

**PHILIPS**

CitySwan LED gen3

**Bring visual guidance  
and quality to your city**





# Global trends

## We are increasingly urban and global

Today 50% of the world's population lives in cities. This is expected to rise to 75% by 2050.

## Environmental awareness

Cities want to meet their sustainability goals and reduce light pollution and their impact on the environment.

## Cities want to establish identity

Municipalities want to enhance the quality of life, well being of citizens and create comfortable public spaces.

## Growing connectivity

There are new opportunities to improve urban life through intelligent lighting part of the IoT eco-system.

Photo: Søndermarken, Denmark

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# The story behind CitySwan gen3

Designed by Danish architects Bjarne Schläger and Morten Weeke Borup, CitySwan LED gen3 will fit any city street or park across cities.

The simple and beautiful shape is designed around an ellipsis. This gives a feeling of elegance and purity and render CitySwan LED gen3 as an inseparable part of the city's identity.

At night a soft glow will shape the design of the luminaire. This reveals CitySwan LED gen3 as a very comfortable and soft luminaire completely in peace with its surroundings.

CitySwan has been assigned the reddot award and The Danish Design Prize in 2010/11 as well as the city. people.light Award in 2009.



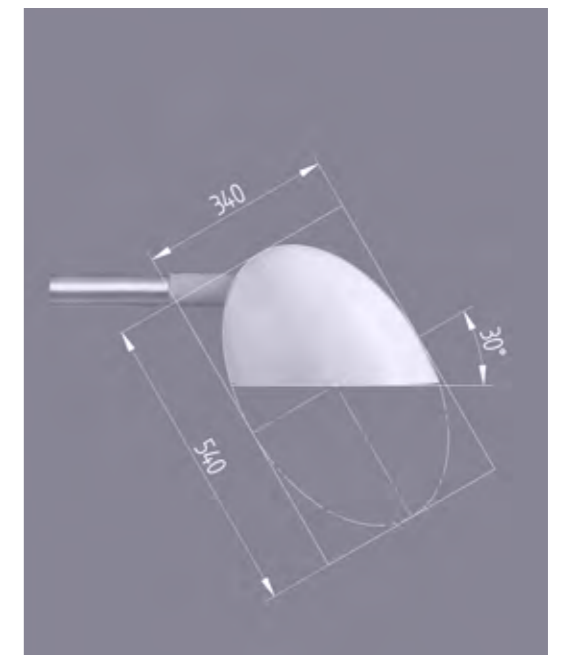
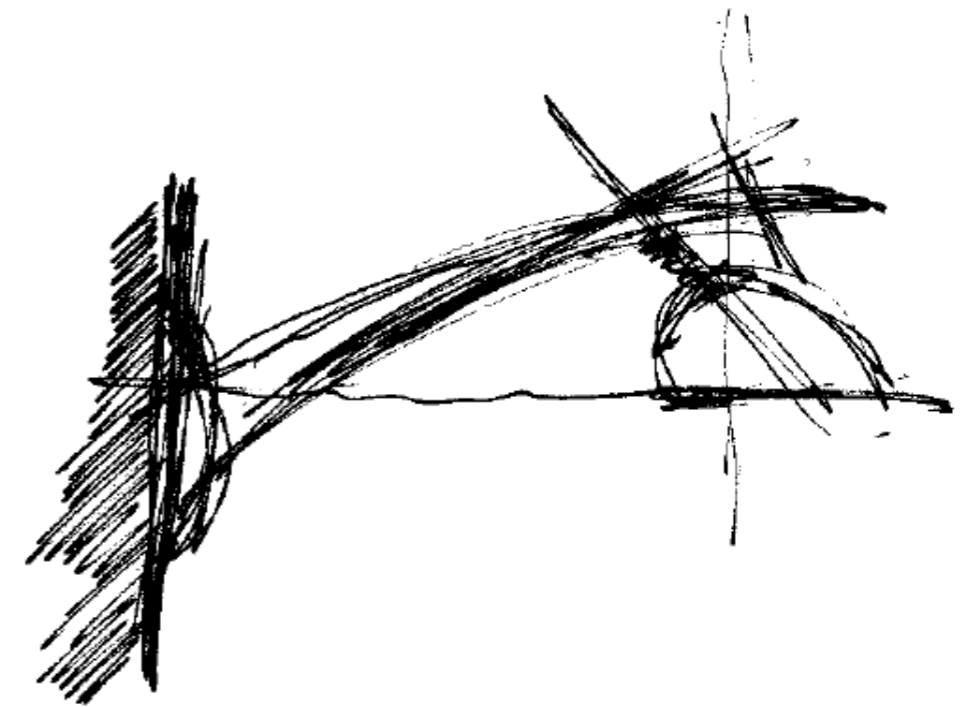
reddot design award  
winner 2008



The Danish Design Prize  
2010/11



Architect MAA Bjarne Schläger (left)  
Architect MAA MDL Morten Weeke Borup (right)



CitySwan gen3 is shaped around the form of an ellipsis symbolizing a swans body above the waterline



# Create the right atmosphere with light ...

The latest generation of the CitySwan LED offers fully balanced, comfortable lighting effects with minimum glare, enabled by a round LED engine, which follows the shape of the luminaire.

CitySwan LED gen3 features a white opal lampshade that makes the luminaire a perceptible object in public space. During nighttime CitySwan illuminates street and space with a soft and functional light. For enhanced guidance there are optional extra LEDs available. Other creative options for city branding can be realized thanks to a great variety of pastel colors for the additional LED lighting. Thus, it is possible to create changing illumination situations and light moods for path or place marking, to emphasize local identities or give urban space an innovative setting.

The luminaire comes with a variety of suspensions and optics, offering maximum freedom in designing lighting for city center and residential area applications.



# Customize your city with dynamic uplift

As the needs and roles of cities evolve, requirements towards lighting are also changing. Beyond illumination cities want to create their own signature, emphasizing on their unique character.

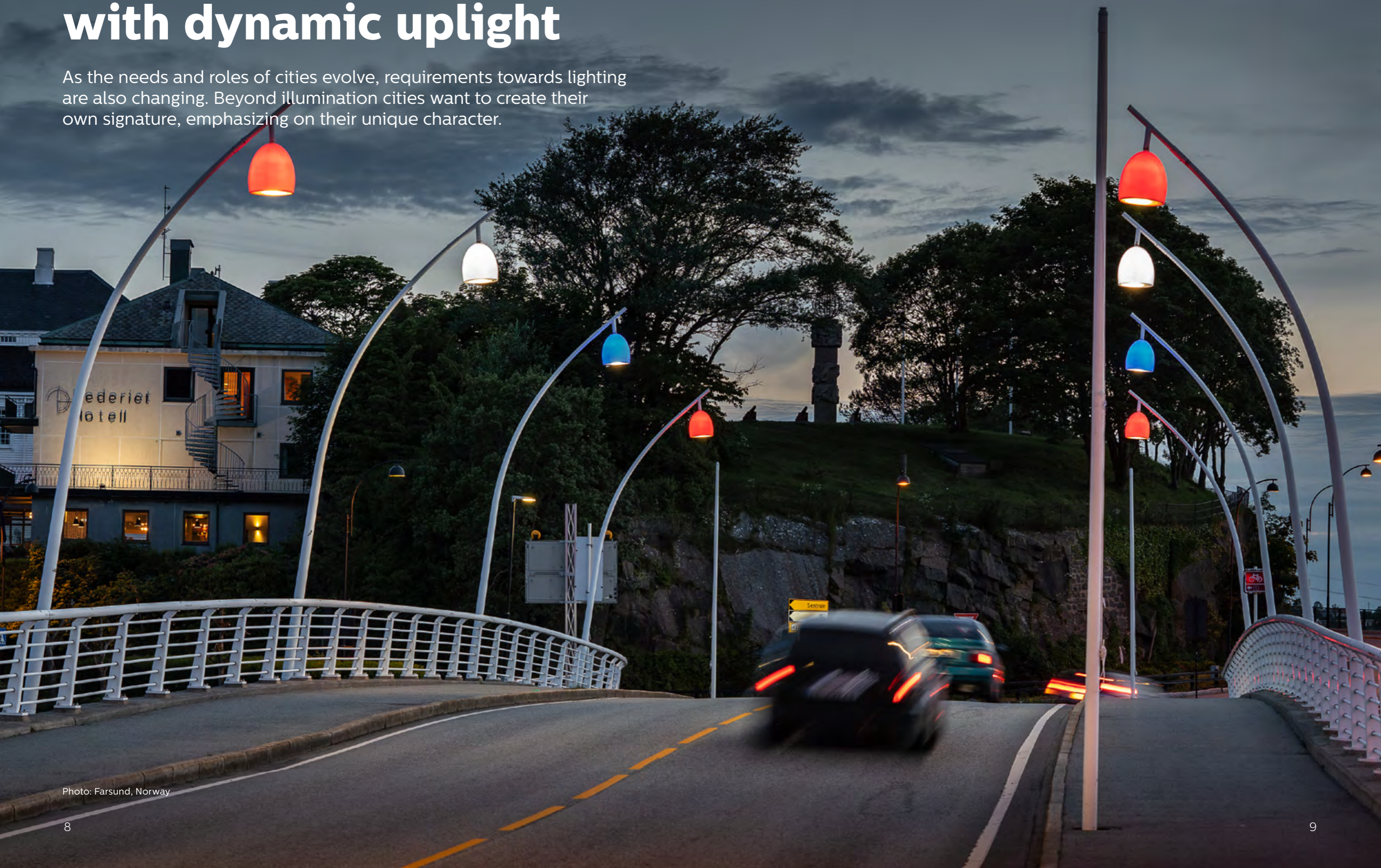


Photo: Farsund, Norway





Thanks to dynamic RGBW you can remotely customize your city's lighting to any color of your choice via the dedicated app. Our Interact Dynamic App gives you the possibility to specify colors based on a calendar and assign your choices to selected group(s) of luminaires.

Whether you want to celebrate New Year's Eve, dress up for Halloween or raise awareness on a social issue we are here to help you light up your city for any occasion. Dynamic RGBW will not only create a unique atmosphere relevant to every event but it can also guide both citizens and tourists to the exact location.

With our Interact Dynamic App you can easily change color of you scenes and make changes to your calendar function. You can also override events to adapt uplight to any desired color instantly. The Interact Dynamic App helps you to fully adapt to any given occasion or unplanned event in only a few minutes.



Interact Dynamic App available in Google Play for android™



Photo: Farsund, Norway



# Meet CitySwan Gen3



Large version

The luminaire comes in 2 shapes and sizes to offer the perfect match with your application and ensure that the dimensions of the luminaire and pole are well balanced.

The large version will provide a very high-quality image to your project. Your installation will blend harmoniously into its surroundings.

A large choice of suspensions is also available, enabling a variety of mounting options and providing maximum freedom during installation.

The CitySwan family also includes a bollard and wall lamp making the family very useful in many city projects.



Small version





Photo: Søndermarken, Denmark



# Application areas

In the heart of the city, designed around our Philips round LEDGINE platform, CitySwan LED gen3 delivers outstanding levels of lighting and energy performance. CitySwan LED gen3 is part of our Urban Inspiration lighting portfolio with strong focus on the emotional values of lighting:

For every application in the city, we do have several solutions to really inspire and enhance your city, while meeting your demands and beyond.

- create ambiance
- enhancing well-being
- promoting tourism and heritage
- increase the livability in the city

## Residential area

- Residential street
- Cycle path and footpath
- Square, park and playground
- Parking area

## Night life areas

## City center

- Side street
- Square, park and playground
- Cycle path and footpath
- Shopping and pedestrian area







Photo: Örebro, Sweden  
Moramast – part of Saferoad Group

# Philips round LEDGINE

Thanks to the built in Philips LEDGINE round platform, and the wide range of available application-tailored optics, CitySwan LED gen3 delivers the right amount of light and in the right direction on your street, enabling further energy savings.



Improved light distribution ensures a perfect fit for every application. The optics offer flexibility, enabling standardization over applications with outstanding performance across a wide range of geometries – as well as design parameters such as overhang. They are easy to use, and distribution remains the same, so even after a LED upgrade you are assured of design continuity. The optics comply with national and European road lighting standards.



Using a standard engine across key portfolio means you can benefit from the latest LED upgrades to various products without changing light distributions. The flux packages are pre-defined across product ranges, including CLO options. Flux minimization is achieved by using the highest flux package (up to L98) per standard. And for upgrades, the lighting image is continued, and the engine is available for your installed base. Easy configuration is assured thanks to the Service tag.

## Did you know?

CitySwan gen3 has GLOW effect at night gently shaping the design of the housing.

If you want to customize your installation CitySwan gen3 is available in all RAL colors. The housing is not painted but moulded in the desired RAL color. This ensures a stronger and long lasting appearance of the luminaire with no risk damaged painting.

We offer different standard RAL colors and other RAL colors are available on request.

### CitySwan gen3 colored canopy

Available in:



Other RAL colors available on request





Photo: Sydhavnen, Denmark

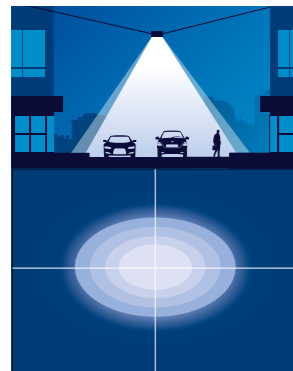


# Portfolio of optics and comfort solutions

## 6 different optics

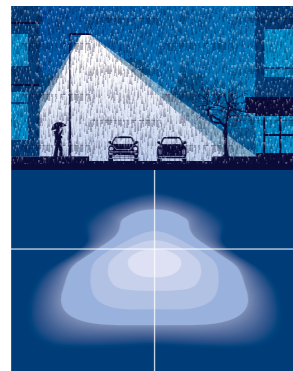
### LEDGINE optics for Roads and Streets

DSW



Distribution Road Symmetric (for wire suspension)

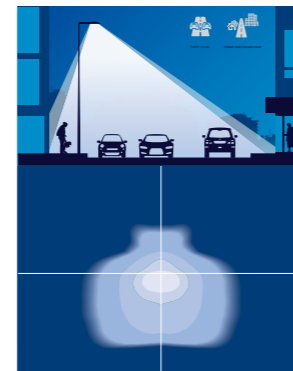
DK



Distribution Wet Road (for wire suspension)

### LEDGINE optic for dedicated application areas

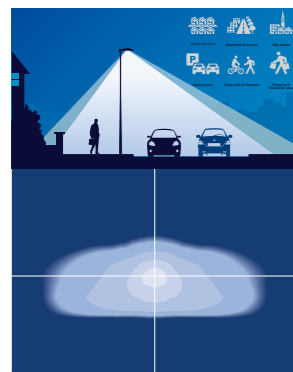
MDA



Distribution Asymmetrical

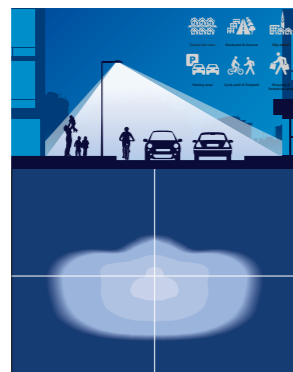
### LEDGINE optics for Residential Streets

MDW



Distribution Street Wide

MDM



Distribution Street Medium

MDS



Distribution Symmetric

## Did you know?

The round LEDGINE in CitySwan LEDgen3 is slightly lifted to deliver an excellent comfort lighting.

On request, CitySwan LED gen3 can be equipped with a round back light cover to avoid light trespassing back.

In applications where lighting comfort is more important than performance (park & plazas and all pedestrian areas) CitySwan LED gen3 can be equipped with a satinice diffuser for best-in-class comfort!



Photo: Sydhavnen, Denmark



# System ready architecture

The digital and smart city era is accelerating fast. To keep pace, cities need luminaires that are not only designed for today's technologies, but are prepared for future advances and upgrades. The System ready architecture gives you a scalable foundation that you can build on whenever your city is ready to opt into new advances in technology. So you can take light beyond illumination into a dynamic world of sensor-rich lighting - whenever you're ready.

## Upgrade now or later

CitySwan LED gen3 is a System ready luminaire, coming with universal sockets on each luminaire, so all you have to do is click in controllers or sensors to activate new applications. That means you can install your luminaires today and mount controllers and sensors at a later date - without any hassle.



### Future-proof upgrades

System ready luminaires can be paired with sensors and controllers now or later. A city solution that is completely flexible and scalable.



### Plug and play

Designed for hassle-free installation, controllers and sensors can be mounted easily.



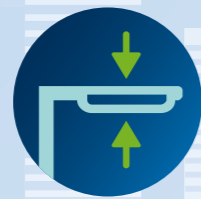
### Standardized technology

Thanks to Zhaga standardization and the SR certified program, you will have access to preferred technology, allowing you to make use of innovations from different suppliers.



### Aesthetic design

The small, unobtrusive form factor can be mounted discreetly on luminaires.



### Flexibility

The SR socket can be mounted on the bottom or on top inside the luminaire, giving you the flexibility to choose from all sources of sensor applications. The IP66 rating also ensures there is no risk of water ingress.



### Open innovation platform

Using this new System ready architecture gives you access to new innovations that could enhance your lighting even further in the future.

## An open platform

Our System ready luminaires use state-of-the-art architectures and components. Because they are SR certified, they are compatible with all components released in our SR program. This ensures you'll always be ready for the latest innovations that will enable you to get more out of your lighting infrastructure.

# Ready to be connected to Interact City

Interact City lighting management software turns your street lighting into a connected network capable of hosting sensors and other IoT enabled devices. It enables you to tap into a wide range of both lighting and non-lighting benefits such as dimming, presence detection, noise, temperature, or incident detection.



For more information about Interact City visit: [www.interact-lighting.com/city](http://www.interact-lighting.com/city)

## Did you know?

To not alter the beautiful design of CitySwan LED gen3, the optional top SR socket and Interact City node is placed internally.

## Get more value out of your lighting infrastructure

Control and monitor your street lighting remotely and immediately identify lighting failures using a single dashboard application. With full control of your city lighting you can identify opportunities for further energy savings by dimming, scheduling and zoning. Interact City enables you to reduce CO<sub>2</sub> emissions, meet sustainability targets and reduce costs, enabling you to reinvest the savings into other areas of your city's infrastructure.

The Open API's of the system also allow Interact City lighting management software to be integrated into your other city management systems and allow your existing partners or independent third parties to use it as a platform for future innovation.







Photo: Tehomet - a Valmont Company



# Family range and installation overview

From residential streets up to the city center, for renovation and new luminaires, the CitySwan LED gen3 family is the perfect solution. Due to the different mounting possibilities and different design and size propositions, installations varying from 3 up to 14 meters will not be any issue.



## CitySwan LED gen3 small



## CitySwan LED gen3 Large





# Configuration overview



## Stand alone

LEDGINE Round  
Easily replaceable LED unit  
Glow effect

## System Ready

LEDGINE Round  
Easily replaceable LED unit  
Glow effect  
**2 x SR-connector: top: inside mounted  
bottom: mounted in front glass**

## Connected

LEDGINE Round  
Easily replaceable LED unit  
Glow effect  
2 x SR-connector: top: inside mounted  
bottom: mounted in front glass  
**Interact City integrated**

## Dynamic

LEDGINE Round  
Easily replaceable LED unit  
Interact City integrated  
**Wireless controlled dynamic RGBW uplight**

# Specifications

	CitySwan LED gen3 small	CitySwan LED gen3 large
Material	Housing: PE; rotational molded	
	Front glass: Tempered flat glass silk screen printed	
Color	Opal white with glow effect or light-tight RAL colors on request	
Marine Salt Protection (MSP)	Yes	
Lumen output	2000 lm to 10000 lm	4000 lm to 14000 lm
Power consumption	12.8W to 106W	28W to 116W
System efficacy	Up to 157 lm/W	
Color temperature	2200, 2700, 3000K or 4000K	
Color Rendering Index (CRI)	>80 (3000K), >70 (2200, 2700, 3000 and 4000K)	
Optics	6 different optics: Distribution Street Medium (MDM), Wide (MDW), Asymmetrical (MDA), Symetric (MDS), Distribution Road Symetric (DSW, for wire suspension) Distribution Wet Road (DK)	
IK- / IP-rating	IK08 / IP66	
Isolation class	Class II (class I on request)	
Surge protection	6 kV (10 kV on request)	
Life time – LED	100,000 h	
Lumen maintenance	L95 to L98	
Life time - driver	100,000 h (0,5% failure / 5.000h)	
Weight	7,3 kg	9,3 kg
Wind area (Scx)	0,08m <sup>2</sup>	0,21m <sup>2</sup>
Mounting types	BPS639: post-top Ø60 mm BRS639: side entry Ø48 or Ø60 mm BWS639: top side entry 3/4" cylindrical pipe thread	BSS639: single wire suspension, 6-9 mm wire BDS639: Ø60 mm side entry BDS639: top 3/4" cylindrical pipe thread (on request)
CLO	Yes	
System Ready (SR) option	Yes	
Top and bottom SR sockets option	Yes	
Control options	Interact City, DALI, Line Switch, DynaDimmer or LumiStep	
RGBW option	Yes	
Comfort accessories	Round Louver / light trespassing back Satin diffuser for comfort	
Operating temperatures	-40°C to +25°C	
Certification	CE	
Environment & recyclability	ECO Design Declaration (ECD), Environmental Product Declaration (EPD) & light source energy marking	

## Did you know?

CitySwan gen3 is designed for 100% recyclability.

The design and disassembly of CitySwan gen3 is according to ECO Design declaration incl. energy marking of the LED board.

We also provide Environmental Product Declaration (EPD) on family declaring from cradle-to-grave environmental impact.

All materials used in CitySwan gen3 are recyclable.

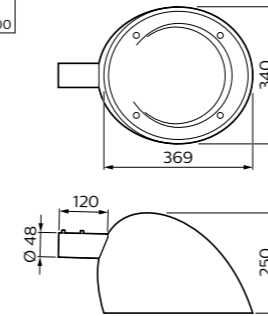




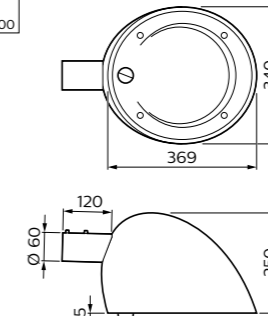
# Dimensional drawings



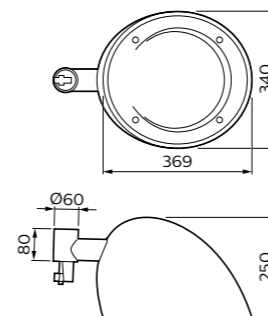
## CitySwan LED gen3 small



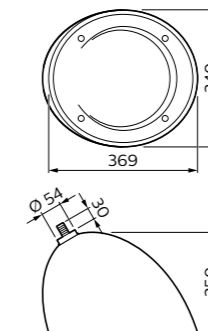
**BRS639**  
Side entry Ø48 mm



**BRS639**  
Side entry Ø60 mm

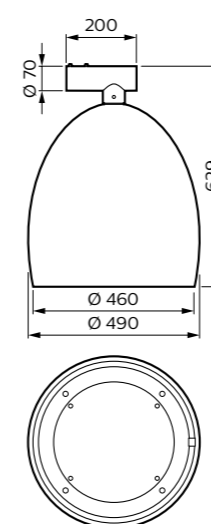
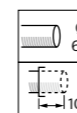


**BPS639**  
Post-top Ø60mm

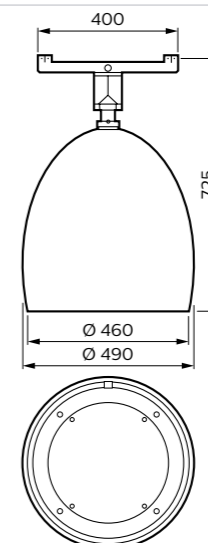


**BWS639**  
Top side-entry 3/4" cylindrical pipe thread for dedicated wall brackets

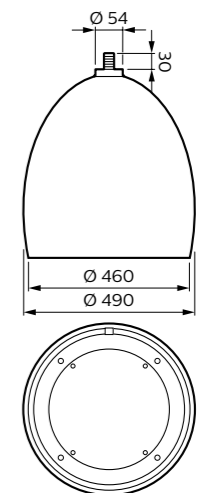
## CitySwan LED gen3 large



**BDS639**  
Top mounted Ø60 mm



**BSS639**  
Suspended/single wire Ø6-9 mm



**BDS639**  
Top 3/4" cylindrical pipe thread (on request)



# Specifications

	CitySwan Wall (BWP445)	CitySwan bollard (BGP444)
Material	Housing: Die cast aluminium Front cover: Shallow clear PC or flat clear or opal PC	Housing: Die cast aluminium Pole: Extruded aluminium Front cover: Shallow clear PC or flat clear or opal PC
Color	Dark grey (close to RAL7021). Other RAL colors on request	Dark grey (close to RAL7021). Other RAL colors on request
Marine Salt Protection (MSP)	Yes	Yes
Lumen output	300 lm	300 lm
Power consumption	7W	7W
System efficacy	42 lm/W	42 lm/W
Color temperature	2.700K, 3.000K & 4.000K	2.700K, 3.000K & 4.000K
Color Rendering Index (CRI)	>80	>80
IK- / IP-rating	IK10 / IP44	IK10 / IP65
Isolation class	II	II
Surge protection	6 kV	6 kV
Life time – LED	100.000 h (L80B10)	100.000 h (L80B10)
Life time - driver	100.000 h (0,5% failure / 5.000 h)	100.000 h (0,5% failure / 5.000 h)
Weight	2,5 kg	8,0 kg
Mounting & Installation	Mounting: Wall monted via four screws Installation: From back or bellow	Mounting: Flange or 800 mm inground Installation: Via door on pole. 4x6mm <sup>2</sup> terminal blocks ( loop in/out)for power and 2x2,5mm <sup>2</sup> for DALI
CLO	No	No
System Ready (SR) option	No	No
Control options	No	DALI
Operating temperatures	-40°C to +25°C	-40°C to +25°C
Certification	CE	CE

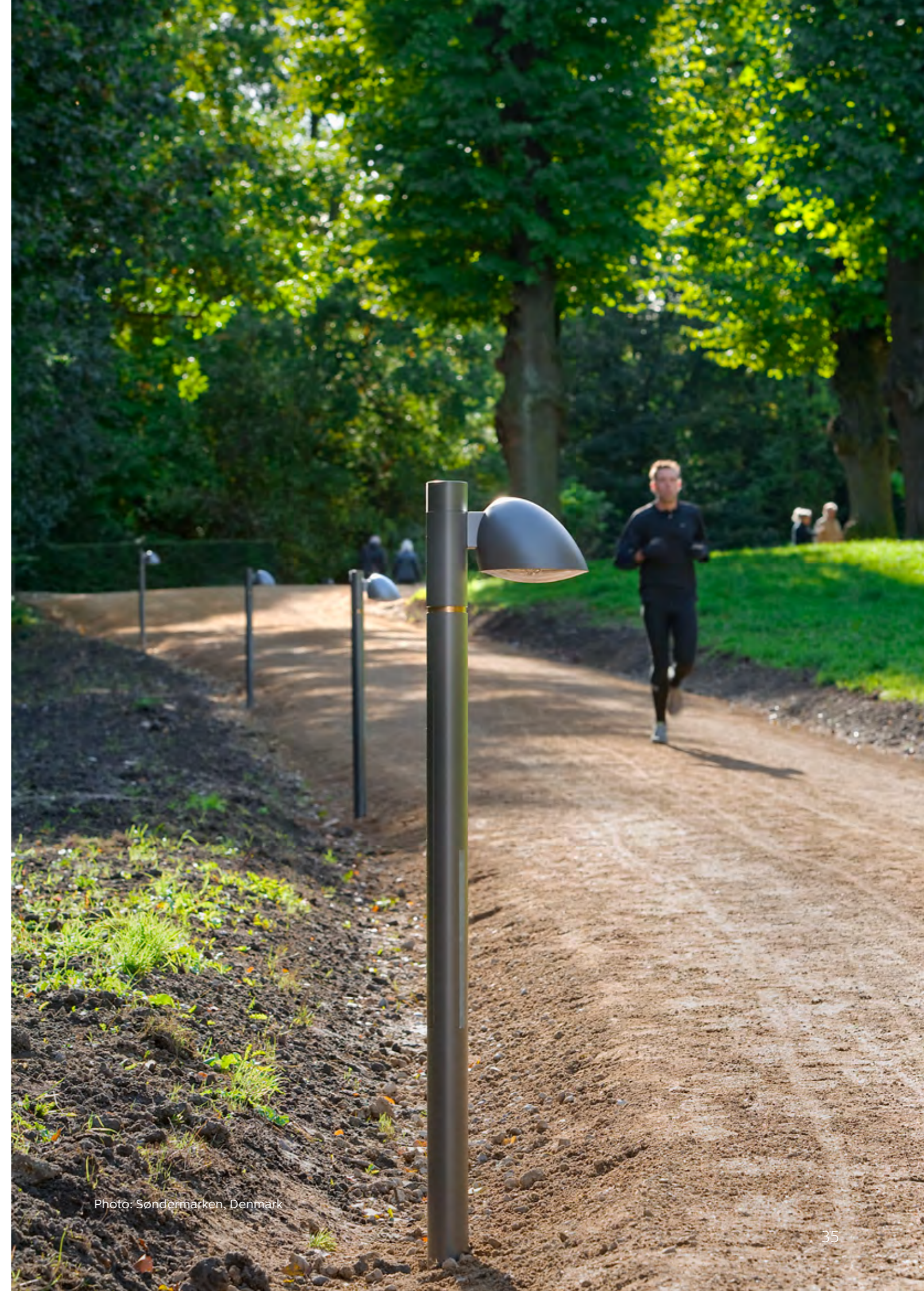


Photo: Søndermarken, Denmark



# Service tag for improved serviceability

Since LED luminaires require different competencies and processes serviceability is always on our mind when designing new products. CitySwan LED gen3 family is easily serviceable thanks to our Service tag system. Service tag is a unique QR-based identification system which can be found in individual luminaires and their packaging. Service tag provides 24/7 access to luminaires and spare parts information while it allows on the spot driver reprogramming. Thanks to Service tag maintenance could never be easier.

NEW Late Stage Configuration delivers a flexible on-demand configuration and installation to Philips professional outdoor luminaires in Europe.



## Why Service tag?



Simplifies installation and servicing full documentation and data at hand



Register your luminaire with your smartphone



All data is stored in the cloud and actively maintained, always up to date



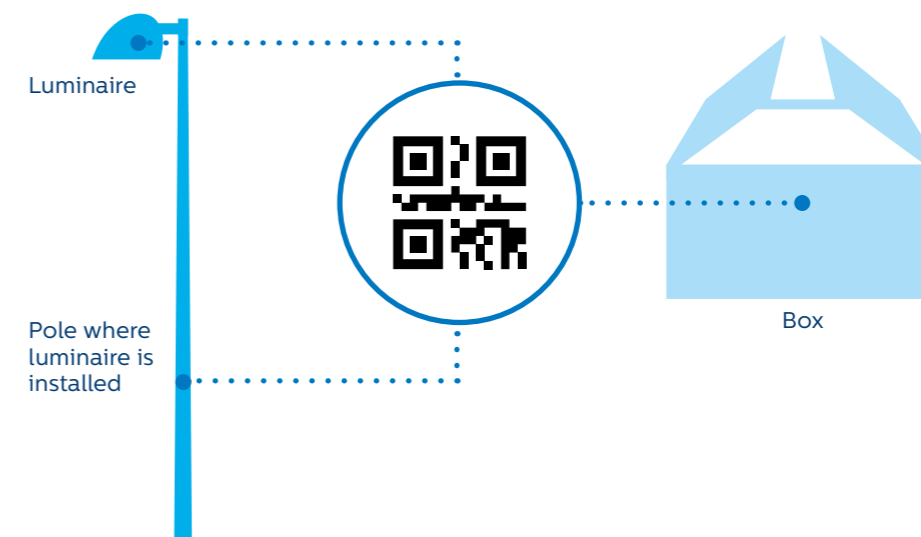
Provides 24/7 access to luminaire and spare parts information



Facilitates spare parts and allows re-programming of drivers on the spot

### Instant access to procedures, spare part list and programming

This tag features a QR-based identification system that gives you instant access to critical information during unpacking, installation, diagnostics, fault reporting and programming. Simply scan the tag with a smartphone or tablet running the Service tag app, and the contents of the box plus installation information are described. The tag also activates the five-year warranty. To assist in diagnosing breakdowns, scanning the tag provides the troubleshooting guide applicable to that luminaire. Sourcing spare parts and 'one touch' programming of parts to original settings can also be done using the app. It's that simple.





# Designed for serviceability



**Replacing driver, LED board or complete driver unit is done by following these simple steps:**

- Step 1:**  
Unscrew four screws to remove front glass.
- Step 2:**  
Unscrew three screws to remove gear tray.
- Step 3:**  
Disconnect the mains cable connector.



Photo: Örebro, Sweden  
Moramast - part of Saferoad Group





Photo: Örebro, Sweden  
Moramast - part of Saferoad Group



# Dedicated masts and brackets



## CitySwan LED gen3 small



Please note: poles and brackets delivered by local pole suppliers



CitySwan LED gen3 large



Please note: poles and brackets delivered by local pole suppliers





Photo: Pettersberggränden, Sweden



