

**PHILIPS**

Connected lighting  
components

Xitanium SR drivers  
EasyAir office sensors



# Connected lighting components

innovation ✨ you



Light beyond  
**illumination**

The lighting infrastructure – both inside and outdoors – is perfect for collecting and carrying information, and using it to improve services, enhance the quality of life, increase sustainability and reduce costs. Our components for connected lighting solutions help you produce luminaires that increase energy efficiency and help manage buildings and municipal environments in an environmentally friendly way.

### **The Internet of Things**

Via the Internet of Things (IoT), smart objects interact with each other and their surroundings. Luminaires can sense changes, collect information and react to it, and share data with other system elements. This is connected lighting, and it harnesses the huge potential of the IoT. We supply lighting components that tap into that. They add functionality – and therefore value – to your connected luminaires.

### **Connected lighting in indoor applications**

In indoor connected lighting systems, sensors distributed throughout a building gather information about usage of specific spaces. Every luminaire becomes a node that senses, collects and passes on information about energy consumption, daylight harvesting and occupancy. This information is used to manage heating, ventilation, IT and cleaning resources in the most cost effective way. Facility managers can streamline operations, achieve sustainability goals, and optimize workspace utilization. Historic records simplify making decisions about long-term resource management. Connected lighting makes effective use of space in activity based workspaces to.

### **Connected lighting in outdoor applications**

In outdoor lighting applications, LEDs have transformed the city landscape, improving the quality of life and reducing energy consumption. Taking this up a level, connected lighting improves asset management, makes energy management more transparent, contributes to safety,

boosts sustainability and lowers total cost of ownership. For municipal authorities, connectivity is an enabler for cost advantage in terms of energy savings, lowers maintenance costs and speeds up response times. However, constant pressure on financial resources often means that upgrades must be implemented in phases. First upgrade to LED lighting, then implement connected lighting in the future. Philips connected lighting components facilitate this.

### **Smoothing your path to connected lighting luminaires**

Choosing Philips as the supplier of components for connected lighting smooths your path into this dynamic and rapidly growing world. Our connected lighting components are forward compatible, so as the technology evolves, you can design them into luminaires that are controllable today, safe in the knowledge that your next-generation luminaires can be upgraded in the future. The portfolio of connected components is spearheaded by the Philips Xitanium SR drivers, Philips EasyAir Sensors and Philips Field Apps for control and configuration via a smartphone. The Xitanium SR driver can be used with our sensors but also with products from our SR certified partners. Since all our connected lighting components are forward compatible you can confidently design our components into controllable luminaires knowing that, as the technology evolves, your next-generation can be upgraded without costly re-engineering. Let's connect.

Philips Xitanium SR Indoor drivers

# Your gateway to luminaires for **connected lighting in offices**



The Philips Xitanium SR Indoor LED drivers standardize the connection between driver and sensor to eliminate the need for separate components and to remove concerns about compatibility. Fast and easy design-in means you spend less time and money bringing new connected solutions to market.



Office



A phone app connected via Bluetooth® extends the possibilities for data sharing



### **Spend less time and money bringing connected solutions to market**

For indoor connected lighting in offices, we have two ranges: Philips Xitanium SR LED drivers and Philips EasyAir Sensors. The Xitanium SR LED drivers standardize the connection between driver and sensor thus eliminating the need for separate components and removing concerns about compatibility. This means you spend less time and money bringing new connected solutions to market.

### **Integrated power supplies, energy metering and diagnostics**

The Xitanium SR LED driver doesn't just provide power conversion for LED lighting; it also features integrated power supplies for sensors, as well as energy metering and diagnostics. Very few external components are required. As a result, luminaire design, manufacturing and installation are greatly simplified and more cost effective. Communication between driver and sensor is via a standard interface based on DALI 2.0. This means that you can also choose from a wide range of third-party sensors via

the SR Certified program to design a solution that's right for you and your customers.

### **Benefits of the Xitanium SR LED driver for indoor applications**

- integral low-voltage power supply for the sensor, so no need for additional power supplies
- integrated energy metering, so no need for external components
- simplified luminaire integration thanks to fewer wires and components
- dim-to-off so no need for a relay
- standardized SR interface to work with EasyAir and other SR Certified devices.





Philips EasyAir wireless sensors

# Lighting, **when** **and where** it's needed

Sensors ensure lighting is only on when and where it is needed. The EasyAir sensors bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. EasyAir sensors are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals.

# Easy to integrate wireless sensors for office applications



Philips EasyAir wireless communication sensors are single-box, luminaire-mounted devices with simple two-wire connection making them easy to design-in. They combine presence and daylight sensing in one unit thus reducing the likelihood of wiring errors during installation. The sensors are powered from the Philips Xitanium SR Driver, eliminating the need for extra boxes or modules in the luminaire or ceiling cavity. They use wireless communication, reducing cabling and installation cost and are therefore ideal for renovation projects as well as new installations.

## Wireless configuration

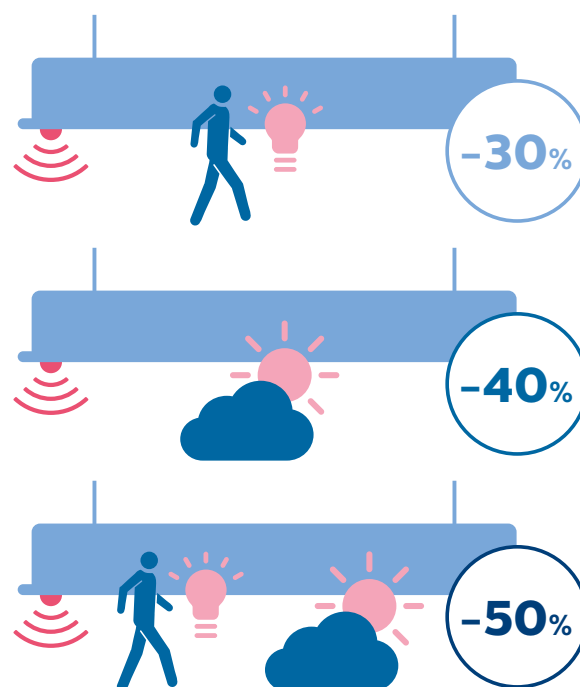
Configuration can be done before installation using SimpleSet and on site via Philips Field Apps. This gives you and your clients more freedom during the whole installation process. Communication is via a Zigbee protocol, and EasyAir is prepared to accommodate thread as it emerges. Advanced Zigbee technology makes it possible to have multiple sensors working as a single group. You can also create different scenes for specific applications, such as a presentation mode in a meeting room.

## EasyAir standalone and group sensors

The EasyAir standalone SNS100 brings huge benefits in terms of energy management and building regulation conformity. It is easily integrated into the luminaire, which

reduces the likelihood of errors during installation. The EasyAir advanced grouping SNS200 is a breakthrough in sensor applications thanks to its unique capability for grouping sensors with Zigbee. It enables sensors to work together and communicate without wires between luminaires. Having just one sensor for daylight and occupancy sensing makes control per luminaire more practical as well as further reducing clutter in the ceiling. Configuration and commissioning is done with the Philips Field Apps.

The sensor portfolio will be further extended to include other applications to offer even more 'personal control' solutions using a smartphone. The possibilities are endless.



A photograph of three people in professional attire standing outdoors at night. A man on the left is seen in profile, wearing glasses and a dark suit. A man in the center is smiling and looking towards the woman on the right. The woman is also smiling and looking towards the man in the center. They are standing under a modern street lamp with a large, glowing, dome-shaped light fixture. The background is dark with some greenery visible.

Philips Xitanium SR Outdoor driver

Step up to luminaires for  
**connected lighting in  
outdoor** applications



Our components for outdoor applications start with the Xitanium SR LED driver. This driver simplifies the design and production of connected luminaires that use intelligent lighting controllers from our SR Certified Partners by reducing wiring and component count. Furthermore, it enables you to design and manufacture future-proof luminaire solutions that align with phased investment capabilities of municipal authorities.

#### **Keeping the component count low**

The Xitanium SR LED driver features an open interface for two-way driver communication (based on DALI 2.0). To further simplify wiring and reduce the component count, it has two integrated power supplies, one as used for indoor SR drivers as well as an auxiliary 24V power supply for higher power sensors used in city management systems. In addition, the driver includes energy metering functionality that provides very accurate data (accurate to within 1%) for smart city systems through the SR interface. And thanks to the driver and light engine diagnostics information available via the SR interface, which keeps the organization up-to-date about maintenance requirements, workflow procedures can be simplified. The standard Xitanium features, such as 100,000 hour lifetime, 6kV/8kV surge protection, SimpleSet wireless configuration, dim-to-off, Module Temperature Protection (MTP) and Constant Light Output (CLO) are part of the package.

#### **Benefits of the Xitanium SR LED**

##### **Outdoor driver**

- integral low-voltage power supply, so no need for additional power supplies
- surge protection by the driver
- integrated energy metering, so no need for external components
- simplified luminaire integration thanks to fewer wires and components
- dim-to-off so no need for a relay
- integrated LED driver diagnostics to streamline resource management.

#### **Field upgradeable outdoor luminaires**

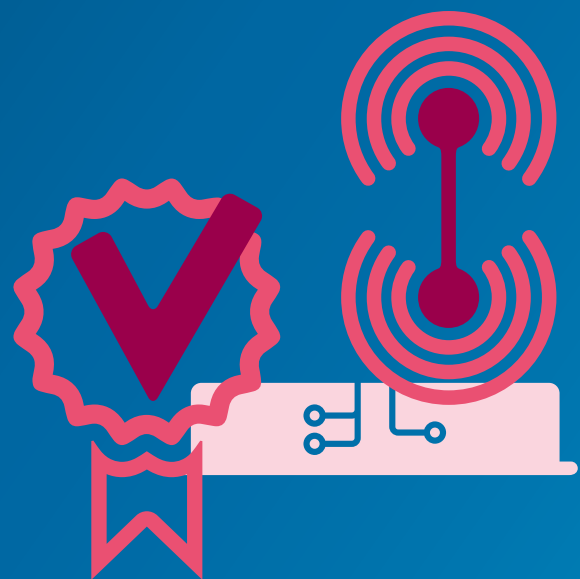
To meet the needs of municipal authorities with budget limitations and therefore cannot afford to upgrade to connected lighting in a single step, we offer a phased investment solution. Using the Xitanium SR LED driver in combination with industry-standard Zhaga connectors enables sensors and other connected devices to be added to the luminaire at a later date. Zhaga enables upgrading by simply removing a cover and screwing in a connectivity module. Municipalities can choose to upgrade to connectivity when they have the budget. It lowers the threshold to connectivity, while keeping the door open for longer term 'total cost of ownership' benefits. The Zhaga connector is a low voltage socket, making it smaller and lower cost than NEMA sockets.



# SR Certified Partner program

For the ultimate reassurance of connectivity, Philips has introduced the SR Certified Partner program, which enables companies to apply for certification of their components and sensors as compatible with the Xitanium SR LED driver. We ensure all partners' products are tested to work seamlessly with the Xitanium SR Drivers.

The list is growing to cover building management systems (BMS) and city management systems (CMS). The program helps you put together a connected solution from participating companies. The Drivers are based on an open platform, and if you are looking for functionality that is complementary to the capabilities of our components, the program is your seal of approval. Let's connect.



# Product and ordering information



## Xitanium Linear drivers

Product name	Housing	Output current range	Output voltage range	Dimming range	DALI power supply max. supply current	Energy metering accuracy	Order Code
	mm	mA	V	%	mA	%	EOC
Xitanium 36W 0.3-1A 54V SR 230V	360x30x21	300-1000	27-54	100-1	52	4	8718696567715
Xitanium 75W 0.7-2A 54V SR 230V	360x30x21	700-2000	27-54	100-1	52	4	8718696552704
Xitanium 35W 0.08-0.35A 150V SR 230V	360x30x21	80-350	50-150	100-1	52	4	871869669814300
Xitanium 60W 0.08-0.35A 220V SR 230V	360x30x21	80-350	50-220	100-1	52	4	871869669816700
Xitanium 60W 0.08-0.35A 300V SR 230V	360x30x21	80-350	100-300	100-1	52	4	871869669818100
Xitanium 100W 0.25-0.7A 220V SR 230V	360x30x21	250-700	50-220	100-1	52	4	871869669924900
Xitanium 100W 0.15-0.5A 300V SR 230V iXT	425x30x21	150-500	100-300	100-1	52	4	871869669926300
Xitanium 150W 0.2-0.7A 300V SR 230V iXT	425x30x21	200-700	100-300	100-1	52	4	871869669928700

## Xitanium Outdoor drivers

Product name	Housing	Output current range	Output voltage range	Efficiency @ 100% load	Lifetime @ Tc life	Energy metering accuracy	Order code
	mm	mA	V	%	hrs	%	EOC
Xitanium SR Outdoor 75W 0.2-0.7A S240 sXt	S240	200-700	50-150	88	100.000	1	871869656879800
Xitanium SR Outdoor 75W 0.3-1.0A S240 sXt	S240	300-1050	20-100	88	100.000	1	871869667414700
Xitanium SR Outdoor 150W 0.2-0.7A S240 sXt	S240	200-700	90-283	90	100.000	1	871869656875000
Xitanium SR Outdoor 150W 0.3-1.0A S240 sXt	S240	300-1050	70-214	90	100.000	1	871869667412300

\* Standard features: Input voltage range 170-264V, Surge protection DM/CM 6/8kV, SimpleSet, DynaDimmer, Module Temperature Protection, diagnostics via SR interface, DALI power supply via SR interface, 24V power supply

## EasyAir sensors



Product name	Housing (volume inside luminaire)	Req. Luminaire hole	Occupancy technology	Detection area at 3m height (minor movement)	Detection area at 2.4m height (minor movement)	Viewing Angle	Full light dimlevel	Operating Ambient temperature	Order Code
	mm	mm		m	m		%	°C	EOC
EasyAir office sensor SNS100 standalone	50x19x31.5 (50x19x24)	44x17	Passive IR	3.6x3.4	2.9x2.7	X=72°Y=86°	5-100%	0-55	871869690056700
EasyAir office sensor SNS200 advanced grouping	50x19x31.5 (50x19x24)	44x17	Passive IR	3.6x3.4	2.9x2.7	X=72°Y=86°	5-100%	0-55	871869669894500

## 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.

