95	168 x 60 x 38	No	929001401180	
Xitanium 100W 0.7A 230V I175	No	IP67	I175	100	0.7	64-143	175 x 68 x 45	No	929001400680	
Xitanium 100W 1.05A 230V I175	No	IP67	I175	100	1.05	42-95	175 x 68 x 45	No	929001400880	
Xitanium 150W 0.7A 230V Y	No	Built-in	Y-can	150	0.7	96-214	168 x 60 x 38	No	929001400480	
Xitanium 150W 1.05A 230V Y	No	Built-in	Y-can	150	1.05	62-142	168 x 60 x 38	No	929001400580	
Xitanium 150W 0.7A 230V I175	No	IP67	I175	150	0.7	96-214	175 x 68 x 45	No	929001400080	
Xitanium 150W 1.05A 230V I175	No	IP67	I175	150	1.05	62-142	175 x 68 x 45	No	929001400280	



# Indoor point drivers

## Portfolio

Indoor point drivers	Dimming		Basic features and performance		
	DALI Dim	1-10V	SimpleSet	Adjustable Output Current (AOC)	Driver lifetime (hours)
<b>S</b> Statement	Yes	No	Yes	Yes	50,000
<b>P</b> Performance	No	No	Yes	Yes	50,000
<b>C</b> Core	No	No	No	No	50,000
<b>E</b> Entry	No	No	No	No	30,000



# Xitanium Programmable

Point

Our Xitanium programmable window LED drivers ensure OEMs have complete flexibility and control in producing high quality luminaires. Available in application dedicated form factors, our LED point drivers provide further customization via wide operating windows. Additionally, almost all drivers feature the following specifications: SELV, temperature derating, hot wiring, providing OEMs the tools to produce, and even alter later if necessary, premium downlights and spotlights.

## Features

- DALI dimmable
- Output current can be adjusted via the Philips MultiOne or SimpleSet
- +/-5% output current tolerance
- Power range from 10W to 75W
- 50,000 hours lifetime

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- High reliability underpinned by 5 year warranty
- Future-proof flexibility: application-oriented operating windows enable LED generation and complexity management
- Compatibility: can also be used for other manufacturers' modules or OEM's own PCB designs
- Authorized certificate: ENEC, CB, CE, CCC, RCM

## Applications

- Downlight
- Track light
- Spotlight



## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V			
Xitanium 20W WH 0.15-0.5A 54V TD/Is 230V	Yes	L200	20	0.15-0.5	24-54	200 x 74 x 32	Dali & Touch Dim	929000991706
Xitanium 36W WH 0.3-1A 54V TD/Is 230V	Yes	L200	36	0.3-1.0	24-54	200 x 74 x 32	Dali & Touch Dim	929000969906
Xitanium 50W WH 0.7-1.5A 54V TD/Is 230V	Yes	L200	50	0.7-1.5	24-54	200 x 74 x 32	Dali & Touch Dim	929000991806
Xitanium 75W SH 0.3-1A 110V TD/I 230V	No	L224	75	0.3-1.0	55-110	220 x 83 x 35	Dali & Touch Dim	929000870203

# Xitanium Adjustable Output Current (LH Family)

Point

Our Xitanium programmable window LED drivers ensure OEMs have complete flexibility and control in producing high quality luminaires. Available in application dedicated form factors, our LED point drivers provide further customization via wide operating windows. Additionally, almost all drivers feature the following specifications: SELV, temperature derating, hot wiring, providing OEMs the tools to produce, and even alter later if necessary, premium downlights and spotlights.

## Features

- Adjustable output current via SimpleSet
- +/-5% output current tolerance
- Low ripple current <=4%
- 50,000 hours lifetime

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- High reliability underpinned by 5 year warranty
- Future-proof flexibility: application-oriented operating windows enable LED generation and complexity management
- Compatibility: can also be used for other manufacturers' modules or OEM's own PCB designs
- Authorized certificate: ENEC, CB, CE, CCC, RCM

## Applications

- Downlight
- Track light
- Spotlight



## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V			
Xitanium 20W LH 0.15-0.5A 48V I 230V	Yes	L150	20	0.15-0.5	24-48	150 x 46 x 32	No	929000941306
Xitanium 36W LH 0.3-1A 48V I 230V	Yes	L190	36	0.3-1.0	24-48	190 x 46 x 32	No	929001404306
Xitanium 50W LH 0.7-1.5A 48V I 230V	Yes	L190	50	0.7-1.5	24-48	190 x 46 x 32	No	929000934706

# Xitanium Adjustable Output Current (Mini Family) Point

Xitanium Mini driver have the same form of conventional HID-Prima vision driver which is widely used in downlight and spotlight. The output current can be adjusted by Rset which give OEMs much design flexibility.

## Features

- Adjustable output current via Rset or SimpleSet
- HID-Prima vision mini form with small size
- +/-5% output current tolerance
- Low ripple current <=4%
- THD <=10%
- 50,000 hours lifetime

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- Different current output set by Rset give high flexibility to OEMs
- Very small size which is easy to be designed in luminaire
- Resolve flickering issue in certain applications
- Authorized certificate: ENEC, CB, CE, CCC, RCM

## Applications

- Downlight
- Track light
- Spotlight



L97

## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V			
Xitanium 20W/m 0.15-0.5A 48V 230V	No	L97	20	0.15-0.5	24-48	97 x 43 x 30	No	929000893806
Xitanium 36W/m 0.3-1.05A 48V 230V	No	L97	36	0.3-1.05	24-48	97 x 43 x 30	No	929000881806
Xitanium 50W/m 0.5-1.5A 48V 230V	No	L97	50	0.3-1.05	24-48	97 x 43 x 30	No	929000934606
Xitanium 20W/m 0.15-0.5A 54V 230V	Yes	L97	20	0.15-0.5	24-54	97 x 43 x 30	No	929001415006
Xitanium 36W/m 0.3-1.05A 54V 230V	Yes	L97	36	0.3-1.05	24-54	97 x 43 x 30	No	929001415106
Xitanium 43W/m 0.7-1.2A 54V 230V	Yes	L97	43	0.7-1.2	24-54	97 x 43 x 30	No	929001415206
Xitanium 50W/m 0.7-1.5A 54V 230V	Yes	L97	50	0.7-1.5	24-54	97 x 43 x 30	No	929001415306



Product type	Order code
Strain Relief Blocks*	929001461680

\*Remark: suitable for 20W/m, 36W/m, 43W/m only.

# Xitanium Single Current (Mini Family) Point

Xitanium Mini driver have the same form of conventional HID-Prima vision driver which is widely used in downlight and spotlight. The product range is the most affordable small size driver within the Mini family.

## Features

- HID-Prima vision mini form with small size
- +/-8% output current tolerance
- Low ripple current <=4%
- THD <=20%
- 50,000 hours lifetime

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- Very small size which is easy to be designed in luminaire
- Resolve flickering issue in certain applications
- Authorized certificate: ENEC, CB, CE, CCC, RCM

## Applications

- Downlight
- Track light
- Spotlight



L97

## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V			
Xitanium 10W/m 0.35A 30V SC 230V	No	L97	10	0.35	20-30	97 x 43 x 30	No	929001412280
Xitanium 16W/m 0.35A 46V SC 230V	No	L97	16	0.35	31-46	97 x 43 x 30	No	929001412380
Xitanium 21W/m 0.7A 30V SC 230V	No	L97	21	0.70	20-30	97 x 43 x 30	No	929001412580
Xitanium 23W/m 0.5A 46V SC 230V	No	L97	23	0.50	31-46	97 x 43 x 30	No	929001412480
Xitanium 28W/m 0.6A 46V SC 230V	No	L97	28	0.60	31-46	97 x 43 x 30	No	929001418706
Xitanium 32W/m 0.7A 46V SC 230V	No	L97	32	0.70	31-46	97 x 43 x 30	No	929001412680
Xitanium 34W/m 0.8A 42V SC 230V	No	L97	34	0.80	30-42	97 x 43 x 30	No	929001418806
Xitanium 38W/m 0.9A 42V SC 230V	No	L97	38	0.90	30-42	97 x 43 x 30	No	929001418906



Product type	Order code
Strain Relief Blocks*	929001461680



# Xitanium Single Current

Point

This range provides an affordable selection of point drivers which have 50,000 hours lifetime. The driver specially addresses the flickering issues by low ripple current, making this ideal for camera operation.

## Features

- Small, compact dimensions
- Specific, optimized output current and voltage
- 50,000 hours lifetime
- Fast Time to Market
- Low ripple current  $\leq 4\%$
- THD  $\leq 15\%$
- Multicurrent output of 27W/32W/34W/36W/44W

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- Various power wattage drivers that are related to the lumen packages/ applications
- Independent version housing design for stand-alone installations
- Resolve flickering issue in certain applications
- Authorized certificate: ENEC, CB, CE, CCC, RCM

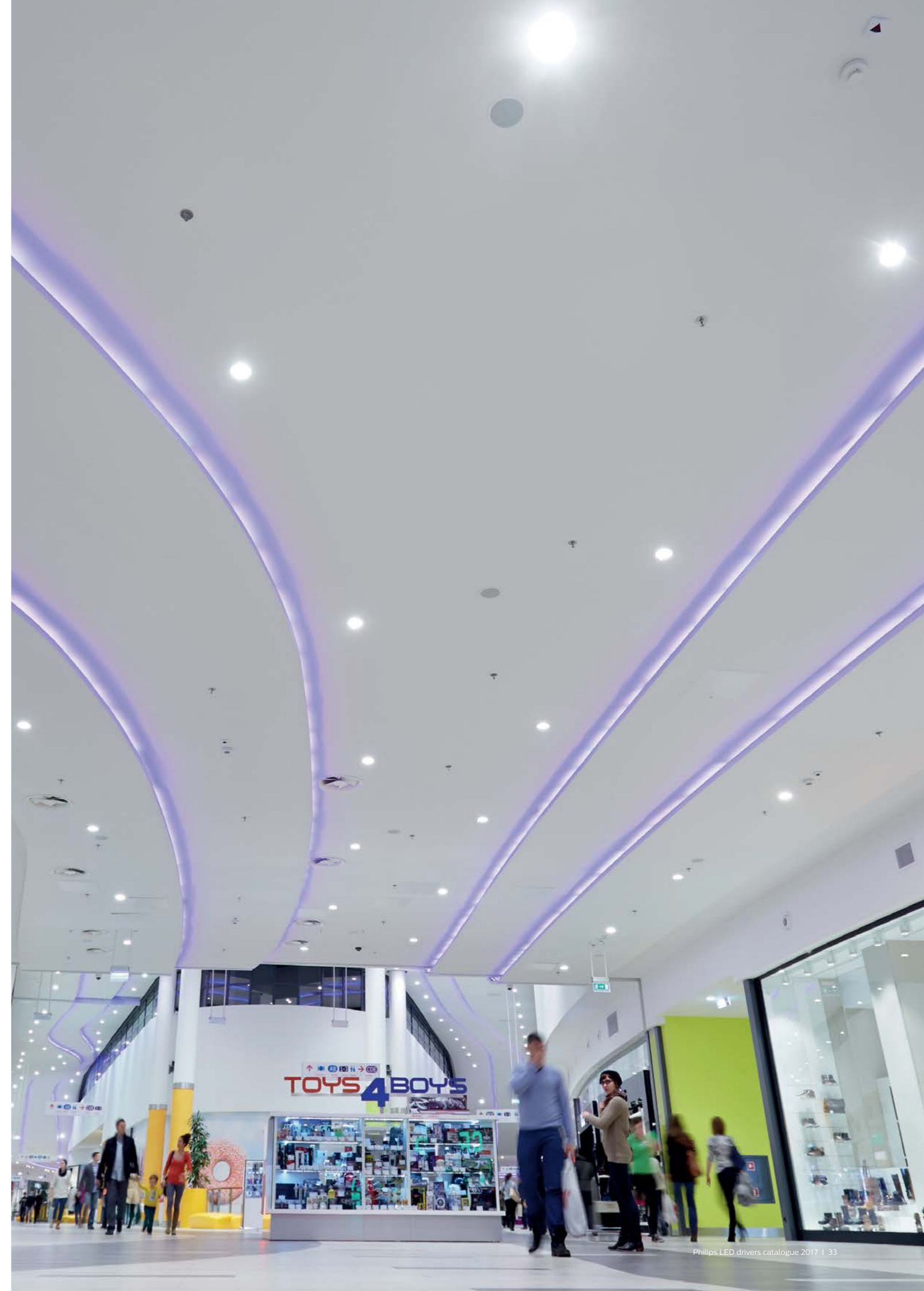
## Applications

- Downlight
- Track light
- Spotlight
- Panel light



## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions mm	Dimming	Order code
			W	A	V			
Xitanium 15W 0.35A 42V I 230V	No	L115	15	0.35	32-42	115 x 45 x 29	No	929001410180
Xitanium 21W 0.5A 42V I 230V	No	L115	21	0.5	32-42	115 x 45 x 29	No	929001410280
Xitanium 27W 0.6/0.65A 42V I 230V	No	L108	27	0.6/0.65	32-42	108 x 68 x 32	No	929001418280
Xitanium 32W 0.7/0.75A 42V I 230V	No	L108	32	0.7/0.75	32-42	108 x 68 x 32	No	929001418380
Xitanium 34W 0.9/1.05A 32V I 230V	No	L108	34	0.9/1.05	24-32	108 x 68 x 32	No	929001418480
Xitanium 36W 0.8/0.85A 42V I 230V	No	L108	36	0.8/0.85	32-42	108 x 68 x 32	No	929001418580
Xitanium 44W 0.9/1.05A 42V I 230V	No	L108	44	0.9/1.05	32-42	108 x 68 x 32	No	929001418680



# CertaDrive Single Current

Point

These fixed current drivers offer an easy to use solution for essential spot, downlight and panel light applications. The CertaDrive range is designed to meet the market needs for basic lighting. They are therefore ideal for high volume applications and can be used with different type LED light engines. These driver are optimized for Chip On Board (COB) LED technology and are available in a variety of wattages.

## Features

- High reliability
- Luminaire design flexibility to keep stable/constant
- Lumen output and light quality levels
- Fast Time to Market
- One supplier for professional general lighting LED Drivers
- Affordable LED Drivers
- +/- 10% output current tolerance
- 30,000 hours life time

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- Various power wattage drivers that are related to the lumen packages/ applications
- Fixed output drivers
- Independent version housing design for stand-alone installations
- Authorized certificate: ENEC, CB, CE and CCC

## Applications

- Downlight
- Track light
- Spotlight



## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions mm	Dimming	Order code 12NC
			W	A	V			
CertaDrive 8W 0.2A 40V I 230V	No	L115	8	0.2	32-40	115 x 45 x 29	No	929000956080
CertaDrive 10W 0.25A 40V I 230V	No	L115	10	0.25	32-40	115 x 45 x 29	No	929000956180
CertaDrive 12W 0.3A 40V I 230V	No	L115	12	0.3	32-40	115 x 45 x 29	No	929000953580
CertaDrive 15W 0.35A 42V I 230V	No	L115	15	0.35	32-42	115 x 45 x 29	No	929000898106
CertaDrive 18W 0.3A 60V I 230V	No	L115	18	0.3	50-60	115 x 45 x 29	No	929001410380
CertaDrive 20W 0.5A 40V I 230V	No	L115	20	0.5	32-40	115 x 45 x 29	No	929000898006
CertaDrive 20W 0.7A 28V I 230V	No	L115	20	0.7	22-28	115 x 45 x 29	No	929000897906
CertaDrive 25W 0.6A 42V I 230V	No	L108	25	0.6	30-42	108 x 68 x 32	No	929001414180
CertaDrive 30W 0.7A 42V I 230V	No	L108	30	0.7	30-42	108 x 68 x 32	No	929001414280
CertaDrive 34W 0.8A 42V I 230V	No	L108	34	0.8	30-42	108 x 68 x 32	No	929001414380
CertaDrive 38W 0.9A 42V I 230V	No	L108	38	0.9	30-42	108 x 68 x 32	No	929001414480
CertaDrive 40W 1.05A 38V I 230V	No	L108	40	1.05	30-42	108 x 68 x 32	No	929001414580

# CertaDrive Single Current (LPF Family)

Point

These fixed current drivers offer an easy to use solution for essential spot, downlight and panel light applications. The CertaDrive range is designed to meet the market needs for basic lighting. They are therefore ideal for high volume applications and can be used with different type LED light engines. These driver are optimized for Chip On Board (COB) LED technology and are available in a variety of wattages.

## Features

- High reliability
- Luminaire design flexibility to keep stable/constant
- Lumen output and light quality levels
- Fast Time to Market
- Low power factor
- Affordable LED Drivers
- +/- 10% output current tolerance
- 30,000 hours life time

## Benefits

- Drivers designed based on Philips experience and knowledge in conventional fluorescent and HID technologies
- Various power wattage drivers that are related to the lumen packages/ applications
- Fixed output drivers
- Independent version housing design for stand-alone installations
- Authorized certificate: ENEC, CB, CE and CCC

## Applications

- Downlight
- Track light
- Spotlight



## Product specifications

Product type	SimpleSet	Housing	Max output power	Output current	Output voltage	Dimensions mm	Dimming	Order code 12NC
			W	A	V			
CertaDrive 6W 0.15A 40V LPF I 230V	No	L88	6	0.15	32-40	88 x 39 x 32	No	929001411780
CertaDrive 8W 0.2A 40V LPF I 230V	No	L88	8	0.2	32-40	88 x 39 x 32	No	929001409980
CertaDrive 10W 0.25A 40V LPF I 230V	No	L88	10	0.25	32-40	88 x 39 x 32	No	929001410006
CertaDrive 12W 0.3A 40V LPF I 230V	No	L88	12	0.3	32-40	88 x 39 x 32	No	929001409506

# TrustSight LED Emergency systems point/downlight

Point

The new Philips TrustSight LED emergency systems are designed for your security. Philips LED TrustSight solutions are designed to operate LED luminaires on battery power when mains voltage is failing. In that case the LED emergency driver immediately switches to battery mode and takes over the function of the standard LED driver.

## Features

- Integrated automatic self-test
- Conditioned automatic discharge of batteries
- Specially developed batteries for emergency lighting
- EU compliance
- 70,000 hours lifetime

## Benefits

- Dedicated solutions for linear applications
- Significantly smaller housing sizes
- Genuine 21mm linear driver height
- Forward voltage window suits new generation of LED boards
- Easy to install via automatic current-setting and battery selection
- 5 year warranty

## Applications

- Office buildings
- Public buildings (airports, cinemas, theaters, exhibition halls)
- Retail (fashion, supermarkets, DIY)



L190

## Product specifications

Product type	Housing	Output power	Output current range	Output voltage	Battery detection	Self test	DALI	Dimensions	Emergency time	Battery*	Order code
		W	mA	V							
TrustSight Basic P 15-55V 3W	L190	3	50-200	15-55	Automatic	Manual	No	190 x 46 x 32	1 hour 3 hours	1300mA 2500mAh	913700767266
TrustSight Pro P 15-55V 3W	L190	3	50-200	15-55	Automatic	Automatic	No	190 x 46 x 32	1 hour 3 hours	1300mA 2500mAh	913700766666
TrustSight DALI P 15-55V 3W	L190	3	50-200	15-55	Automatic	Automatic	Yes	190 x 46 x 32	1 hour 3 hours	1300mA 2500mAh	929000995866

\*Battery needs to be ordered separately.

Description	Order code
TrustSight Batt Box NiMH 7.2V 1300mA	913700768166
TrustSight Batt Box NiMH 7.2V 2500mAh	913700768266



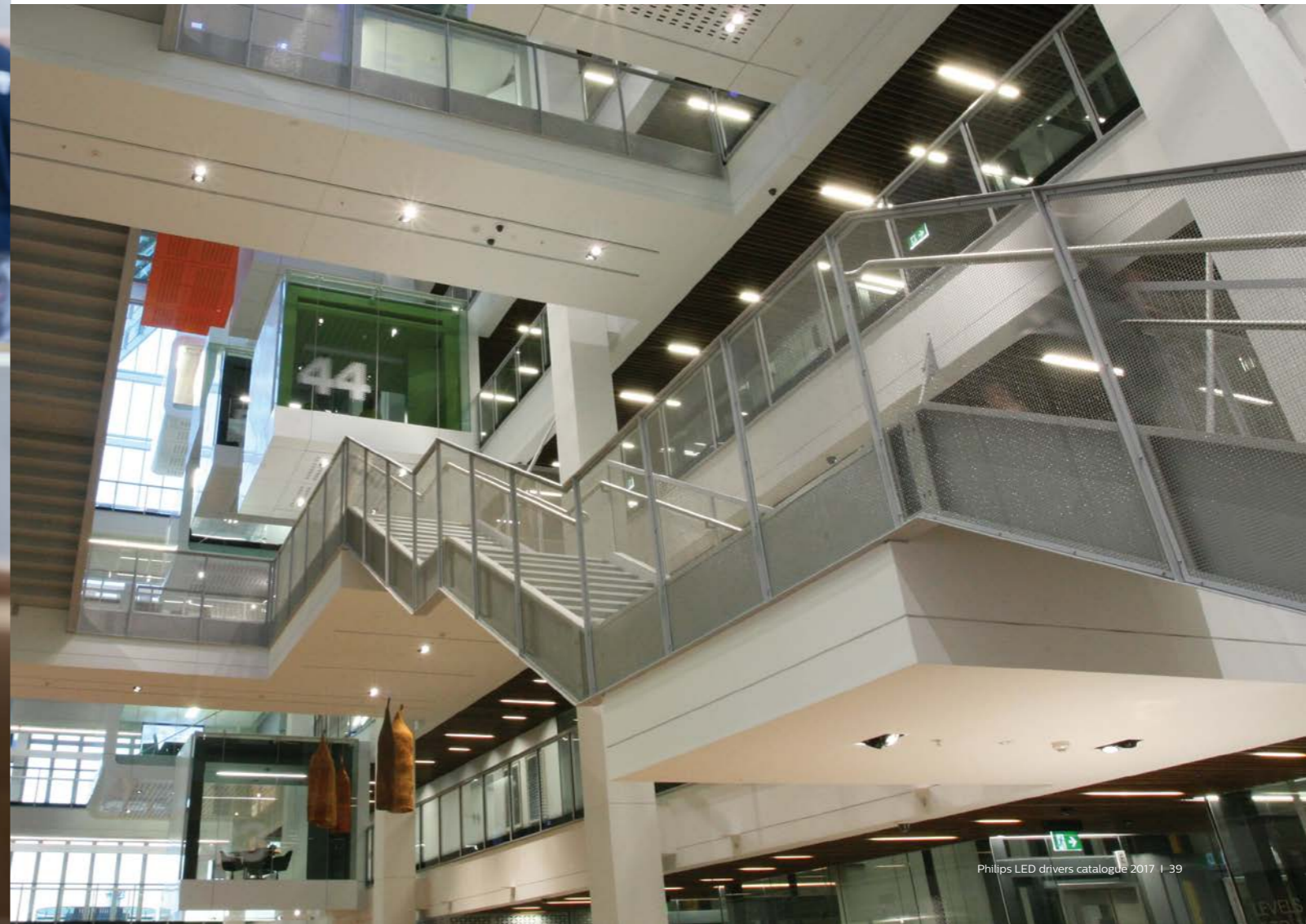


# Indoor linear drivers

Xtanium and CertaDrive LED drivers make up a complete portfolio of LED drivers to support project and high volume trade LED luminaires businesses.

## Portfolio

Indoor linear drivers	Dimming		Basic features and performances		
	DALI Dim	1-10V	SimpleSet	Adjustable Output Current (AOC)	Driver lifetime (hours)
<b>S</b> Statement	Yes	No	Yes	Yes	100,000
<b>P</b> Performance	No	Yes	Yes	Yes	100,000
<b>C</b> Core	No	No	No	No	50,000
<b>E</b> Entry	No	No	No	No	30,000-50,000



# Xitanium Programmable

Linear

Xitanium LED drivers are designed to operate LED solutions for professional general lighting applications, with non-isolated and isolated drivers to support HV and LV linear systems. Flexibility in luminaire design is assured thanks to an adjustable output current. Application-oriented operating windows offer the flexibility required to provide the stable lumen output and light quality levels that lighting specifiers and architects demand. Reliability is enhanced by specific features that protect the connected LED module, e.g. hot wiring, reduced ripple current and thermal de-rating. With Xitanium programmable indoor linear drivers, it supports light point management and is programmable for all your needs.

## Features

- DALI dimming and programmable
- Isolated (low voltage) and non-isolated (high voltage) versions available
- Operating windows - output current can be adjusted via SimpleSet and the Philips MultiOne Configurator (for all TD drivers) or with a resistor outside the driver
- Reduced ripple current and thermal de-rating for increased reliability
- iXt LED-drivers have a Longer life time (100khrs), improved surge and burst (4kV) and Tambient (-40°C to +60°C) specifications
- Central DC operation supported

## Benefits

- High voltage systems for up to 95% high efficiency, lowest cost and smallest dimensions
- Low voltage systems involve simpler approbation process and ease of design-in
- High reliability underpinned by 5 year warranty
- Future-proof flexibility – application-oriented operating windows enable LED generation and complexity management
- Compatibility – adjustable output current enables operation of various LED solutions from different manufacturers or OEM own designs
- Low ripple for camera and scanner friendly operation
- More robust LED drivers for industry applications
- Flicker and noise free dimming with all Touch and DALI LED drivers due to amplitude dimming (AM)

## Applications

- Office
- Industry
- Retail
- Public buildings (airports, cinemas, theatres, exhibition halls), distribution centers and shopping malls



## Product specifications

Product type	SimpleSet	Isolate	Housing	Max output power		Output voltage	Dimensions	Dimming	Order code
				W	A				
Xitanium 150W 0.2-0.7A 300V TD 230V iXt	No	No	L360	150	0.2-0.7	150-300	360 x 30 x 21	Dali & Touch Dim	929000893306
Xitanium 110W 0.2-0.6A 215V TD 230V iXt	No	No	L360	110	0.2-0.6	100-215	360 x 30 x 21	Dali & Touch Dim	929000877306
Xitanium 150W 0.2-0.7A 300V iXt TD 230V	Yes	No	L360	150	0.2-0.7	100-300	360 x 30 x 21	Dali & Touch Dim	929001516506
Xitanium 100W 0.15-0.5A 300V iXt TD 230V	Yes	No	L360	100	0.15-0.5	100-300	360 x 30 x 21	Dali & Touch Dim	929001516406
Xitanium 60W 0.08-0.35A 300V TD/16 230V	Yes	No	L280	60	0.08-0.35	100-300	280 x 30 x 16	Dali & Touch Dim	929000993206
Xitanium 35W 0.08-0.35A 150V TD/16 230V	Yes	No	L280	35	0.08-0.35	50-150	280 x 30 x 16	Dali & Touch Dim	929000993106
Xitanium 75W 0.12-0.4A 215V TD 230V	No	No	L360	75	0.12-0.4	100-215	360 x 30 x 22	Dali & Touch Dim	929000852103
Xitanium 36W 0.12-0.4A 110V TD 230V	No	No	L360	36	0.12-0.4	50-110	360 x 30 x 22	Dali & Touch Dim	929000852203
Xitanium 75W 0.7-2A 54V TD 230V	Yes	Yes	L360	75	0.7-2.0	27-54	360 x 30 x 21	Dali & Touch Dim	929001503706
Xitanium 36W 0.3-1A 54V TD 230V	Yes	Yes	L360	36	0.3-1.0	27-54	360 x 30 x 21	Dali & Touch Dim	929001503606

# Xitanium Adjustable Output Current

Linear

Xitanium LED drivers are designed to operate LED solutions for professional general lighting applications, with non-isolated and isolated drivers to support HV and LV linear systems. With Xitanium LED drivers, flexibility in luminaire design is assured thanks to an adjustable output current. Application-oriented operating windows offer the flexibility required to provide the stable lumen output and light quality levels that lighting specifiers and architects demand. Reliability is enhanced by specific features that protect the connected LED module, e.g. hot wiring, reduced ripple current and thermal de-rating.

## Features

- Multiple versions – 1-10V dimmable and fixed output, non-isolated and isolated available
- Adjustable output current via a resistor outside the driver or SimpleSet tools
- Reduced ripple current and thermal de-rating for increased reliability
- iXt LED-drivers have a Longer life time (100khrs), improved surge and burst (4kV) and Tambient (-40°C to +60°C) specifications
- Central DC operation supported

## Benefits

- High voltage systems for up to 95% high efficiency, lowest cost and smallest dimensions
- Low voltage systems involve simpler approbation process and ease of design-in
- High reliability underpinned by 5 year warranty
- Future-proof flexibility – application-oriented operating windows enable LED generation and complexity management
- Compatibility – adjustable output current enables operation of various LED solutions from different manufacturers or OEM own designs
- Low ripple for camera and scanner friendly operation

## Applications

- Office
- Industry
- Retail
- Public buildings (airports, cinemas, theatres, exhibition halls), distribution centers and shopping malls



## Product specifications

Product type	SimpleSet	Isolate	Housing	Max output power		Output voltage	Dimensions	Dimming	Order code
				W	A				
Xitanium 150W 0.2-0.7A 300V 230V iXt	Yes	No	L360	150	0.2-0.7	100-300	360 x 30 x 21	No	929001506706
Xitanium 100W 0.15-0.5A 300V 230V iXt	Yes	No	L360	100	0.15-0.5	100-300	360 x 30 x 21	No	929001506606
Xitanium 100W 0.25-0.7A 220V S 230V	Yes	No	L360	100	0.25-0.7	50-220	360 x 30 x 21	No	929001529506
Xitanium 75W 0.12-0.4A 220V 1-10V 230V	No	No	L280	75	0.12-0.4	100-220	280 x 30 x 21	1-10V	929000953706
Xitanium 36W 0.12-0.4A 115V 1-10V 230V	No	No	L280	36	0.12-0.4	50-115	280 x 30 x 21	1-10V	929000953606
Xitanium 75W 0.12-0.4A 220V 230V	No	No	L280	75	0.12-0.4	100-220	280 x 30 x 21	No	929000950706
Xitanium 36W 0.12-0.4A 115V 230V	No	No	L280	36	0.12-0.4	50-115	280 x 30 x 21	No	929000950606
Xitanium 60W 0.08-0.35A 220V S 230V	Yes	No	L280	60	0.08-0.35	50-220	280 x 30 x 21	No	929001509106
Xitanium 60W 0.08-0.35A 300V S 230V	Yes	No	L280	60	0.08-0.35	100-300	280 x 30 x 21	No	929001506506
Xitanium 35W 0.08-0.35A 150V S 230V	Yes	No	L280	35	0.08-0.35	50-150	280 x 30 x 21	No	929001506406
Xitanium 75W/0.7-2A 54V 1-10V 230V	No	Yes	L425	75	0.7-2.0	27-54	424 x 30 x 26.5	1-10V	929000863503
Xitanium 36W/0.3-1A 54V 1-10V 230V	No	Yes	L360	36	0.3-1.0	27-54	360 x 30 x 26.5	1-10V	929000854003
Xitanium 75W/0.7-2A 54V 230V	No	Yes	L360	75	0.7-2.0	27-54	360 x 30 x 21	No	929000958806
Xitanium 36W/0.3-1A 54V 230V	No	Yes	L360	36	0.3-1.0	27-54	360 x 30 x 21	No	929000958706

# Xitanium Single Current

Linear

Xitanium LED drivers with single current output offer industry leading performance and reliability at optimized cost. They are ideal for high volume applications where performance specification is key. These drivers guarantee OEM makers Xitanium performance and Philips reliability but with standard current settings.

## Features

- Low output current tolerance
- High efficiency
- Small dimensions
- Specific current and voltage
- 50,000 hours lifetime

## Benefits

- High voltage systems for highest efficiency and lowest cost
- Easy design-in with specific output current settings
- Low profile drivers enabling greater luminaire design freedom
- Good light quality

## Applications

- Office
- Industry
- Retail
- Public buildings (airports, cinemas, theatres, exhibition halls), distribution centers and shopping malls



L280

## Product specifications

Product type	SimpleSet	Isolate	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
				W	A	V	mm		12NC
Xitanium 40W 280mA 142V 230V	No	No	L280	40	0.28	116-142	280 x 30 x 22	No	929000805108



# CertaDrive Single Current

Linear

CertaDrive LED drivers are designed to fulfill the market needs for essential lighting. They are therefore ideal for high volume applications and can be used with CertaFlux LED modules, or other LED light engines. These drivers offer basic specifications such as specific current and voltage settings, with lifetime of the driver set up to 50,000 hours.

## Features

- High efficiency
- Small dimensions
- Specific current and voltage
- Fast time-to-market
- 30,000 to 50,000 hours lifetime

## Benefits

- High voltage systems for high efficiency, lowest cost and small dimensions
- Low voltage systems involve simpler approbation process and ease of design-in
- Various power/wattage combination which is easy to design
- Low profile drivers enabling greater luminaire design freedom
- Optimized to operate CertaFlux LED modules

## Applications

- Recessed, surface and suspended luminaires in offices
- Waterproof luminaires and high bay luminaires for industry applications
- Trunking in retail applications



## Product specifications

Product type	SimpleSet	Isolate	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
CertaDrive 60W 300mA 200V 230V	No	No	L210	60	0.3	145-200	210 x 30 x 21	No	929000970006
CertaDrive 60W 360mA 170V 230V	No	No	L210	60	0.36	120-170	210 x 30 x 21	No	929000975006
CertaDrive 40W 360mA 110V 230V	No	No	L210	40	0.36	91-110	210 x 30 x 21	No	929000974906
CertaDrive 40W 240mA 160V 230V	No	No	L210	40	0.24	116-160	210 x 30 x 21	No	929000934906
CertaDrive 30W 330mA 82V 230V	No	No	L210	30	0.33	72-82	210 x 30 x 21	No	929000974806
CertaDrive 30W 350mA 82V 230V	No	No	L210	30	0.35	57-82	210 x 30 x 21	No	929000934806
LED driver 40W 280mA 132V 230V	No	No	L150	40	0.28	118-145	150 x 40 x 28	No	929000887280
CertaDrive 30W 0.4A 72V 230V	No	No	L138	30	0.4	56-80	138 x 25 x 22	No	929000914606
LED driver 20W 280mA 69V 230V	No	No	L138	20	0.28	64-76	138 x 25 x 22	No	929000887180
CertaDrive 30W 0.4A 80V 230V	No	No	L138	30	0.4	51-82	138 x 25 x 22	No	929001409780
CertaDrive 15W 0.4A 36V 230V	No	No	L138	15	0.4	30-42	138 x 25 x 22	No	929001409880
CertaDrive 65W 1.4A 46.5V 230V	No	Yes	L280	65	1.4	32-46.5	280 x 30 x 21	No	929001417280
CertaDrive 57W 1.05A 54V 230V	No	Yes	L280	57	1.05	32-54	280 x 30 x 21	No	929001417180
CertaDrive 44W 1.05A 42V 230V	No	Yes	L280	44	1.05	27-42	280 x 30 x 21	No	929001410880
CertaDrive 40W 0.9A 44V 230V	No	Yes	L280	40	0.9	29-44	280 x 30 x 21	No	929001410980
CertaDrive 38W 0.7A 54V 230V	No	Yes	L280	38	0.7	29-54	280 x 30 x 21	No	929001411080
CertaDrive 27W 0.5A 54V 230V	No	Yes	L280	27	0.5	36-54	280 x 30 x 21	No	929001411280
CertaDrive 26W 0.6A 44V 230V	No	Yes	L280	26	0.6	29-44	280 x 30 x 21	No	929001411380
CertaDrive 44W 1.05A 42V 230V I	No	Yes	L195	44	1.05	32-42	195 x 41 x 31	No	929001416380
CertaDrive 38W 0.9A 42V 230V I	No	Yes	L195	38	0.9	32-42	195 x 41 x 31	No	929001416280
CertaDrive 34W 0.8A 42V 230V I	No	Yes	L195	34	0.8	32-42	195 x 41 x 31	No	929001416180
CertaDrive 30W 0.7A 42V 230V I	No	Yes	L195	30	0.7	32-42	195 x 41 x 31	No	929001416080
CertaDrive 38W 1.1A 35V 230V I	No	Yes	L195	38	1.1	24-35	195 x 41 x 31	No	929001416980
CertaDrive 34W 1.05A 32V 230V I	No	Yes	L195	34	1.05	24-32	195 x 41 x 31	No	929001416480

# TrustSight LED emergency systems

Linear

The new Philips TrustSight LED emergency systems are designed for your security. Philips LED TrustSight solutions are designed to operate LED luminaires on battery power when mains voltage is failing. In that case the LED emergency driver immediately switches to battery mode and takes over the function of the standard LED driver.

## Features

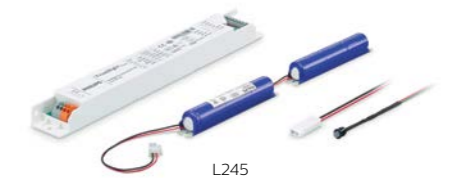
- Integrated automatic self-test
- Conditioned automatic discharge of batteries
- Specially developed batteries for emergency lighting
- EU compliance
- 70,000 hours lifetime

## Benefits

- Dedicated solutions for linear applications
- Significantly smaller housing sizes
- Genuine 21mm linear driver height
- Forward voltage window suits new generation of LED boards
- Easy to install via automatic current-setting and battery selection
- 5 year warranty

## Applications

- Office buildings
- Public buildings (airports, cinemas, theaters, exhibition halls)
- Retail (fashion, supermarkets, DIY)



## Product specifications

Product type	Housing	Output power	Output current range	Output voltage	Battery detection	Self test	DALI	Dimensions	Emergency time	Battery*	Order code
TrustSight Basic L 20-95V 3W	L245	3	32-150	20-95	Automatic	Manual	No	245 x 30 x 21	1 hour 3 hours	1300mAh 2500mAh	913700767366
TrustSight Basic L 20-95V 6W	L245	6	64-300	20-95	Automatic	Manual	No	245 x 30 x 21	1 hour	2500mAh	913700767466
TrustSight Pro L 20-95V 3W	L245	3	32-150	20-95	Automatic	Automatic	No	245 x 30 x 21	1 hour 3 hours	1300mAh 2500mAh	913700766766
TrustSight Pro L 20-95V 6W	L245	6	64-300	20-95	Automatic	Automatic	No	245 x 30 x 21	1 hour	2500mAh	913700766866
TrustSight DALI L 20-95V 3W	L245	3	32-150	20-95	Automatic	Automatic	Yes	245 x 30 x 21	1 hour 3 hours	1300mAh 2500mAh	929000995966
TrustSight DALI L 20-95V 6W	L245	6	64-300	20-95	Automatic	Automatic	Yes	245 x 30 x 21	1 hour	2500mAh	929000996066

\*Battery needs to be ordered separately.

Description	Order code
TrustSight Flat Batt NiMH 7.2V 1300mAh	913700766966
TrustSight Flat Batt NiMH 7.2V 2500mAh	913700767066



# LED Transformer

## Portfolio

Constant Voltage	Dimming			Basic features and performances	
	DALI Dim	1-10V	Phase cut	Adjustable Output Power	Transformer lifetime (hours)
<b>Performance</b>	No	No	Yes (75W/150W)	PWM (75W/150W)	30,000
<b>Mainstream</b>	No	No	No	-	20,000





# Performance

## LED Transformer

LED Transformer range are designed to replace switching power supply (non lighting standard product) in matching constant voltage LED Strips in indoor application, therefore upgrade total lighting quality.

Dimmable LED Transformer range are designed to meet the market needs for dimming in specific application

### Features

- High frequency
- Compact size
- SELV compliant
- Safety protections including overload protection and short circuit protection
- Lifetime 30,000 hours
- Phase cut dimming function for 75W & 150W

### Benefits

- Optimal performance thanks to the dedicated LED solution
- Safe operation
- Installation friendly, Class II and independent
- 3 years warranty
- CCC, CE, CB certificate

### Applications

- Hotel, Partially light the space, Living rooms, Corridors
- Retail & Shopping Mall, Cabinet or shelf lighting
- Restaurant, Enhance the ambience, create the mood
- Decoration, Create space and layers, light sculpture



### Product specifications

Product type	Isolate	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V	mm		12NC
LED Transformer 60W 24VDC	Yes	Plastic	60	0.75-2.5	22.8-25.2	180x52x30	No	913710032267
LED Transformer 120W 24VDC	Yes	Plastic	120	1.5-5	22.8-25.2	300x40x30	No	913710032567
Dimmable LED Transformer 75W 24VDC	Yes	Metal	75	0.938-3.125	22.8-25.2	213x54x33	Phase cut	913710033880
Dimmable LED Transformer 150W 24VDC	Yes	Metal	150	1.875-6.25	22.8-25.2	300x60x45	Phase cut	913710033980

# Mainstream

## LED Transformer

Economic range LED Transformer range are designed to replace switching power supply (non lighting standard product) in matching constant voltage LED Strips in indoor application, therefore upgrade total lighting quality.

### Features

- High frequency
- Compact size
- SELV compliant
- Safety protections including overload protection and short circuit protection
- Lifetime 20,000 hours

### Benefits

- Optimal performance thanks to the dedicated LED solution
- Safe operation
- Installation friendly, Class II
- 2 years warranty
- CCC, CE, CB certificate

### Applications

- Hotel, Partially light the space, Living rooms, Corridors
- Retail & Shopping Mall, Cabinet or shelf lighting
- Restaurant, Enhance the ambience, create the mood
- Decoration, Create space and layers, light sculpture



### Product specifications

Product type	Isolate	Housing	Max output power	Output current	Output voltage	Dimensions	Dimming	Order code
			W	A	V	mm		12NC
Economic LED Transformer 30W 24VDC	Yes	Plastic	30	0.375-1.25	22.8-25.2	150x40x28	No	913710033080
Economic LED Transformer 60W 24VDC	Yes	Plastic	60	0.75-2.5	22.8-25.2	211x40x32	No	913710033180
Economic LED Transformer 120W 24VDC	Yes	Plastic	120	1.5-5	22.8-25.2	280x40x34	No	913710033680
Economic LED Transformer 180W 24VDC	Yes	Plastic	180	2-7.5	22.8-25.2	300x50x35	No	913710033780



# MultiOne configurator

The demands from customers for flexibility and diversity are fast increasing in multi-folds. This is the reason why Philips has introduced simplified tools which allow you to easily configure your drivers for ease of use.

The universal Philips MultiOne configurator is a tool you can use with any Philips programmable driver and configure the functions in your lighting solutions for any application. It has become a must-have in all applications where the lighting system needs to match specific requirements.

### Features

- For use with all Philips LED, fluorescent and HID programmable drivers
- Suitable for standard Windows computers with USB connection
- Different interfaces depending on the installation
- Enables optimization of installation, last minute changes, easy diagnostics and maintenance

### Benefits

- One tool for all Philips configurable drivers, both for conventional and LED systems
- Flexibility for OEM providing access to the features built into the driver
- Optimized for use in the production process
- Unique tool that combines configuration with diagnostics

### Applications

- General lighting
- Retail lighting
- Outdoor lighting
- Office lighting

## The MultiOne configurator consists of two building blocks

### 1 MultiOne Interface tool



#### LCN8600/00 MultiOne Interface USB2DALI

The interface that can be used with the MultiOne PC software to commission, configure, diagnose drivers via the DALI interface.



#### LCN9610 or LCN9620 MultiOne SimpleSet Interface

The tools can be used with the MultiOne PC software to configure drivers wirelessly using SimpleSet® Technology.

### Product specifications

Product type	Order code
LCN8600/00 MultiOne interface USB2DALI	9137 003 46703
LCN8650/10 MultiOne interface USB2ZigBee	9137 003 59203
LCN 9610 MultiOne interface SimpleSet®	9290 009 99400
LCN 9620 MultiOne interface SimpleSet®	9290 009 99500

### 2 MultiOne Software

#### Supporting MultiOne Software

to be installed on a PC, laptop or production work station.

#### System requirements:

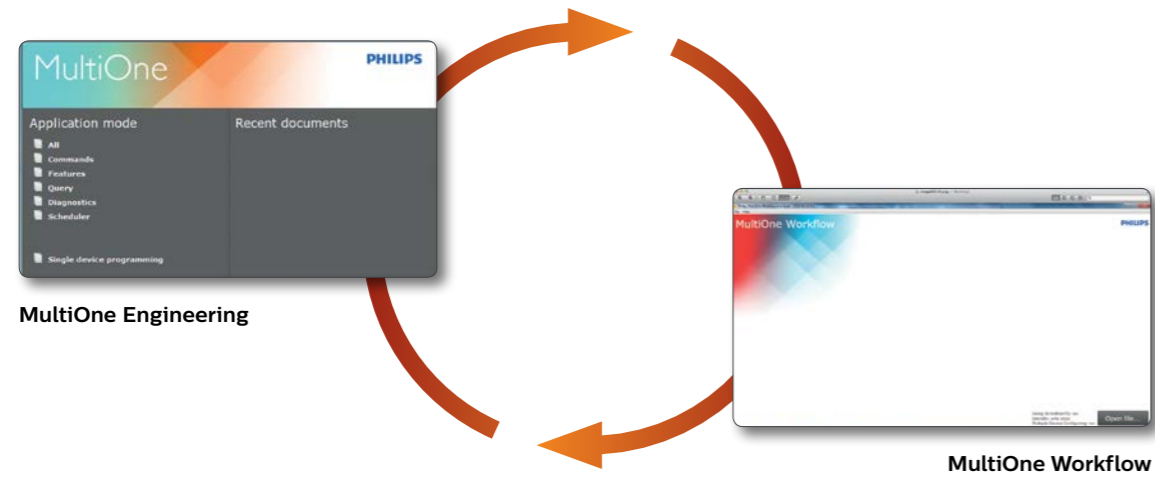
- Windows PC or laptop
- Microsoft windows 7, 8.0, 8.1 (support of Windows XP will stop in end 2015)
- USB 2.0 ports (Two free ports preferred)
- Min 35 MB of free disk space
- Microsoft .NET Framework 3.5 SP1

## Free download

Find out more about MultiOne software via [www.philips.com/multiOne](http://www.philips.com/multiOne)

# Philips MultiOne configurator

All programmable Outdoor, Indoor (Linear and Point) LED systems can be configured with the MultiOne configurator. Also all existing programmable conventional Philips systems, HID and FLUO can be configured with the same tool. Using the unique tool along with the installation of the software makes flexibility comes alive, providing you with access to all featured built in within the driver.



The MultiOne configurator software is free and downloadable from our website. It consists of:

## 1. MultiOne Engineering

Specially developed to access all functionalities of the driver; to configure, diagnose and prepare the configuration file for the production environment.

Also includes:

- DALI commands, scheduler
- SimpleSet®

## 2. MultiOne Workflow

Developed to configure all devices or subassemblies in the production environment in a simple and quick way.

Depending on the type of driver, a combination of features can be configured. With these features, one can create diversity (e.g. Adjustable light output and Adjustable output current), but also extra security (e.g. Module temperature protection and DC emergency), including costdown improvements (e.g. Constant light output, Dynadimmer and Corridor mode).

Detailed explanations of each feature and how to configure, are available in the instruction manual on our website.

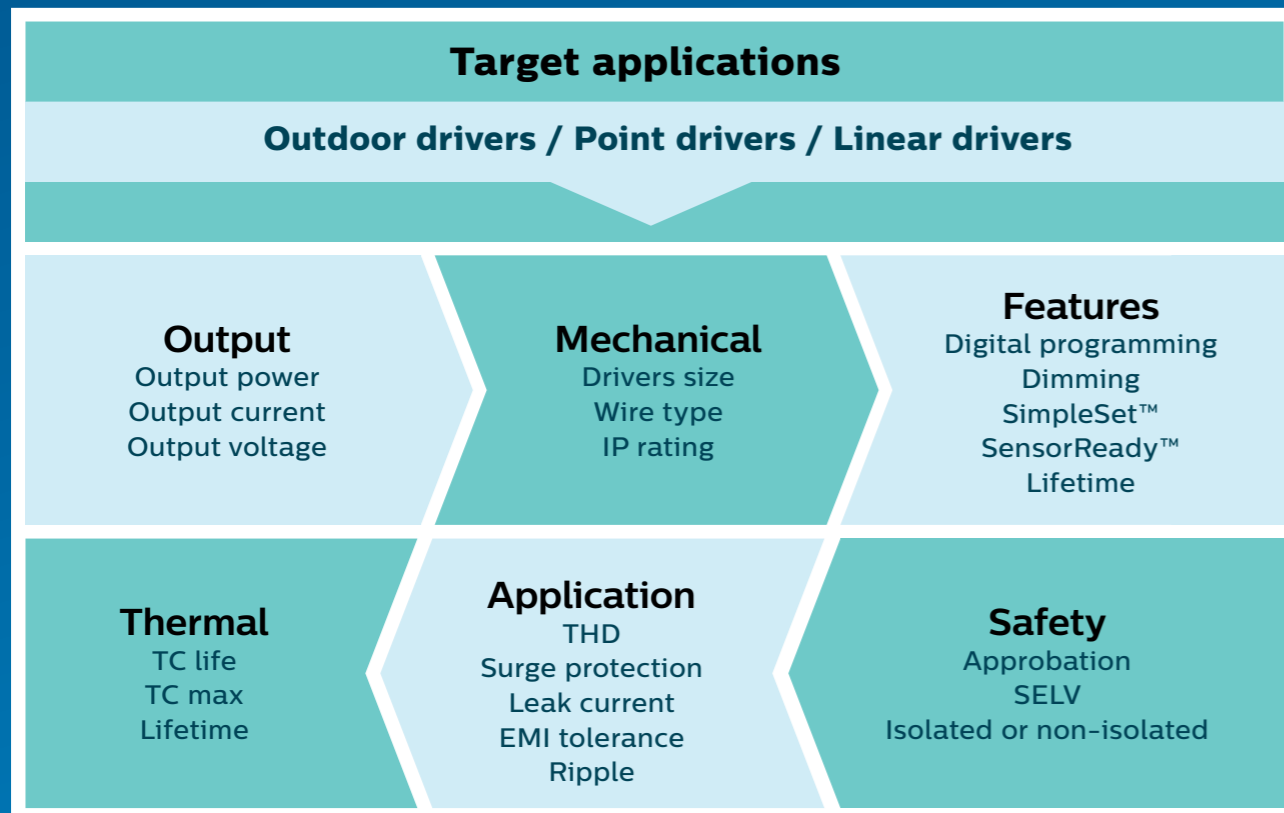
[www.philips.com/MultiOne](http://www.philips.com/MultiOne)

- Configurable device features
  - Active cooling
  - Module temperature protection
  - DC emergency
  - End of life indication
  - Light source operating hours
  - Energy meter
  - Lamp burn-in
  - Lamp selection
  - Quick lamp start
- Adjustable output current
- Adjustable light output
- Adjustable startup time
- Constant light output
- Constant light output Lite
- Dimming interface
  - 1-10 V dim level
  - AmpDim
  - LumiStep
  - LineSwitch
  - Touch and dim
  - Min dim level
  - Dynadimmer
  - Dynadimmer Lite
  - Corridor mode



# LED drivers selection pointers

Different drivers cater to different needs and the right drivers can help ensure optimal performance of your LED light engine. Use the following chart to help you pick the perfect drivers to match your intended use.



# Explanation Drivers namings



Xitanium	75W	0.7-2	TD	R	230V	/H	iXt
							<b>Protection:</b> Xt: Maximum reliable sXt: Proven reliable iXt: Industry reliable
							<b>Housing:</b> Enclosure Designation
							<b>Input voltage:</b> 230V: 220V-240V input for Asia and Europe INT: 120V-277V input fro American GL: 120V-277V+230V input for Global HV: 347V-480V input for industrial installations in Canada and US
							<b>Config:</b> S: SimpleSet™ N: NTC L: LineSwitch R2/R3: Resistor Setting AM: Manual Adjustable Output Current F: Auxilary Power for Fan
							<b>Control:</b> LE: Leading Edge TE: Trailing edge 0-10V: 0 to 10V dimming 1-10V: 1 to 10V dimming D: Dali TD: Touch Dali LS: Lumistep SD: StepDim
							<b>Range of output current:</b> Output current range
							<b>Power:</b> Max output power
							<b>Family:</b> TrustSight: Trustsight LED emergency driver Xitanium Dim: Xitanium driver with dimming features Xitanium Lite Prog: Xitanium light programmable driver Xitanium SensorReady™: Xitanium SensorReady™ driver Xitanium SimpleSet™: Xitanium SimpleSet™ driver



©2017 Koninklijke Philips N.V.

All rights reserved. Reproduction in whole or in part is prohibited without prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent – or other industrial or intellectual property rights.