

**PHILIPS**

Xitanium

LED indoor drivers

Linear  
Office and Industry



Philips Xitanium  
**LED linear drivers**

For today, for tomorrow





# The lighting market is evolving, and we're ready to help you benefit

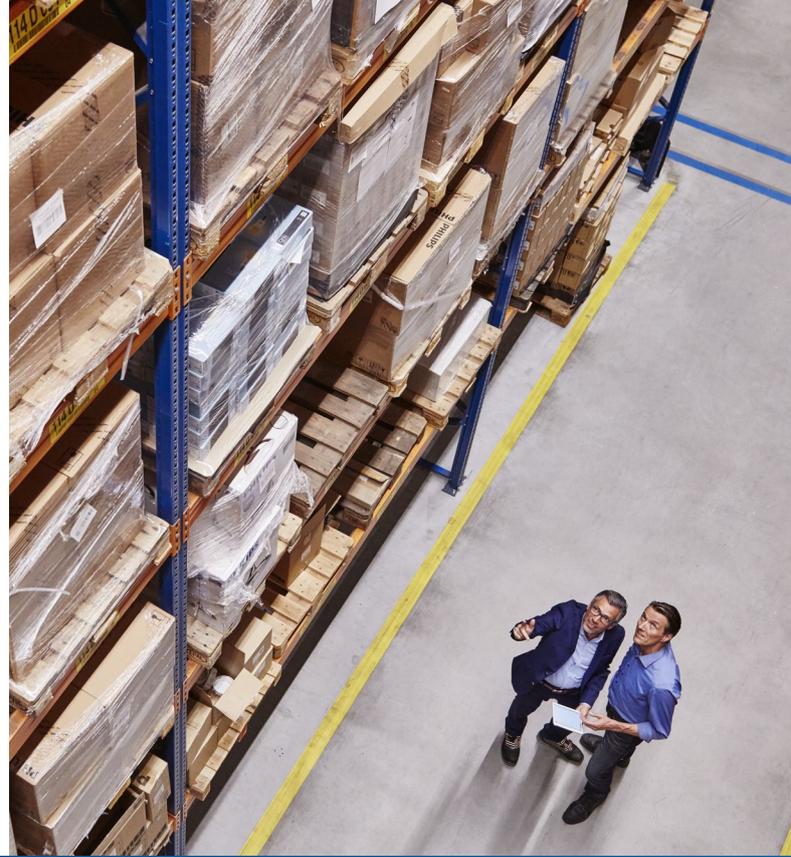
LED technology has left the 'good enough' performance point far behind, and is well into a penetration phase where the cost, performance and energy saving benefits are widely accepted. The technology is far superior to conventional lighting, payback times are decreasing and volumes are growing fast. It's time to embrace the next phase, where new features can be added, new form factors and lighting vehicles become possible, and new opportunities are created through digitalization and intelligence. These are the characteristics that will help you differentiate your solutions, and benefit from what connected lighting has to offer your customers,

## **Complete LED linear driver portfolio for OEM projects**

Philips is ready to support you in OEM project business for office and industry applications with our complete Xitanium LED linear drivers portfolio. This portfolio is designed to enable you to offer a full pallet of lighting solutions characterized by reliability, flexibility and quality of light.

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**Future-proof driver technology** for reliability, flexibility and quality of light.”



#### Complete portfolio

Xitanium LED linear drivers are designed for professional office, industry, retail and general lighting applications. The range comprises fixed-output, dimmable (1-10 V and Touch and DALI) and programmable (Touch and DALI) types.

#### Reliability

By drawing on our experience and knowledge of conventional fluorescent technologies, we've developed extremely reliable drivers that have a 100,000 hour life and a 5 year warranty. The drivers also enhance the reliability of your LED solutions thanks to integrated features – such as reduced ripple current and thermal derating – that protect the connected LED module against open load-, short-circuit- and over power protection. All LED linear drivers feature central DC operation and have DC emergency backup for emergency lighting.

#### Flexibility

As LEDs continue to increase in efficiency, new opportunities arise for OEMs. Application-oriented operating windows (workable areas for specific drivers) give the flexibility to provide the stable lumen outputs and light quality levels that are requested by lighting specifiers and architects. Another step forward in flexibility step is

miniaturization, which gives OEMs more design freedom.

For this reason, we created a range of low profile 16mm and 11mm non-isolated DALI and Fixed Output drivers.

#### Quality of light

Philips places great importance on quality of light, and the driver has a critical role to play here. Our Xitanium LED linear drivers have very low output ripple (less than 4%) at both low and high frequencies, meaning virtually no interference or disruption of devices like cameras and scanners. Dimming is done using amplitude modulation rather than pulse-width modulation (PWM), which is a potential source of interference.

Up to  
**94%**  
efficiency



# Quality that shines

We know that quality is one of the key factors that can make your business stand out. And by delivering reliable solutions you can also boost your reputation and encourage customer loyalty.

It's the reason we're placing even greater emphasis on the quality of our Xitanium LED linear drivers and modules. 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.**

## Discover the Xitanium LED linear driver portfolio

Our Xitanium LED linear drivers constantly improved and the latest specifications further enhance the flexibility, reliability and quality of light. These improvements include:

- **New Operating windows** for non-isolated and isolated LED linear drivers to boost the efficiencies of your LED luminaires
- **Philips SimpleSet** wireless programming technology allows luminaire manufacturers to quickly program Xitanium LED linear drivers at any stage during the manufacturing process without a connection to mains power. This means you can meet orders faster, while reducing costs and inventory.
- **LEDset** addressing the interface standard for LED modules and LED drivers.
- **Miniaturization** for greater design freedom for OEMs. The portfolio includes LED linear drivers with 11mm (DALI non-isolated), 16mm (DALI and Fixed Output non-isolated drivers) and 21mm height (isolated and non-isolated iXt LED linear drivers). The length is also kept as low small as possible.
- **Low ripple output current** (less than 4%) to assure camera- and scanner-friendly performance.
- **Improved anti-glow-in-the-dark** specifications eliminating possible afterglow effects in DALI standby operation modes (for non-isolated systems only)
- **Amplitude modulated (AM)** dimming of Touch and DALI LED linear drivers for flicker-free and noise-free dimming.



## Key features and benefits

### Xitanium Linear LED drivers offer:



Power ratings of 25, 35, 36, 40, 44, 52, 60, 75, 100, 150, 300 W

Non-isolated and isolated drivers to support HV and LV linear office systems

- HV systems for highest efficiency, lowest cost and smallest dimensions
- LV systems for simpler approval process and ease of design in

Non-isolated DALI and Fixed Output drivers with 11 mm and 16mm height

Flexible programming of DALI drivers via MultiOne software

Extra robust LED drivers for industry applications (iXt), with longer lifetime, wider temperature range plus higher surge specifications

Flexible operating windows to simplify dynamic generation- and complexity management

Low ripple output current for camera- and scanner-friendly performance

Unique AM dimming in DALI drivers for flicker and noise-free dimming

Complete range of Sensor Ready (SR) drivers for connected systems

# The driver portfolio for third-party LED modules as well as Philips Fortimo LED modules

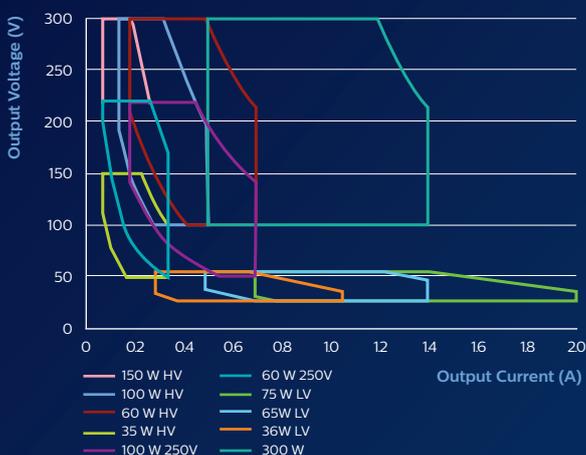
In addition for use with Philips Fortimo LED modules, Xitanium LED linear drivers can also be used with LED modules from other manufacturers or OEMs - even with own PCB designs (as long as the V/I setting fits the operating window). The output current within the operating window can be set in various ways:

- Programmed using the Philips MultiOne software via a DALI interface, or wirelessly via SimpleSet (for fixed output and DALI drivers).

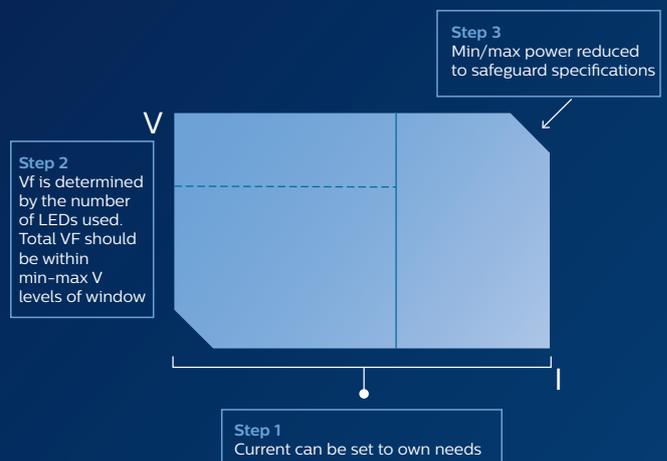
- With a resistor outside the driver, which can be on the LED PCB (level 2 board), in the cable or in the connector (output) of the LED driver.

The relevant forward voltage ( $V_f$ ) is determined by the number and type of LEDs used in the module or on the PCB. The min/max levels of the relevant operating window have to be respected in order to safeguard other driver specifications.

## Linear office operating windows



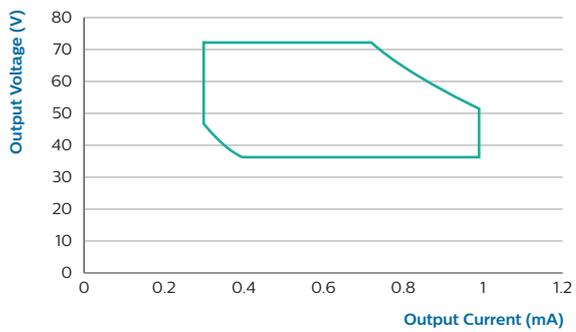
## Explanation of operating windows



Note that the relevant forward voltage ( $V_f$ ) is determined by the number and type of LEDs used in the module or on the PCB. The min/max levels of the relevant operating window have to be respected in order to safeguard other driver specifications.



### Typical operating window



Example of operating window. Can operate all points within window.

# 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)



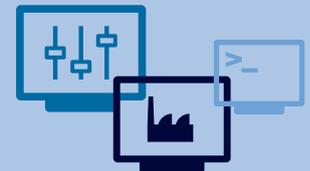
## MultiOne and SimpleSet

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. MultiOne Basic is a stand-alone solution that offers quick and easy manual configuration of the LED current at any stage of production.

### 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

## HV (non-isolated) LED drivers

### Sensor Ready (SR)

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 100W 0.25-0.7A 220V SR 230V	360x30x21	100-1	0.25-0.7	50-220	929001540706
Xitanium 60W 0.08-0.35A 220V SR 230V	360x30x21	100-1	0.08-0.35	50-220	929001540506
Xitanium 60W 0.08-0.35A 300V SR 230V	360x30x21	100-1	0.08-0.35	100-300	929001540606
Xitanium 35W 0.08-0.35A 150V SR 230V	360x30x21	100-1	0.08-0.35	50-150	929001540406
Xitanium SR Bridge built-in					929001546406
Xitanium SR Bridge independent					929001546506

### Sensor Ready (SR) – for industry applications

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 150W 0.2-0.7A 300V SR 230V iXt	425x30x21	100-1	0.2-0.7	100-300	929001540906
Xitanium 100W 0.15-0.5A 300V SR 230V iXt	425x30x21	100-1	0.15-0.5	100-300	929001540806

### DALI dimmable and programmable



Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 100W/0.25-0.7A 220V TD16 230V	360 x 30 x 16	100-1	0.25-0.7	50-220	929001547306
Xitanium 75W/0.12-0.4A 215V TD 230V	360 x 30 x 21	100-1	0.12-0.4	100-215	929000852103
Xitanium 60W/0.08-0.35A 300V TD16 230V	280 x 30 x 16	100-1	0.08-0.35	100-300	929000993206
Xitanium 60W/0.08-0.35A 220V TD16 230V	280 x 30 x 16	100-1	0.08-0.35	100-220	929001547206
Xitanium 60W 0.15-0.5A 220V TD11 230V	280x30x11	100-1	0.15-0.5	50-220	929001627606
Xitanium 35W 0.08-0.35A 220V TD11 230V	280x30x11	100-1	0.08-0.35	50-220	929001627706
Xitanium 36W/0.12-0.4A 110V TD 230V	360 x 30 x 21	100-1	0.12-0.4	50-110	929000993106
Xitanium 35W/0.08-0.35A 150V TD16 230V	280 x 30 x 16	100-1	0.08-0.35	50-150	929000852203

### DALI dimmable and programmable – for industry applications



Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 300W 0.5-1.4A 300V iXt TD 230V	360 x 50 x 28	100-1	0.5-1.4	100-300	929001608406
Xitanium 150W/0.2-0.7A 300V iXt TD 230V	360 x 30 x 21	100-1	0.2-0.7	100-300	929001516506
Xitanium 100W/0.15-0.5A 300V iXt TD 230V	360 x 30 x 21	100-1	0.15-0.5	100-300	929001516406

## 1-10 V dimmable



Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 75W/0.12-0.4A 220V 1-10V 230V	280 x 30 x 21	100-10	0.12-0.4	100-220	929000953706
Xitanium 36W/0.12-0.4A 115V 1-10V 230V	280 x 30 x 21	100-10	0.12-0.4	50-115	929000953606

## Fixed output



Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 100W 0.25-0.7A 220V S 230V	360x30x21	n.a.	0.25-0.7	50-220	929001529506
Xitanium 100W 0.25-0.7A 220V 16 230V	360x30x16	n.a.	0.25-0.7	50-220	929001613406
Xitanium 75W 0.12-0.4A 220V 230V	280x30x21	n.a.	0.12-0.4	100-220	929000950706
Xitanium 60W 0.08-0.35A 220V S/16 230V	280x30x16	n.a.	0.08-0.35	50-220	929001557506
Xitanium 60W 0.08-0.35A 300V S/16 230V	280x30x16	n.a.	0.08-0.35	100-300	929001557406
Xitanium 60W 0.08-0.35A 300V S 230V	280x30x21	n.a.	0.08-0.35	100-300	929001506506
Xitanium 60W 0.08-0.35A 220V S 230V	280x30x21	n.a.	0.08-0.35	50-220	929001509106
Xitanium 60W 0.08-0.35A 220V 16 230V	280x30x16	n.a.	0.08-0.35	50-220	929001557806
Xitanium 60W 0.08-0.35A 300V 16 230V	280x30x16	n.a.	0.08-0.35	100-300	929001557706
Xitanium 36W 0.12-0.4A 115V 230V	280x30x21	n.a.	0.12-0.4	50-115	929000950606
Xitanium 35W 0.08-0.35A 150V S 230V	280x30x21	n.a.	0.08-0.35	50-150	929001506406
Xitanium 35W 0.08-0.35A 150V 16 230V	280x30x16	n.a.	0.08-0.35	50-150	929001557606
Xitanium 35W 0.08-0.35A 150V S/16 230V	280x30x16	n.a.	0.08-0.35	50-150	929001557306

## Fixed output - for industry applications



Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 150W/0.2-0.7A 300V iXt 230V	360 x 30 x 21	n.a.	0.2-0.7	100-300	929001506706
Xitanium 100W/0.15-0.5A 300V iXt 230V	360 x 30 x 21	n.a.	0.15-0.5	100-300	929001506606

## Xitanium and Fortimo - 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 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.

# LV (isolated) LED drivers

## Sensor Ready (SR)

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 75W 0.7-2.0A 54V SR 230V	360x30x21	100-1	0.7-2	27-54	929001505006
Xitanium 36W 0.3-1A 54V SR 230V	360x30x21	100-1	0.3-1	27-54	929001516306



## DALI dimmable and programmable

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 75W/0.7-2A 54V TD 230V	360 x 30 x 21	100-1	0.7-2	27-54	929001503706
Xitanium 36W/0.3-1A 54V TD 230V	360 x 30 x 21	100-1	0.3-1	27-54	929001503606



## 1-10 V dimmable

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 75W/0.7-2A 54V 1-10V 230V	425 x 30 x 26.5	100-10	0.7-2	27-54	929000863503
Xitanium 36W/0.3-1A 54V 1-10V 230V	360 x 30 x 26.5	100-10	0.3-1	27-54	929000854003



## Fixed output

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 75W 0.7-2A 54V 230V	360x30x21	n.a.	0.7-2	27-54	929000958806
Xitanium 65W 0.5-1.4A 54V S 230V	360x30x21	n.a.	0.5-1.4	27-54	929001571506
Xitanium 36W 0.3-1A 54V 230V	360x30x21	n.a.	0.3-1	27-54	929000958706
Xitanium 36W 0.3-1.05A 54V S 230V	360x30x21	n.a.	0.3-1.05	27-54	929001571406



## Single current drivers

Product name	Housing	Dimming range	Output current range	Output voltage range	Order code
	mm	%	A	Vdc	12NC
Xitanium 25W 0.5/0.6A 42V 13 230V	250 x 48.6 x 13	n.a.	0.5A/0.6	30-42	929001425380
Xitanium 44W 0.9/1.05A 42V 13 230V	250 x 48.6 x 13	n.a.	0.9A/1.05	30-42	929001425480

For more information see datasheet on datasheets [www.philips.com/technology](http://www.philips.com/technology)



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