



The right light at the right time

Philips step-dimming outdoor luminaires

PHILIPS

Energy management by means of lighting management

A good lighting application has the following characteristics: optimum wattage, precisely the right level of lighting in the right place at the right time, lamps and electrical components with the longest possible lifetime.

Our lighting systems are developed in response to your ever-changing needs. Compact luminaires are designed, often with aesthetically pleasing housings, reflecting the increasing importance of daytime appearance. Optics is adapted to new lamps, improving performance and a range of dedicated lamps is meeting the growing popularity of high-quality white light sources. Better materials and higher IP values are contributing to the durability of installations. And now with the advent of step dimming outdoor luminaires, you will also enjoy greater energy savings than ever before and enhanced safety on the road.

Step dimming

Lighting level requirements often depend on external factors such as traffic volume, ambient brightness and weather conditions.

When there is very little traffic on the roads, drivers do not require the same level of lighting as when the traffic flow is at its heaviest. Similarly, there is little point in the aesthetic illumination of monuments in city centers in the early hours of the morning.



In the case of road lighting, it can be dangerous to reduce lighting levels by simply switching off every other luminaire, as this leads to irregularity and dark spots on the road surface. Dimming is an ideal means of saving energy without adversely affecting either safety or uniformity.

Step dimming can adjust the lighting level down to approximately 50%, producing energy savings of around 35%. Dimming is achieved using a combination of a step dimming ballast, ignitor, capacitor and a controller integrated into each luminaire.

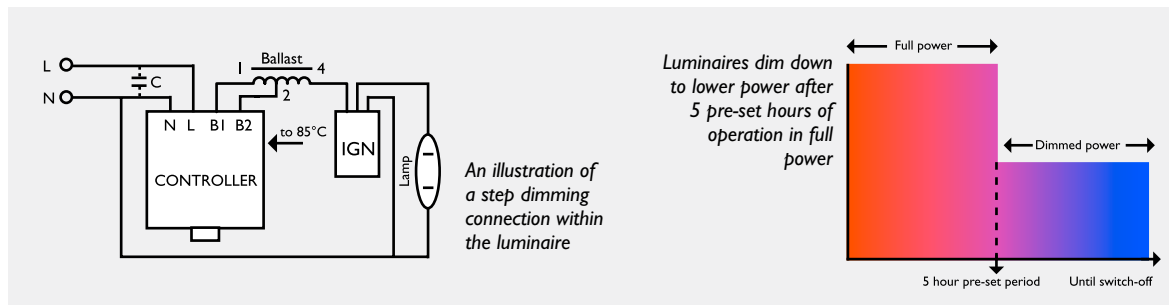
Features of step dimming outdoor luminaires

The main benefits of step-dimming luminaires:

- Improved safety by ensuring that the lighting level is adjusted to suit varying traffic conditions.
- Reduction of energy costs and environmental pollution: step-dimming luminaires makes it possible to dim lighting levels to as little as 50% when traffic density is low, generating total annual energy cost savings of 20%.
- Environmental benefit: Philips' step dimming luminaires helps to reduce light pollution, energy consumption and prolongs the lifetime of system components thereby reducing waste materials.

A step dimming luminaire (based on SON-T lamps) typically consists of:

- Step dimming ballast for SON-T lamps
 - 400/250W, full power 400W, dimmed to 250W.
 - 250/150W, full power 250W, dimmed to 150W.
- Ignitor - Provides ignition voltage during system start-up.
- Capacitor - Provides additional capacitance to achieve better power factor.
- Controller - An integrated timer automatically calculates the time after ignition. After a pre-set point of 5 hours, it switches the system from full power to lower power mode.



Step dimming luminaires

Our innovative road lighting range of step dimming luminaires are Broadway, Spectrum and Velocity, that comes installed with timed step dimming gear for SON-T 400W and SON-T 250W lamps.



Broadway SGP268

- Road lighting luminaire which embodies functionality and aesthetics, reflecting the aspirations of today modern cities.
- Dedicated faceted optics to optimize beam control and maximise light output
- Adjustable optics
- Mounting: lateral mounting on 50mm-60mm mast arms
- Maintenance from above in an ergonomic position
- IP66



Spectrum SPP 368

- Patented design, blends in easily with modern architecture
- Mounting: lateral mounting on 40mm to 60mm mast arms
- Maintenance: ergonomic, from above, tool-free maintenance/lamp replacement
- Lamp position: fixed
- IP65



Velocity SGP338

- Patented timeless design blends easily with modern and traditional architecture
- Lamp position: adjustable for various light distributions
- Mounting: post-top or lateral on 50mm-65mm mast arms
- Maintenance: tool-free from above
- IP66

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