

**PHILIPS**

CityClassic gen2

Urban lighting

A classic design,  
balanced for future-  
thinking municipalities

CityClassic gen2



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# In a world of sustainability challenges, light

The world requires a healthy balance to keep people and planet in perfect harmony. Every day, human enterprise and endeavor puts increasing pressure on the planet, depleting resources and increasing harmful emissions. Our challenge is to turn back the clock and create a future where we have as little impact on the planet as possible. From protecting natural environments to reusing scarce materials and preserving dark skies.

### Pioneers in lighting

As a leader in lighting, Philips has been at the forefront of sustainable thinking. Our design innovations and engineering expertise have already made a huge difference to the world we live in. From energy-saving LEDs to the unique lighting comfort created by GentleBeam. With the introduction of CityClassic gen2, we're reducing our impact on the environment even further, at the same time as creating urban areas that are safer and more pleasant places to enjoy.

### Excellent performance, timeless appeal

The CityClassic gen2 family of luminaires offers the perfect balance between style and performance. A classic design with a clean, well-balanced look that has timeless appeal. But it's not just the minimalist look and feel that is attractive. With effortless connectivity options, CityClassic gen2 is an intelligent choice that is capable of harnessing the latest technologies. So it can also deliver excellent efficiency, intuitive operation and easy servicing and maintenance. A decorative asset that's a smart choice for any future thinking municipality.



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# Designed for efficiency from fast installation to space-saving delivery

## Quick and simple to install

Made for hassle-free installation, CityClassic gen2 has an IP connector in the spigot for mains connection, which eliminates the need to access the gear compartment. and a quick release button for rapid disconnection from the pole. It also offers the option of:

- Smooth pole spigot transitions through dedicated 60mm and 76mm spigot versions.
- Multi-functional spigots to fit all pole diameters, including an adaptor and mask to cover the gap if smaller diameter poles are chosen.

The robust design is tested to 3 G vibration and can withstand 40 G shocks for a secure, long, safe and reliable service life. If late stage programming is not possible or desired, the optional flux selection switch offers customers and trade partners the flexibility to select from four different flux settings, making each luminaire suitable for numerous application sites in a community.

## Easy to service and maintain

No tools, no nonsense. With just two clips to open the gear cover, CityClassic gen2 makes servicing and maintenance a breeze. Two captive screws are within easy reach and individual components are screwed onto the gear tray, making it easy to replace or remove for servicing. Plus plug socket connectors make it simple to separate and access parts. Online options like the Service tag app also make troubleshooting and ordering spare parts quick and simple, as well as replacing and configuring parts like drivers, using near field communication, in the field.

## Efficient shipment and delivery

Each luminaire box includes an individually-packaged canopy and four screws for easy and secure installation to the luminaire. This reduces the amount of space required for lorry transportation and warehouse storage as four times more products will fit on a pallet. This saves on carbon miles and lowering the overall carbon footprint of CityClassic gen2.

Urban lighting

CityClassic gen2

Introducing  
CityClassic gen2





# In tune with the needs of the smartest cities

The CityClassic gen2 is an attractive family of luminaires with high quality light that can be tuned to the exact needs of each city application. It offers a choice between two Philips standardized light engines: Ledgine Optimized offers best-in-class performance with a variety of lens optics and has the option to integrate GentleBeam to maximize visual comfort; ClearGuide is unique to Philips in the lighting marketplace and delivers the highest decorative effect at the same time as optimizing vertical illumination and visual guidance.

Once the right optics have been selected, the desired version of the luminaire, being CityClassic, CityClassic small or the Torch version, then can be further tailored with

L-Tune to dial flux levels up or down to achieve the optimum energy saving and energy efficiency for a wide range of applications.

CityClassic gen2 is a future-proof solution too. The Signify Service tag app provides maintenance and spare part information from the moment the lighting is installed. The Zhaga connector on top of each luminaire can be paired with controls, or already chosen to be prepared for future use when municipalities are ready to invest in smart lighting technologies like Interact City. That makes CityClassic gen2 infinitely upgradable and easy to service and maintain to the highest standards.

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CityClassic gen2  
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Future proof  
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# Style and performance in perfect harmony

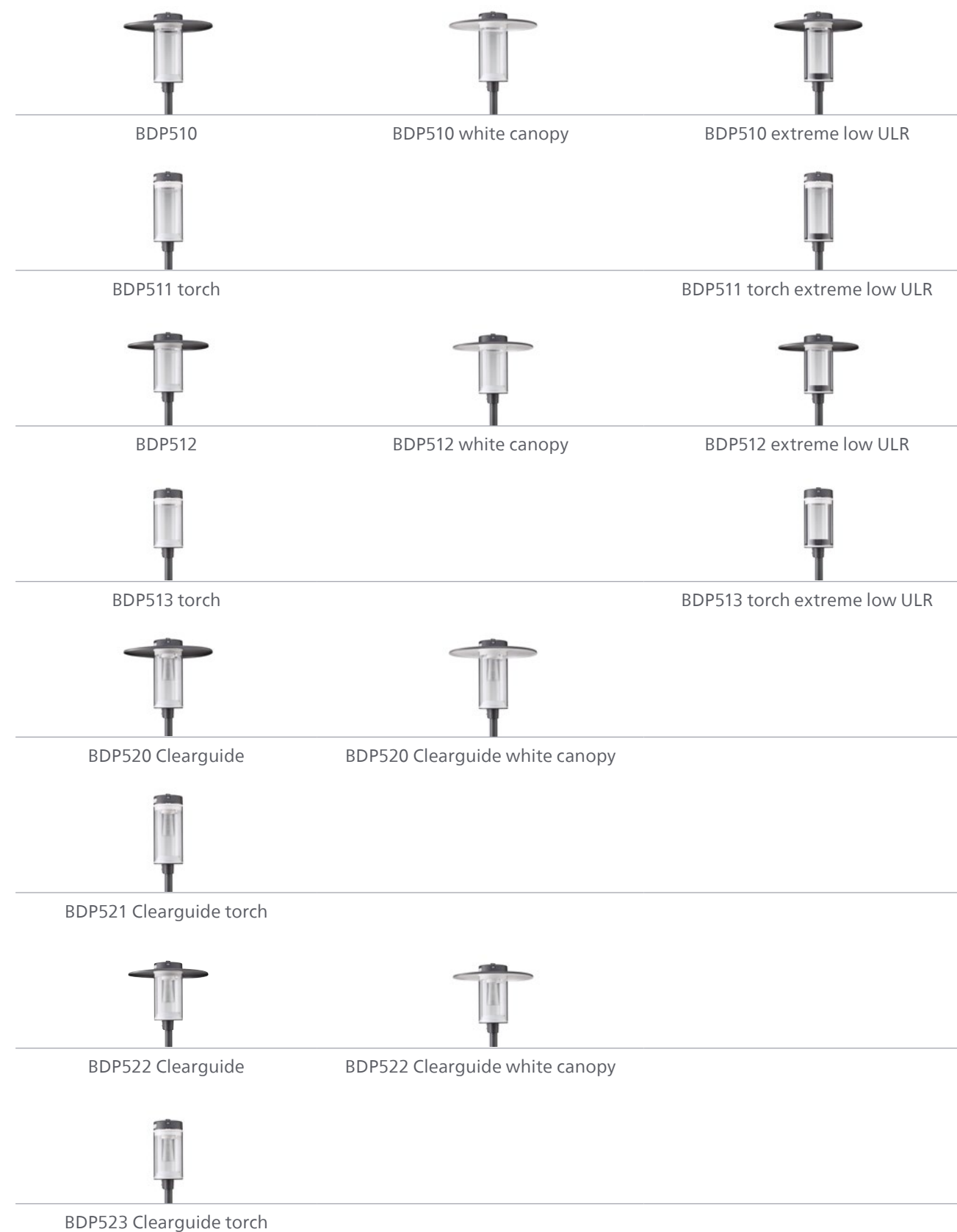
## A modular concept

The family is designed around a flexible, modular concept based on two heights and two large canopy sizes, or a torch option without a canopy. Each is specifically designed to preserve the perfect proportions of the luminaire. The canopy is painted in a single color as standard, but a bicolor option with a white painted underside can also be requested. When using Ledgine O, the range is also easy to retrofit with GentleBeam and/or a backlight louvre.

## Designed for dark skies

Where a minimum Upward Light Ratio (ULR) is required, for natural zones or strict environmental reasons, specific CityClassic gen2 models are the perfect options. These PCN versions feature black arms and a spigot mask, and have a sharper cut-off light distribution to minimize the impact on the environment and dark sky.

## Flexible modular concept



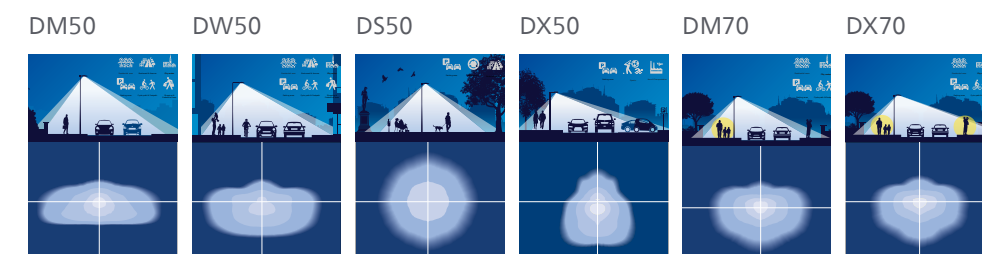


# Lighting performance when it matters most

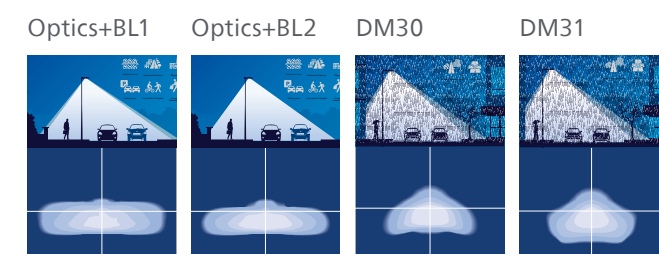
With a choice of LED light engines and optics, you can ensure that you always have the right amount and direction of light on your city streets.

## Portfolio of optics

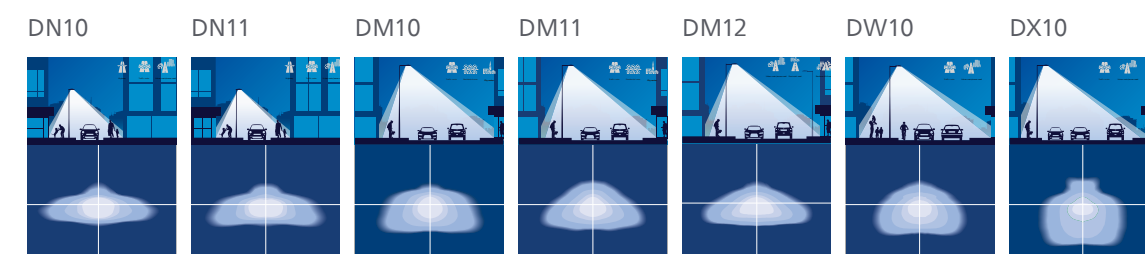
### Illuminance classes (P, C)



### Dedicated applications



### Luminance classes (M)



Urban lighting  
CityClassic gen2  
Lighting  
performance



# LEDGINE optimized



The new generation LEDGINE offers a unique combination of standardization and customization, so you can tune lighting solutions to suit your exact needs. The three pillars that characterize the LEDGINE are standardized optics, standard engine and tailor-made solutions.

Complete new optics range 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 L96B10) 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.

For tuned project solutions, we can support you with the exclusive L-Tune tool. It enables you to build the required flux to ensure the best balance between operational life, maintained flux, energy costs and product type. You can create your own standard by matching requirements to your own policy. For serviceability, the L-Tune program codes are linked to the Service tag app.

Urban lighting  
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CityClassic gen2  
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Ledgine  
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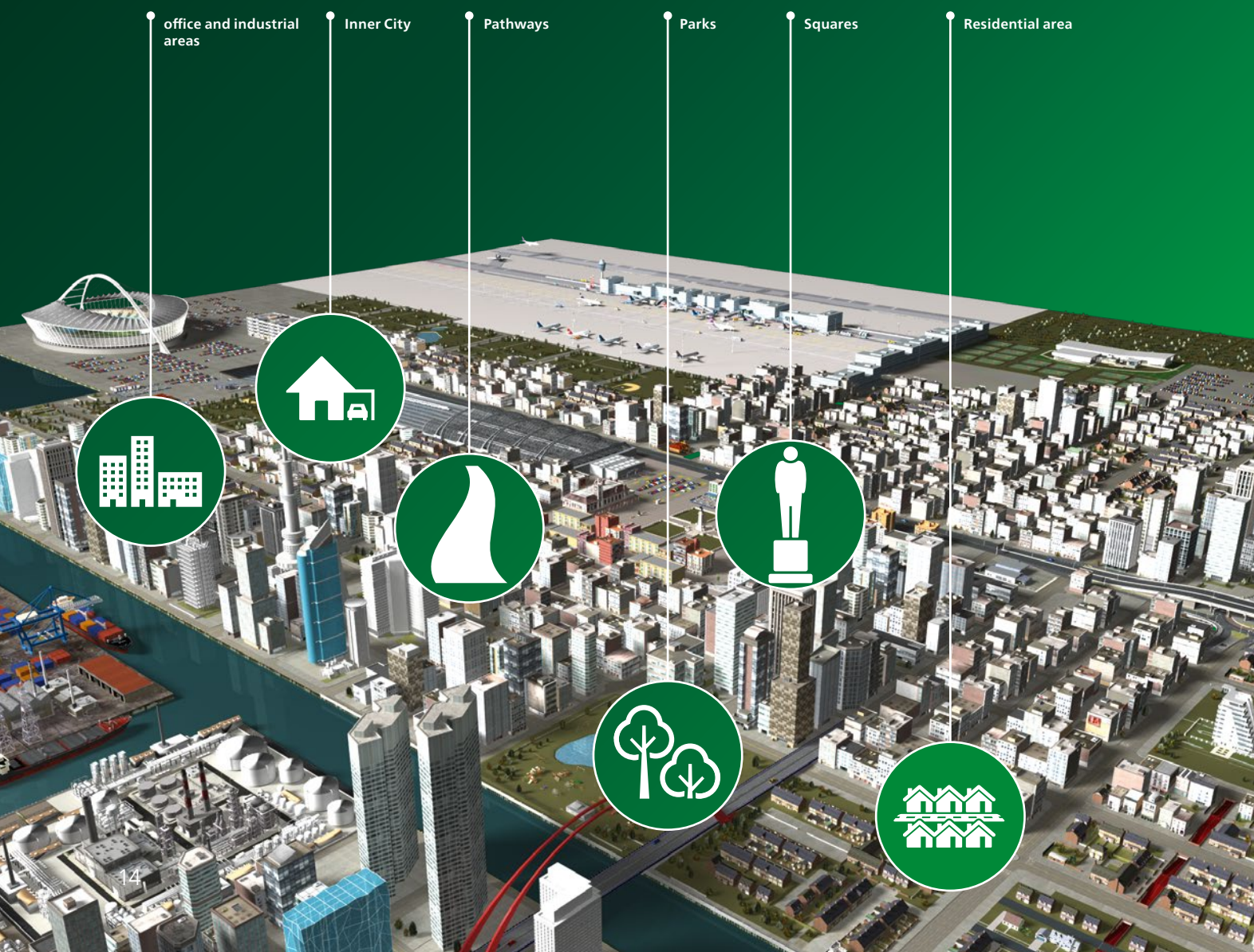
# Application areas

Whether specified for new installations or as a 1:1 retrofit, CityClassic gen2 is well suited to residential areas, parks, squares and pathways as well as private spaces near offices, campuses or parking areas.

The built-in Philips standardized LEDGINE optimized optics allow an array of different distributions. Together with the various dimming and control options, you can easily create the right lighting scenario for each application.

For high decorative scenario's the unique Philips ClearGuide light engine version can also be chosen, enriching the atmosphere.

The CityClassic gen2 application areas include:



Street lighting  
.....  
CityClassic gen2  
.....  
Application areas  
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# Service tag for improved serviceability

Since LED luminaires require different competencies and processes serviceability is always on our mind when designing new products. CityClassic gen2 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.




## Why Philips 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

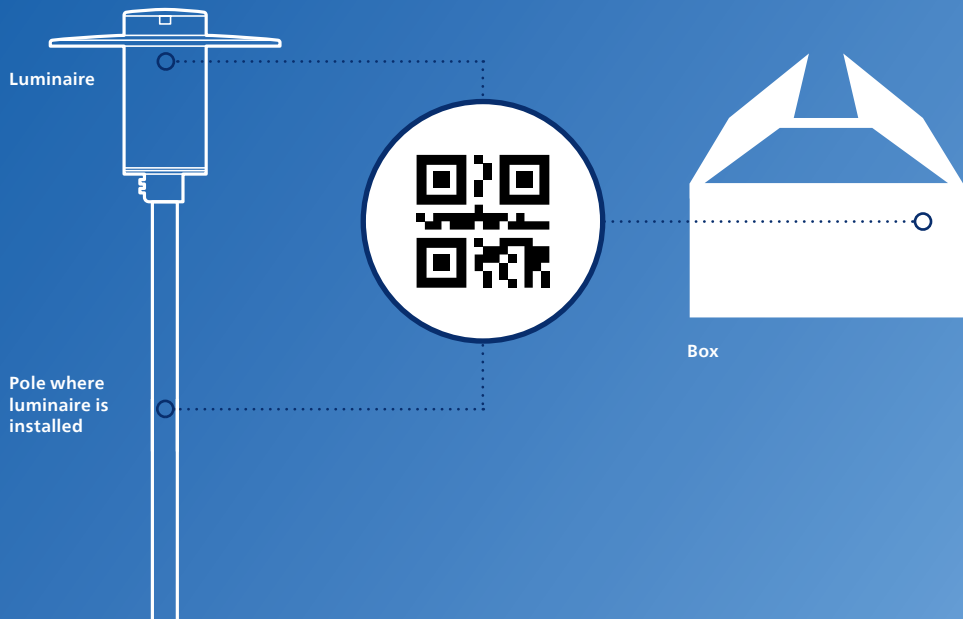


Facilitates spare parts and allows re-programming of drivers on the spot

## 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.





# 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

CityClassic gen2 is a System ready luminaire, coming with universal sockets on top of the 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.



## Standardized technology

System ready luminaires can be paired with sensors and Thanks to Zhaga standardization and the SR & ZD4i Certified program, you will have access to preferred technology, allowing you to make use of innovations from different suppliers.



## 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 & ZD4i 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.



## Plug and play

Designed for hassle-free installation, controllers and sensors can be mounted without opening the luminaire.



## Aesthetic design

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



## Flexibility

The Zhaga 4 Pin socket can be mounted on the top, of 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.

# Ready to be connected to Interact

Interact is a connected LED lighting management system which helps you improve services, enhance safety, beautify public spaces, encourage civic pride, and increase energy efficiency in your city. The system allows you to tap into a wide range of both lighting and non lighting benefits such as dimming, presence detection, noise or air quality monitoring, and incident detection.

CityClassic gen2 is ready to connect with Interact when you are.

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



# Get more value out of your lighting infrastructure

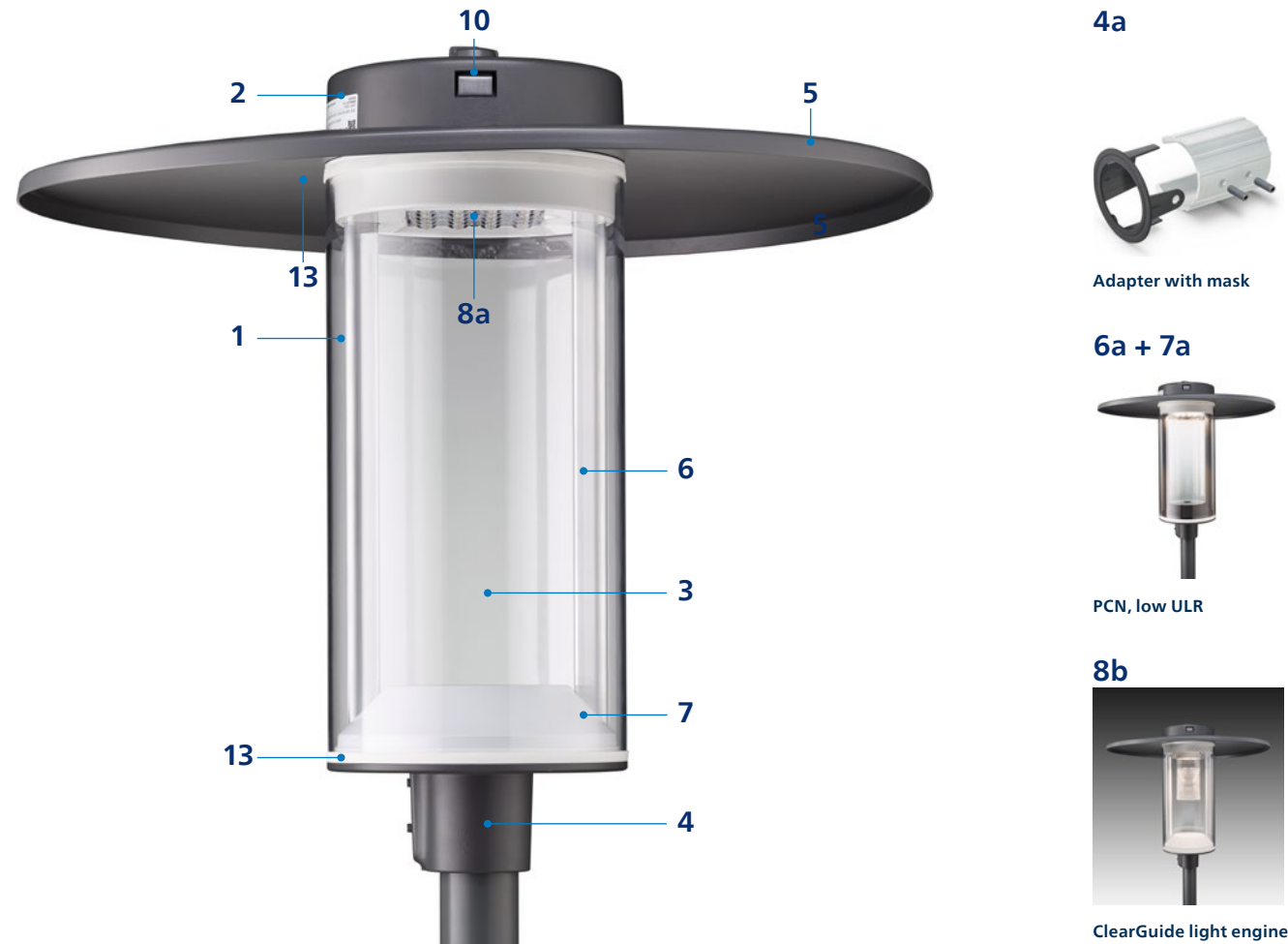
Control and monitor your street lighting remotely and immediately identify lighting failures using a single dashboard application. With full control of your city lighting you can identify opportunities for further energy savings by dimming, scheduling and zoning. Interact enables you to reduce CO<sub>2</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 allows it to be integrated into your other city management systems and allows your existing partners or independent third parties to use it as a platform for future innovation.



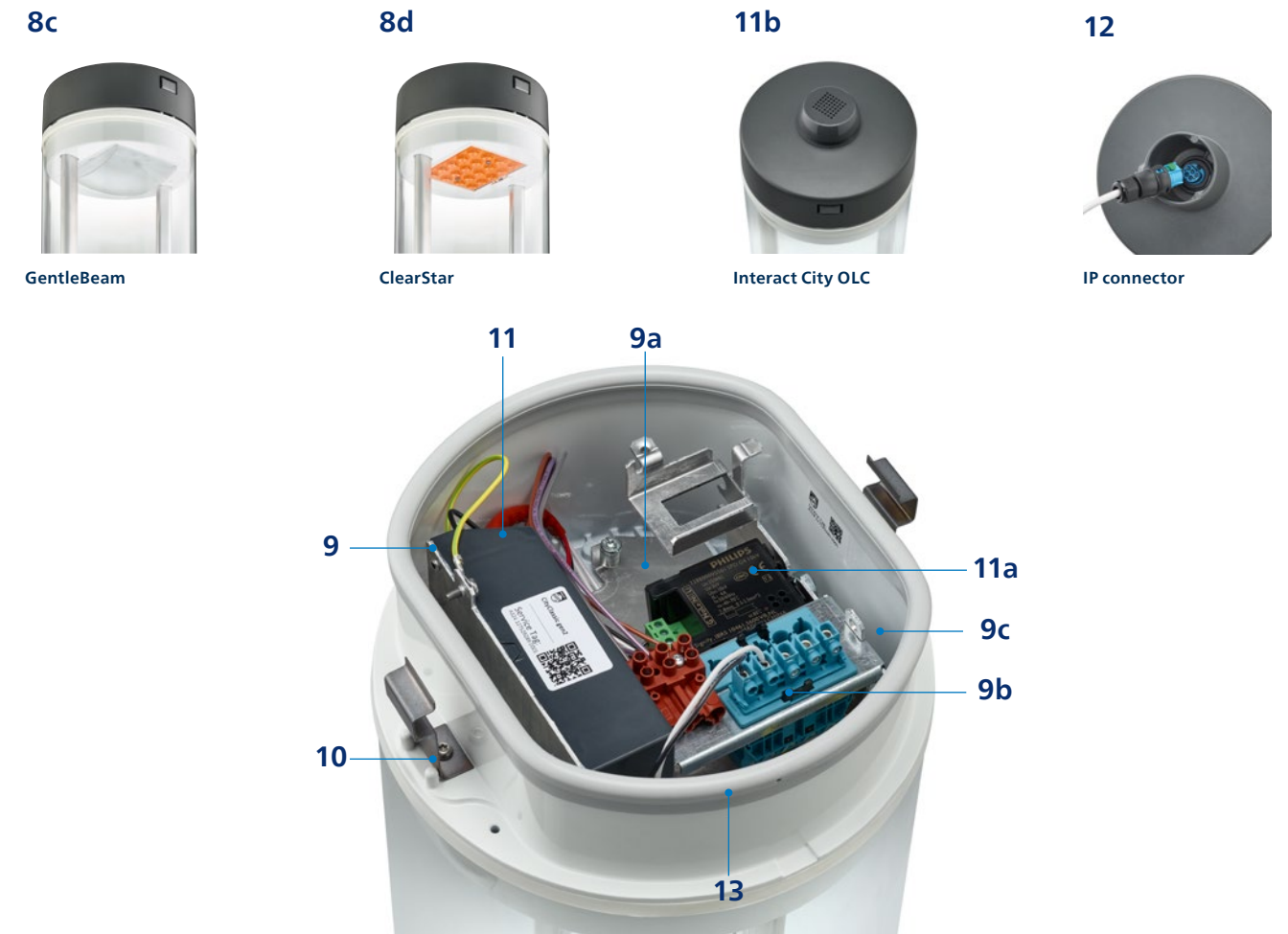


# Technical components



- 1 Frame:** die-cast aluminium, powder coat painted in RAL 9016 white, carrying the gear tray and light engine.
- 2 Gear cover:** die cast aluminium, powder coat painted in Philips Ultra dark grey. Selection of other (RAL) colors on demand. Marine Salt Protection (MSP) on request. The gear cover is secured by two, toolless to use, clips (**10**).
- 3 Cylinder bowl:** UV stabilised extruded clear polycarbonate, IK10 impact protection.
- 4 Spigot:** die cast aluminium, powder coat painted in Philips Ultra dark grey. Selection of other (RAL) colors on demand. Marine Salt Protection (MSP) on request. Post top spigot size Ø62 or 76mm, 76mm with option of added adapter ring and mask to also suit 60mm (**4a**). Fixation to the pole by 2 stainless steel bolts M8.
- 5 Large canopy:** spun aluminum, powder coat painted in Philips Ultra dark grey. Selection of other (RAL) colors on demand. Marine Salt Protection (MSP) on request. Packaged separate in the box, fixation to the housing using four screws (contained in the box).

- 6 Internal arms:** extruded aluminium, providing stiffness to the sandwich construction, containing internal wiring from spigot to gear compartment. Standardly unpainted, but in PCN versions painted in RAL 9005 black (**6a**).
- 7 Spigot cover:** UV stabilised polycarbonate, standardly in RAL 9016 white, but in PCN version in RAL 9005 black (**7a**).
- 8a Light engine:** attached to the gear tray. Philips standardized Ledgine O modules, 6, 10 or 20 LED, in 3000K or 4000K light color standard and option for 2700K or 2200K. Over 20 standardized Ledgine O lens optics are available to tailor the best distribution for the application in hand. Optional internal louver (**8b**) for obtrusive back light available as part of the total Ledgine O concept. Gentlebeam cover (**8c**) available for increased lighting comfort. The louver and Gentlebeam can also be combined and are easy to add at any point in time. Special optics in ClearStar (amber) (**8d**) as optional choice available.



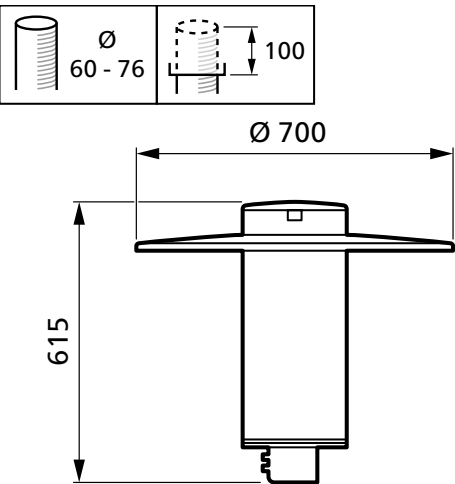
- 8b Light engine Clearguide:** attached to the gear tray. Philips standardized light engine, 15 LED, in 3000K. Either with a round symmetric or asymmetric distribution.
- 9 Gear tray:** sheet aluminium, containing the driver and other electronics for long lasting operation. At the bottom side, the light engine is installed. The entire tray can be released and taken out complete by loosening two captive screws (**9a**). Removing the gear tray allows quick and easy addition of either the back light louver, Gentlebeam for increased lighting comfort or both. Plug and socket connectors to easily disconnect internal wiring from gear cover and towards mains power connection (**9b**). For maintenance, the gear tray can be exchanged as a whole, but components can be serviced and exchanged individual as well. The retention wire of the gear cover, is clipped with a carabiner hook on to the gear tray (**9c**).

- 10 Clips:** in stainless steel, zinklad coated, allowing toolless opening and closing for easy service and maintenance.
- 11 Electrical components:** Philips programmable driver (**11**), Basic Prog, Lite Prog, Full Prog, coded mains or System Ready, allowing stand alone operation, including Dynadim and CLO, group control or connected individual light point control. Optional added 10kV surge protection (**11a**), optional Zhaga SR top socket for (future) smart city, e.g., Interact City (**11b**) connected lighting or optional 5 or 7-pin top Nema socket.
- 12 Mains connection:** in the spigot, using an IP rated connector, easy to connect and easy to disconnect through the integrated green quick release button.
- 13 Gaskets:** to seal luminaire to IP66, between spigot and bowl, between frame and bowl, between frame and gear cover.

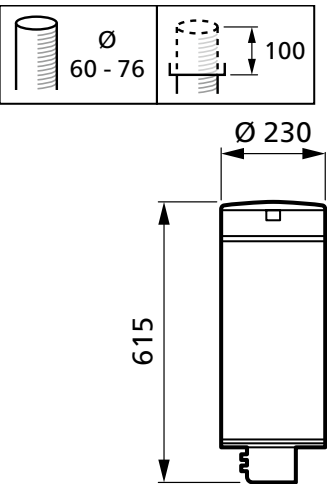


Dimensional drawings

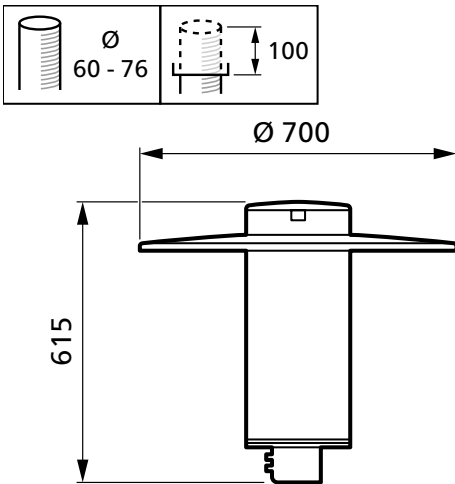
BDP510



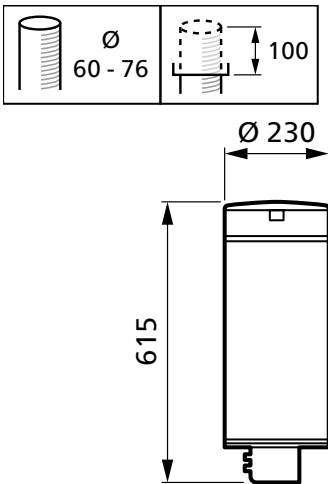
BDP511 torch



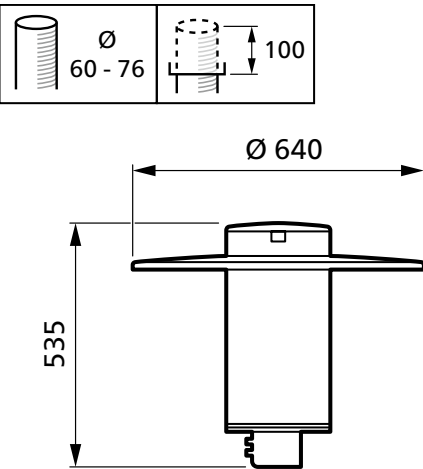
BDP520 Clearguide



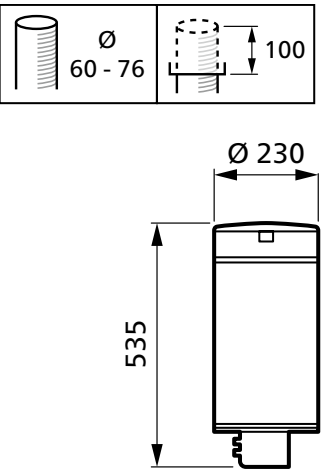
BDP521 Clearguide torch



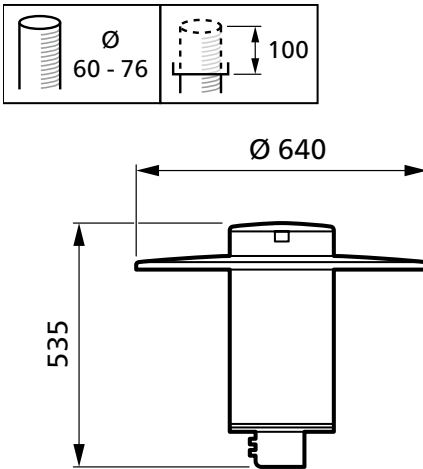
BDP512



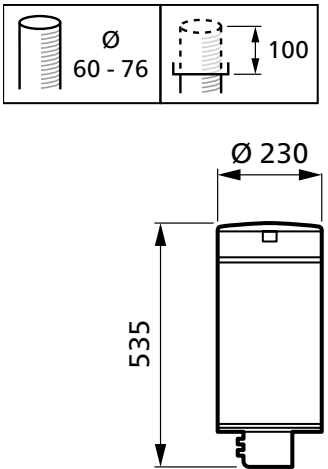
BDP513 torch



BDP522 Clearguide



BDP523 Clearguide torch





# Luminaire Specifications

Product features	Specifications
Type	BDP510: CityClassic gen2 (mono or bi-color large canopy) BDP511: CityClassic gen2 Torch BDP512: CityClassic S gen2 (mono or bi-color large canopy) BDP513: CityClassic S gen2 Torch  BDP520: CityClassic plus gen2 (mono or bi-color large canopy) BDP521: CityClassic plus gen2 Torch BDP522: CityClassic S plus gen2 (mono or bi-color large canopy) BDP523: CityClassic S plus gen2 Torch
Light source	CityClassic gen2: Integral Philips Ledgine Optimized 6, 10 or 20LED CityClassic plus gen2: Integral Philips ClearGuide Symmetric or asymmetric
System Power	CityClassic gen 2: between 6 and 40W depending on LED count and color temperature CityClassic plus gen2: between 16W and 32W depending on flux and color temperature
Luminous flux (source flux)	Ledgine O: LED8/10/12/14/16/18/20/22/24/27/30/35/40/50/60 ClearGuide: CG20/25/30/40
Luminaire efficacy (system flux)	Ledgine O 740: between 120 and 145, depending on flux Ledgine O 730: between 115 and 135, depending on flux ClearGuide 740: between 108 and 111, depending on flux ClearGuide 730: between 103 and 107, depending on flux
Optics	Distribution Round Symmetric: DS50 Distribution Narrow: DN10, DN11 Distribution Medium: DM10, DM11 DM12, DM32, DM33, DM50 Distribution Wide: DW10, DW50 Distribution Extra Wide: DX10, DX50, DX52
Optical option	Back light control louver BL2 (not for DS50 or DX50)
Controls system input	DALI or SR
Dimming	LineSwitch DynaDimmer LumiStep CLO
Connectivity	Interact City (SR)
Material	Spigot, frame, top cover: high-pressure die-cast aluminium  Large canopy: spun aluminium  Bowl: impact resistant UV stabilized polycarbonate  Arms: extruded aluminium
Color	Standard Philips ultra dark grey (DGR) , Akzo Gris Sable 900 (GR-900) or Ral 7035 (GR) matt finish
Color option	Limited number of (RAL) colors. Bi color large canopy (underside white)
Ingress protection	IP66

Product features	Specifications
Impact protection	IK10
Correlated color temperature	740: 4000K 730: 3000K 727: 2700K 830: 3000K 518: 1800K (ClearStar) 420: 2000K (ClearStar)
ETO option correlated color temperature	722: 2200K 827: 2700K 840: 4000K 757: 5700K
Color rendering index	70 or 80
Maintenance of Lumen output at 100,000 hours	Between L90 and L98 depending on flux and light color
Operating temp. range	-40 up to +50 °C
Driver	Integrated programmable LED driver
Power/Data supply	Philips Xitanium, BP, LP, FP or SR
Mains voltage	220-240V / 50-60 Hz
Options	Constant Light output (CLO), also possible in combination with Dimming and connectivity options  Electrical safety Class II  Added 10kV surge protection device  Factory fitted cable  Mini Photocell for SR socket  Interact City  Comfort GentleBeam cover for Ledgine O  Back-light louvers BL1 or BL2
Maintenance	Opening/closing: by 2 stainless steel clips All components contained in the frame on a gear tray
Installation	Post-top mounting: Axial entry Ø 60 or 76mm  Connection: IP connector in spigot  2 x M8 mast fixation bolt  Recommended mounting height: 4 to 6 meters  SCx: BDP510/520: 0.66m², BDP512/522: 0.56m², BDP511/521: 0.29m², BDP513/523: 0.26m²
Cable entry	IP connector, cable Ø 6-12mm
Accessories	Spigot adapter ring from Ø 76mm to Ø 60mm with bolts





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