Creating comfort and appealing atmospheres
CitySphere

Creating a comfortable and appealing atmosphere

In these times of rapid social change, cities are looking for ways to become more attractive, welcoming, convenient and safe. Urban lighting is not just about illuminating city streets and roads. It’s also about giving the city a coherent visual identity, highlighting its best features and enhancing its image. And urban lighting plays an essential role in creating a safe and distinctive atmosphere, so that people feel at ease and enjoy socializing in public spaces.

Reflecting our commitment to improve the quality of life, the slim, discreet CitySphere – specially designed for ambience lighting – makes the city a safer and more pleasant place to be at night.
CitySphere represents the ideal choice for our evolving urban environment. It was designed to promote visual comfort and city beautification. The extensive and consistent CitySphere is part of our urban inspirational lighting range and brings cities to life at night with its distinctive color effects, creating an appealing atmosphere that invites people to visit and socialize.

Personalization
CitySphere enables cities to add their own touch of color to create a distinctive color signature. It allows city planners to choose their own colored lighting scenarios and ambience to bring the city to life after dark.

Comfort
CitySphere is all about increasing visual comfort and enabling cities to create a pleasant and safe atmosphere at night. That’s why we have created GentleBeam, the first patented optical system that delivers both visual comfort and lighting performance.

Energy saving
Urban lighting is one of the areas in which energy saving is a top priority. CitySphere’s dedicated LED module provides excellent opportunities to save energy. To be a real success, a lighting installation has to deliver more than just good illumination: it also needs to have low energy consumption and should be easy to install.

“The ideal choice for an evolving urban environment.”
Dedicated to creating an appealing and comfortable atmosphere, the slim, discrete CitySphere range combines design consistency, a high level of lighting performance and a unique color signature. The full range is modular – from poles, brackets and luminaires to color effects – and therefore offers a high degree of flexibility, not only in terms of integration with the architectural context, but also in its range of applications.

CitySphere is part of our urban inspirational lighting range portfolio. It incorporates all the necessary functional aspects of lighting and also has a strong focus on the emotional value of light. In this way, it helps to create the right ambience, enhance people’s well-being, and make the city more livable. For every application we have a number of solutions that will inspire you and enhance your city, while also fulfilling all your specific requirements.

Applications
A high degree of flexibility

City center
- Boulevard & avenue
- Side street
- Square, park & playground
- Roundabout
- Cycle path & foothpath
- Shopping & pedestrian area
- Parking area
- Public transport area

Residential area
- Residential street
- Cycle path & foothpath
- Roundabout
- Square, park & playground
- Parking area
Public lighting
CitySphere
Applications
Family range

Designed from the start as a complete set, CitySphere has a consistent look and feel. At the same time it offers a wide range of options – from post-top solutions and bowl finishes to white light and color effects. CitySphere solutions are all modular and combine harmoniously with both standard and dedicated poles and brackets.

Bowl finish

There are two finishes for different types of ambience.

A The clear bowl with a dot effect creates an exciting, modern ambience and can also be used for high lumen outputs of up to 9,000 lm.

B The ribbed bowl or GentleBeam is an exclusive innovative optical system from Philips designed to enhance visual comfort and create a warm and pleasant atmosphere.

White ring effect

As well as offering various bowl finishes, CitySphere also offers three different white rings to complete the look and feel of the luminaire.

Color effects

To enable you to add your own touch of color, CitySphere comes with a soft and diffuse color ring that improves visual comfort and gives the city its own color signature by night.

The color ring is available in green, red, amber and blue. The CitySphere can also be delivered without a color ring.

Complete sets

Two types of spigot and bracket are available to suit different architectural contexts, from standard to more exclusive ones.

A CitySphere Standard
B CitySphere Decorative
C CitySphere Bracket 60
D CitySphere Bracket 76
Complete sets

CitySphere comes with dedicated spigots, brackets and poles, enabling development planners, specifiers and decision makers to create a consistent urban identity and ambience.

A CitySphere Standard
Post-top set for Ø 60 mm or Ø 76 mm poles

1 CitySphere Standard + Accante 3.5 m
2 CitySphere Standard + Accante 4 m
3 CitySphere Standard + Accante 4.5 m
4 CitySphere Standard + Accante 4.5 m

B CitySphere Decorative
Post-top set for Ø 90 mm poles, ensuring perfect continuity with the pole to give the luminaire a more exclusive look and feel.

1 CitySphere Decorative + Accante 3.5 m
2 CitySphere Decorative + Accante 4 m
3 CitySphere Decorative + Accante 4.5 m

C CitySphere Bracket 60
Dedicated bracket family comprising single, double and rear brackets for Ø 60 mm poles. A wall-mounted bracket is also available, consistent with the Bracket 60 shape.

1 CitySphere + CitySphere Bracket 60 + Accante 4 m
2 CitySphere + CitySphere Bracket 60 + Accante 5 m
3 CitySphere + CitySphere Bracket 60 + Accante 4 m
4 CitySphere + CitySphere Bracket 60 + Accante 5 m
5 CitySphere + CitySphere Bracket 60 + Accante 4.5 m
6 CitySphere + CitySphere wall Bracket 60

D CitySphere Bracket 76
Dedicated bracket family comprising single, double and rear brackets for Ø 76 mm poles. A wall-mounted bracket is also available, consistent with the Bracket 76 shape.

1 CitySphere + CitySphere Bracket 76 + Accante 4 m
2 CitySphere + CitySphere Bracket 76 + Accante 5 m
3 CitySphere + CitySphere Bracket 76 + Accante 4 m
4 CitySphere + CitySphere Bracket 76 + Accante 5 m
5 CitySphere + CitySphere Bracket 76 + Accante 4.5 m
6 CitySphere + CitySphere wall Bracket 76
Create your own distinctive atmosphere combining visual comfort and performance.

In order to achieve a high level of performance in both energy efficiency (lm/W) and application (W/m²/light class), the optical design of LED luminaires is often based on high-power LEDs (driven at a current of 350 mA or more) in combination with high-transmission lenses. This allows the best light distribution to be achieved. The trade-off in this case is visual comfort: when transparent optics are used, exposure to high luminance levels can cause discomfort for users if they look directly into the light.

The use of microlinear prisms enhances visual comfort by creating the appearance of a lighting surface with moderate luminance. At the same time, application performance remains high.

On the other hand, if matte optics are used, this gives the light a more diffuse appearance. This, however, will affect the light distribution. As a result, the application value of the optical system is consistently lower.

For example, using a frosted bowl typically results in only 50% of the application value achieved with clear optics.
Dimming signature

CitySphere does more than light streets, squares and other urban areas – it offers great flexibility in creating the right atmosphere for each specific space. By combining the color ring effect with the dimming scenario during the day, it is possible to adapt the lighting to suit the ambience of any given space:

- Improve traffic safety when traffic volumes are high by using 100% white light.
- Save energy, create ambience and make the city more attractive by dimming the white light and using the color-ring effect.
- Create guidance and make substantial energy savings by using only the color ring to give the city its own distinctive atmosphere.

Only the white ring is dimmable; the color ring always remains at 100%.

Prismatic effects

In addition to the color ring and the dimming effect, the prismatic inner ring also adds to the CitySphere color effect, helping to bring cities to life at night.

CitySphere is also available without any color effect.
CitySphere offers a wide range of light distributions, enabling a high level of flexibility in application.

**DM Distribution Medium**
- S, CE and ME5-6 class for road and street lighting
  - Luminous intensity class: G3
  - Upward light ratio, ULR < 3%

**DW Distribution Wide**
- S, CE and ME5-6 class for road and street lighting
  - Luminous intensity class: G3
  - Upward light ratio, ULR < 3%

**DS Distribution Symmetrical**
- S and CE class for area and square lighting
  - Luminous intensity class: G3
  - Upward light ratio, ULR < 3%

**DSP Distribution Street Pedestrian**
- S, CE and P class complying with ROVL standards
  - Luminous intensity class:
    - G0 (clear) / G2 (ribbed)
  - Upward light ratio, ULR < 3%
The CitySphere family is suitable for many different applications. Choose the best version for your project based on the street width and the required performance: personalization, comfort or energy efficiency.

**Residential street**
- **CitySphere Gentlebeam**
  - Light source: GRN40/830
  - Optic: DM
  - Spacing: 26 m
  - System power: 37 W
  - Lighting class: S3
- **CitySphere Clear**
  - Light source: ECO90/740
  - Optic: DW
  - Spacing: 30 m
  - System power: 75 W
  - Lighting class: CE4
- **CitySphere Clear**
  - Light source: GRN30/740
  - Optic: DSP
  - Spacing: 35 m / 21 m*
  - System power: 26 W
  - Lighting class: S4 / S5*

**Cycle and footpath**
- **CitySphere Gentlebeam**
  - Light source: ECO80/830
  - Optic: DS
  - Spacing: 23 m
  - System power: 77 W
  - Lighting class: S2
- **CitySphere Gentlebeam + color ring**
  - Light source: GRN50/830
  - Optic: DS
  - Spacing: 24 m
  - System power: 46 W
  - Lighting class: S4 + Focus on atmosphere
- **CitySphere Clear**
  - Light source: GRN30/740
  - Optic: DM
  - Spacing: 25 m
  - System power: 26 W
  - Lighting class: S3

**Square**
- **CitySphere Gentlebeam**
  - Light source: GRN60/830
  - Optic: DS
  - Spacing: 22 m
  - System power: 85 W
  - Lighting class: S2
- **CitySphere Gentlebeam + color ring**
  - Light source: GRN25/830
  - Optic: DS
  - Spacing: 18 m
  - System power: 25 W
  - Lighting class: S4 + Focus on atmosphere
- **CitySphere Clear**
  - Light source: GRN70/830
  - Optic: DS
  - Spacing: 21 m
  - System power: 85 W
  - Lighting class: CE4

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* Including vertical illuminance level.
Lighting city streets, roads and public spaces presents many challenges, partly because the dynamics of city life are changing constantly due to fluctuations in traffic density, etc.

This means you need the right level of lighting to respond to these changes in order to make the city feel safe, attractive and inviting. But at the same time you are under pressure to reduce energy costs and maximize your green credentials. Philips offers a complete range of intelligent lighting controls to help you overcome all these problems and make your city more livable and sustainable.

CitySphere can be seamlessly connected to CityTouch software* via CityTouch Connect app (remote management), with all the intelligence being integrated into the luminaire without the need for any additional hardware. Communication runs directly via the public mobile network. An additional advantage is that you are not required to perform any maintenance. Furthermore, the entire connectivity management is covered by the service we provide, ensuring there is no hassle for you, the customer. Once connected to the power supply, a light point automatically appears on the CityTouch map at the right location – with all the relevant technical parameters imported into the system.

CityTouch Connect app is an intelligent, interactive remote management solution for street lighting. It brings your city lighting to life and offers you flexibility, information and accuracy. The system’s flexibility enables you to respond easily to expected and unexpected situations by dimming or brightening any of the areas within your city to ensure safety and well-being. Information keeps you up to date on the current status of every single luminaire, facilitating more effective maintenance and faster repairs. And accurate energy metering gives you a precise overview of actual energy consumption.

*CityTouch-Ready is only available without the color ring.
Network controls

**Starsense Wireless with RF antenna**

Starsense Wireless is a networked control system based on two-way wireless communication using the latest in mesh network technology. The system enables individual light points to be controlled remotely and to be managed via online platforms like CityTouch.

Lighting operators can control the public lighting infrastructure remotely, setting dimming levels to achieve considerable energy savings. Also, they get real-time feedback from the luminaires, reducing operating and maintenance costs via accurate scheduling of on-site maintenance service tasks, while improving both the quality and reliability of public lighting.

**Stand alone controls**

**LumiStep control**

An integrated control system available in the Philips driver, which lowers the flux of the light source and power consumed over a period of 6, 8 or 10 hours (3 pre-programmed versions). The potential energy savings (on power system) are up to 25%, depending on the luminaires and light source used.

**DynaDimmer control**

An integrated control system included in each light point – operated on electronic equipment and can be integrated into the Philips driver. It can apply 5 levels of power, redefinable on the level and duration, per chosen light point. An average energy saving of approximately 50% per year can be realized.

**Serviceability**

**Access to the driver**

To access the driver, unscrew the four Phillips screws and remove the opening plate. The plate is attached to the housing by a safety cable.

To access the driver screws, disconnect the tool-less connectors on both sides of the driver and remove the complete gear tray.

**Dimensional drawings**

- **Standard spigot Ø 60 mm**
- **Standard spigot Ø 76 mm**
- **Decorative spigot Ø 90 mm**
- **Citysphere Bracket 60**
- **Citysphere Bracket 76**
- **Poles**
- **Alteo**
- **Alcante**
- **Altra**
### Main specifications

<table>
<thead>
<tr>
<th>Product features</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>BDP780 (version with white ring 1, 56 LEDs)</td>
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<tr>
<td>Light source</td>
<td>Integral LED module</td>
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<td>Correlated color temperature</td>
<td>3.000K (warm white), 4.000K (neutral white)</td>
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<td>Luminous flux (depending on LED configuration)</td>
<td>GreenLine: 1.148 to 5.810 lm, EconomyLine: 1.985 to 9.816 lm</td>
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<tr>
<td>Power</td>
<td>14 to 115 W</td>
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<tr>
<td>Luminaire efficacy</td>
<td>Up to 89 lm/W (warm white), up to 107 lm/W (neutral white)</td>
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<tr>
<td>Lumen maintenance</td>
<td>GreenLine: 100,000 hours, EconomyLine: 70,000 hours</td>
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<tr>
<td>Weight</td>
<td>14.5 kg standard spigot, 16 kg decorative spigot</td>
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<td>CLO</td>
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<td>Warranty</td>
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<tr>
<td>Optic</td>
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<td>IP rating</td>
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<td>Color</td>
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<td>Operating temperature range</td>
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<td>Mains voltage</td>
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<td>Weight</td>
<td>14.5 kg standard spigot, 16 kg decorative spigot</td>
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<td>Material</td>
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<td>Surge protection</td>
<td>4/f (standard) / 10/f (optional)</td>
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<tr>
<td>Maintenance</td>
<td>Access to driver by releasing four screws</td>
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### Specification table

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<tr>
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<th>Lumen package</th>
<th>Source flux (lm)</th>
<th>Power system (W)</th>
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### Pole specifications

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<tr>
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<th>Accante</th>
<th>Altea</th>
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<tr>
<td>Material</td>
<td>Steel</td>
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<td>4 m, 4.5 m and 5 m</td>
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<td>Philips dark gray (close to RAL 7022)</td>
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### Bracket specifications

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<tr>
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<th>Bracket 60</th>
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<tr>
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<td>Philips dark gray (close to RAL 7022)</td>
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