



Luma gen2

Connected, ultra-efficient
road lighting for a more
sustainable present and future



* This icon has been developed by Signify and is used as a self-certification for UltraEfficient luminaires meeting the standards of tier 3 in IEA 4E SSL ANNEX. Only applicable for selected UltraEfficient configurations.

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Lighting the way to a smarter, more sustainable city

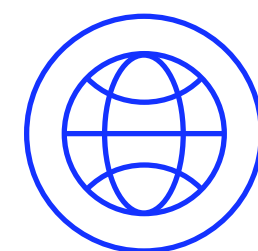
The Luma family is designed to deliver flexible, ultra-efficient, and sustainable lighting that adapts to the dynamic needs of every city



Adaptable lighting system
Easily deliver optimal lighting for urban or rural environments with vastly different requirements



Reduce energy costs
UltraEfficient versions with 200 lm/W efficacy available



Meet sustainability goals
Designed for a second lifetime with easy servicing, upgrade options, and recyclable materials



Luma gen2 in a nutshell



Interact Ready connectivity for smart lighting

[Read more](#)



Energy-efficient and durable

- **New:** Selected UltraEfficient configurations with 200 lm/W
- Lifetime: 100,000 hours (L99), for selected configurations
- Source lumen output (LED Cold Flux): 600-100,000 lm
- IK10 for standard aluminum housing, IK09 for all added connectors

Sustainable upgrades

- GearFlex housing is made from post-industrial recycled material
- White mask is made from post-industrial recycled material
- Luminaire housing is made from 85% recycled aluminum
- Product packaging minimizes plastic waste by dispensing with product wrapping foil
- Easy disassembly in just 7 steps at end of life

See [Environmental product declarations \(EPD\)](#) for details



Meets lighting for circularity criteria

[Read more](#)

High-quality, comfortable light

that provides excellent visibility for enhanced safety

Optional anti-reflective glass

helps to maximize efficiency

Simplified maintenance



Thanks to Signify Service tag and the removable GearFlex module

[Learn more about Signify Service tag](#)

[Read more about GearFlex](#)

Wide application coverage



LEDgine optimized and new extension LEDgine performance (UE) platform, plus wide range of optics for great performance in many applications

[Read more](#)

Reduces light pollution: DarkSky approved



Application areas



Motorways and highways



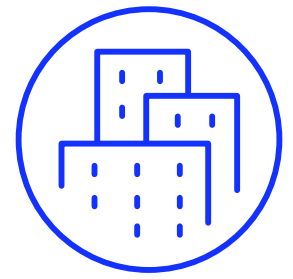
Roads and streets



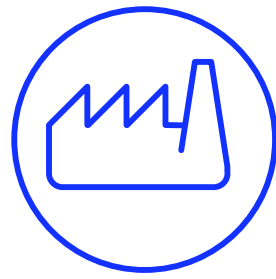
Cycle and pathways



Marine environments



Outdoor parking



Industrial areas



Your application, our LEDgine solutions

Our innovative range of flexible LEDgine LED light sources and optics offer solutions for every lighting need. Discover the new LEDgine performance and proven LEDgine optimized.



UltraEfficient LEDgine

Efficiency taken to the next level.

With system efficacies of up to 200 lm/W in selected configurations, LEDgine performance delivers ultra-efficient lighting without compromise. Luminous flux and energy use are minimized thanks to best-in-class lumen maintenance (up to L99), ensuring lasting performance over time. The result is an attractive total cost of ownership — combining high energy savings with reduced initial cost through high flux levels in the same housing.

Standardized optics

Designed for flexibility,
built for consistency.

Our comprehensive range of optics and louvers ensures a perfect fit and standardization across all applications. Whether you're working with varied geometries, tilt, or overhang parameters, these optics deliver outstanding performance and maintain familiar light distributions for seamless LED conversion. Fully compliant with road lighting standards, they enable consistent and reliable designs every time.

Standardized LEDgine optimized and LEDgine performance engines

Consistency and upgradeability
in one platform.

Our standardized light engines strike the ideal balance between cost efficiency, performance, and versatility. They offer access to the latest LED upgrades without altering light distributions, ensuring consistent flux packages across product ranges — including CLO options. Many optics are shared between LEDgine performance and optimized versions, simplifying service and maintenance. Configuration is quick and effortless using the Signify Service tag.

Tailor-made solutions

Customized lighting,
defined by your project.

Signify's exclusive calculation tool lets you create project-specific solutions that achieve the perfect balance between operational life, maintained flux, energy costs, and product type. Specialized light recipes — ClearField for bat protection and ClearStar for night-sky preservation — help you meet environmental goals. You can even define your own standards to align with local requirements and policies.

Designed for a circular economy

In 2024, we used 1.7 times the resources our planet can sustain. To transition to a sustainable and circular economy, we need to rethink the way we produce and consume. There's no plan B for our home planet. By choosing our lighting for circularity solutions, you get flexibility in lighting configurations and settings while reducing your carbon footprint to help you reach your sustainability development goals.

Go for optimal sustainability by selecting your renovation path

Are you looking to update your non-LED lighting?

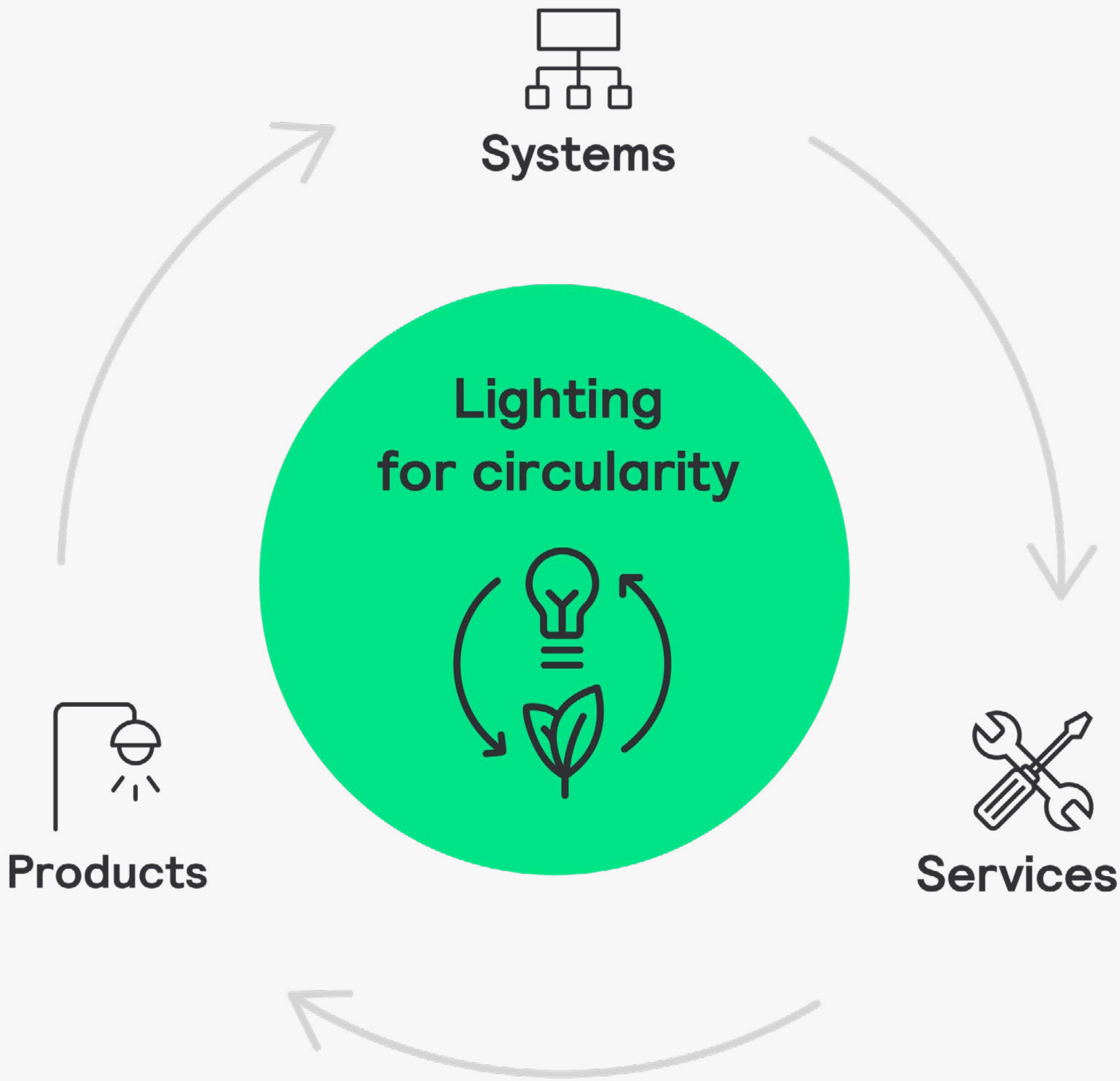
- Choose our lighting for circularity products
- Full portfolio of circular economy ready Signify LED luminaires
- Superior efficacy
- Products are recyclable, connectable and serviceable.

Are you planning to update your LED-based infrastructure?

- Discover our remanufacturing or refurbishment services
- Gain enhanced luminaire performance, extended lifetimes, and end of contract management

Do you want to unlock the potential of smart lighting?

- Update your infrastructure to smart lighting with our systems solutions
- Optimize your energy costs with insights into your energy usage
- Configure lighting behavior
- Remotely monitor your lighting system



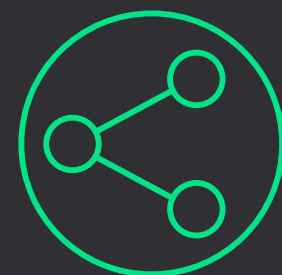


Luma gen2 meets the five criteria of lighting for circularity



1. Energy efficiency & extended lifetime

- UltraEfficient configurations available with luminous efficacy of 200 lm/W for selected products
 - **Select LEDgine performance (1P) product versions**
- Tailor-made optics support optimized lighting design in various applications for even greater energy savings
- Long lifetime of 100,000 hours (L99) for selected configurations reduces the need to replace luminaires or components



2. Connectable

- Zhaga or Nema sockets can connect Luma gen2 to smart lighting systems (Interact or any other CMS)
 - **Choose Interact Ready product version (IACZ-4)**
- The Zhaga bottom socket supports Zhaga-compliant sensors (e.g. for motion, noise, and air quality sensing)
 - **Choose Outdoor Multisensor (OSB)**



3. Upgradeable

- The driver and other electrical components can be easily upgraded by replacing the GearFlex box



4. Reusable and recyclable

Replacing luminaire parts can significantly extend the service life of a Luma installation. At the end of its service life, the luminaire can be easily dismantled and disassembled into individual parts made of the same (pure) material in just seven steps. Those materials can then be recycled, contributing to an overall reduced carbon footprint.



5. Serviceable

- Signify Service tag QR-based identification system for easy identification of spare parts

Interact for smart lighting in city applications

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 or air quality monitoring, and incident detection.

Smart

- Benefit from remote control and monitoring and reporting capabilities
- Use data to make better informed decisions more quickly

Sustainable

- Identify opportunities for further energy savings by dimming, scheduling and zoning
- Optimize the lights' power factor to minimize waste and reduce demand on the power grid

System ready

- The Open APIs of the system allow Interact City lighting management software to be integrated into your other city management systems
- This enables your existing partners or independent third parties to use it as a platform for future innovation

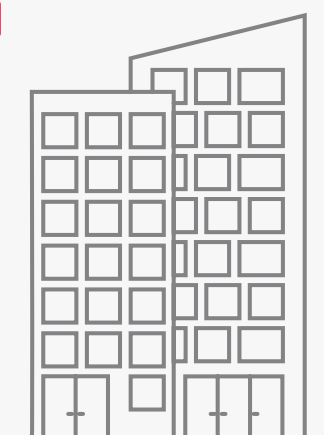
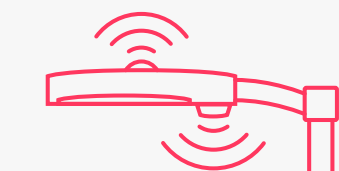
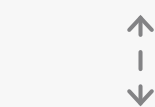
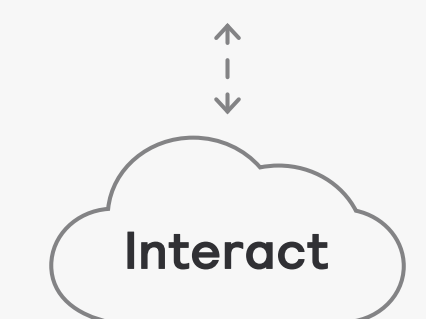
i Select IACZ-4 (Interact City) product versions

This is all you need for your smart lighting system

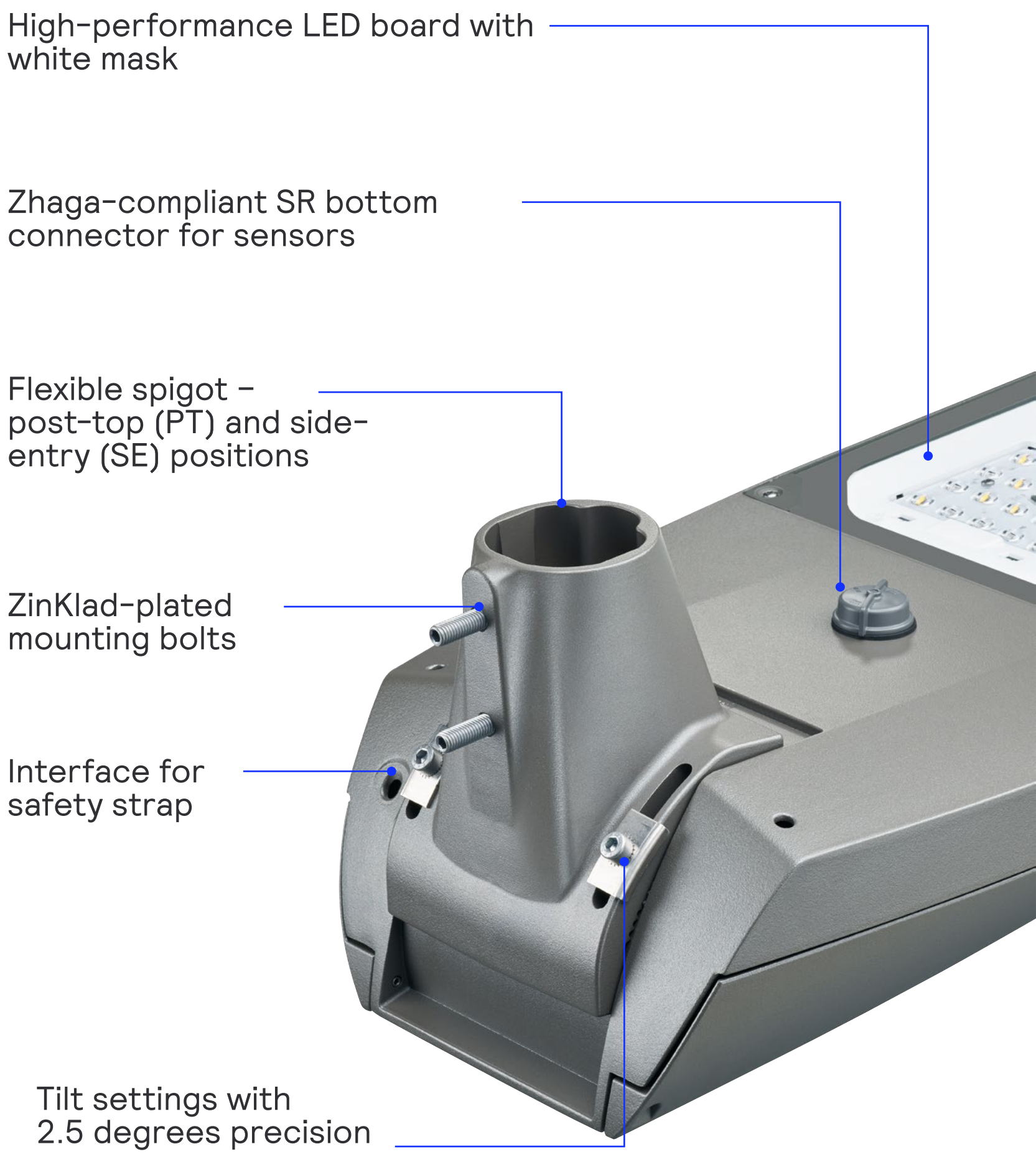
Luma gen2

equipped with control node on top and/or sensor at the bottom.

Software applications



Refined details for a durable design



Easy maintenance with GearFlex plug-and-play

GearFlex is designed to make Luma gen2 maintenance safer and more efficient

GearFlex is an internal component box within the luminaire, designed for easy maintenance. Technicians can simply remove the GearFlex module to replace or adjust components in the convenience of their van or workshop – reducing the need for ladder work and making maintenance much safer and more efficient.

- Fast GearFlex replacement in 30 seconds*
- Designed for recycling and optimal re-use of components
- Increased performance and safety with no live wires
- No risk of faulty wiring in the field
- Safe repair in the workshop

*Validated in service tests performed by qualified third-party installers



Replace the GearFlex module without tools in 5 easy steps

1. Open the luminaire
2. Remove the GearFlex box – it's quick and tool-free
3. Scan the Service tag QR code with a smartphone using the Service tag app
4. Take the replacement GearFlex module and program the driver with the Service tag app
5. Place the module in the luminaire and close it

Done!



Signify Service tag

Service tag from Signify is a unique QR code-based LED luminaire asset identification system that provides detailed information on specification and spare parts. The system simplifies the installation and maintenance of lighting infrastructure by utilizing cloud technology. Service tag also plays a key role in the circular design of our lighting solutions, as it extends their service life and reduces maintenance efforts, ensuring efficient servicing and avoiding waste.



How it works

Every luminaire is equipped with a unique QR code. All relevant asset data is stored in the service cloud, including detailed luminaire specification, User data (geo location, project-location, external ID, notes, etc.) and information on spare parts and accessories. By scanning the QR code on the packaging or luminaire with the Signify Service tag app, this information becomes instantly accessible, offering invaluable benefits.

Your benefits at a glance



During installation



#1. Download the app

Download the Service tag app from the App store or Play store on your mobile device (iOS or Android).



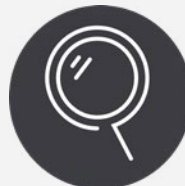
#3. Create a group QR code

If you have multiple luminaires, it's possible to use the Service tag app to combine individual luminaires into a group. Each group will have its own unique group QR code.



#2. Register the luminaire

Register the luminaire by simply scanning the QR code on the packaging or luminaire. The system automatically identifies the type of each luminaire.



#4. Luminaire information

Scan the QR code on your luminaire for easy access to the installation manual.

During service/maintenance



#1. Spare parts identification

Use the Service tag app to view a luminaire's spare parts, which contains all necessary information for quick ordering.



#2. Spare parts programming

Quickly program a spare driver using the Service tag app—without needing a faulty driver on hand. Scan the QR code of a luminaire with your device, put your mobile device on the spare driver, press “Program” and the spare driver receives the right settings for this specific luminaire.



Easy installation and commissioning

- Access to product details, manuals and spare parts
- Helps avoid errors



Simplified maintenance

- Detailed information on products
- Quick access to relevant information means less time required for repairs or replacements



Asset management

- Real-time tracking of assets
- Simplified management of replacements, upgrades and warranty information

Learn more at signify.com/global/service-tag



Product configuration example

The example shown assumes a configuration based on a correlated color temperature of 4000K – it illustrates only a small part of the almost infinite configuration possibilities of Luma gen2.

Family description



BGP701:
Luma gen2 nano



BGP703:
Luma gen2 mini



BGP702:
Luma gen2 micro



BGP704:
Luma gen2 medium



BGP713:
Luma gen2 mini compact



BGP705:
Luma gen2 large

	Power (W)*	Luminous flux ranges (lm)*		Luminous efficacy (lm/W)*	
		LEDgine optimized	LEDgine performance	LEDgine optimized	LEDgine performance
BGP701	5.6-62	384-8,550	492-10,120	130-153	143-181
BGP702	5.6-62	384-8,550	492-10,120	130-153	143-181
BGP713	5.6-122	392-16,150	762-20,240	131-167	154-191
BGP703	5.6-122	392-16,150	762-20,240	131-167	154-191
BGP704	13.4-168	1152-24,960	1,500-29,440	148-172	175-196
BGP705	41.5-550	4128-56,320	5,160- 89,000	142-167	162-200

Road optics LEDgine optimized (4S)

- Narrow:**
DN08, DN09, DN10, DN11, DN25, DN26, DN33, DN50
- Medium:**
DM10, DM11, DM12, DM13, DM30, DM31, DM32, DM33, DM50, DM52, DM65, DM70
- Wide:**
DW10, DW30, DW50, DW52, DW65
- Extra wide:**
DX10, DX50, DX51, DX52, DX70

Road optics LEDgine performance (1P)

- Narrow:**
DN08P, DN09P, DN10P, DN11P, DN27P, DN50P
- Medium:**
DM14P, DM15P, DM16P, DM20P, DM24P, DM30P, DM31P, DM32P, DM65P, DM70P
- Wide:**
DW10P, DW30P, DW52P
- Extra wide:**
DX50P, DX51P, DX70P



Connectivity options

- IACZ-4:** Interact City
OSB: Outdoor Multisensor

Dimming options

- D9:** DALI
D11, D12: LineSwitch
D13: Amp dimming
D18: Stand-alone DynaDimmer
D28: Dimming via coded mains voltage

Optional features

- FG-AR:** Flat glass, Anti-reflective
MSP: Marine salt protection coating
FU: Fuses
SRG10: Surge protection 10kV
CABLELENGTH: Pre-fitted with cable up to 22 m

*Based on 4000K system level



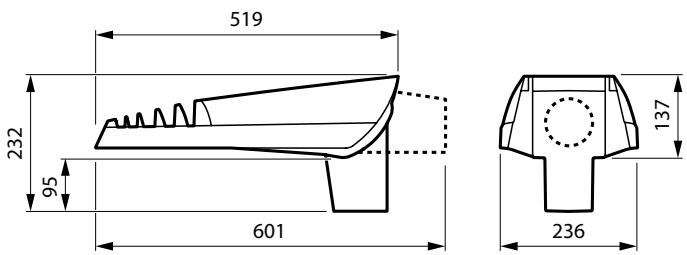
Product specifications

Power (W)	BGP701, BGP702: 6–62 / BGP713, BGP703: 5.6–122 / BGP704: 13.4–168 / BGP705: 41.5–550
Luminous flux ranges*	BGP701, BGP702: 384–10,120 / BGP713, BGP703: 392–20,240 / BGP704: 1,152–29,440 / BGP705: 4,128– 89,000
Luminous efficacy* (lm/W)	BGP701, BGP702: 130–181 / BGP713, BGP703: 131–191 / BGP704: 148–196 / BGP705: 142–200
Correlated color temperature (K)	1800 (only for 1P) / 2200 / 2700 / 3000 / 4000 / 5700
Color rendering index	>70 (for CW, NW) / >80 (for WW)
Lifetime	100,000 hours (L93–L99)
Operating temperature range	–40 to +50 °C
Light recipes	518, 420 ClearStar / 610 ClearField
Driver	Programmable LED drivers (DALI, D4i)
Dimming	Stand alone DynaDimmer / DALI / LineSwitch / Mains dimming
Connectivity options	Interact City / Outdoor Multisensor / Zhaga D4i / Nema
Connection	Plug-in cable connectors
Optics	Narrow / Medium / Wide / Extra wide
Louvres	Dedicated louvres for backlight cut-off BL1, BL2
Tilt	Standard tilt angle post top: 0° / Adjustable tilt angle: from –20 to +20° (ajustable in steps of 2,5°)
Installation	BGP701–704, 713: post top; side entry mounting Ø 32–60 mm / BGP705: post top, side entry mounting Ø 48–76 mm Recommended mounting height: 4–18 m
Ingress protection/Impact resistance	IP66 / IK10 (not connected)
Surge protection	6–8kV standard / 10kV with SPD (SRG10)
Options	Flat glass, anti-reflective (FG-AR) / Marine salt protection coating (MSP) / Fuses (FU) / Pre-fitted cable <22m (CABLELENGTH)

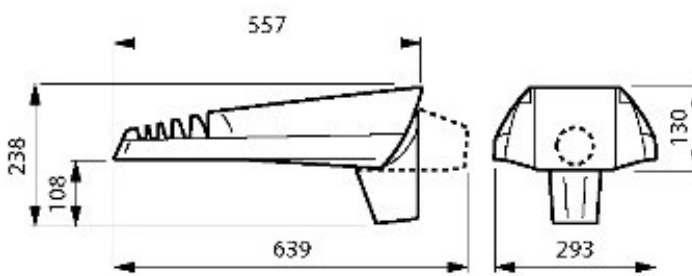
¹Based on 4000K

Product dimensions

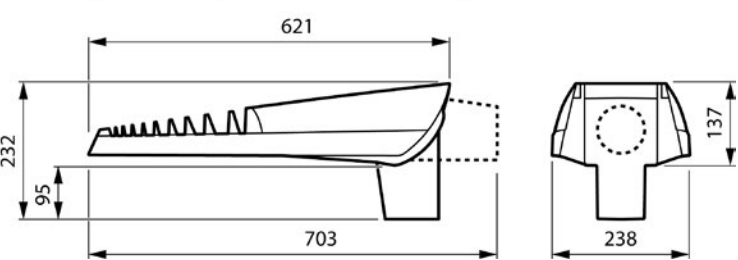
Luma gen2 nano



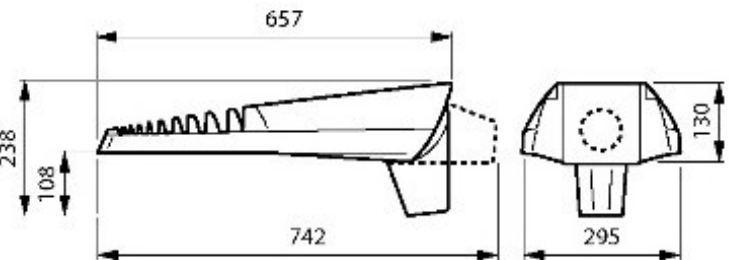
Luma gen2 micro



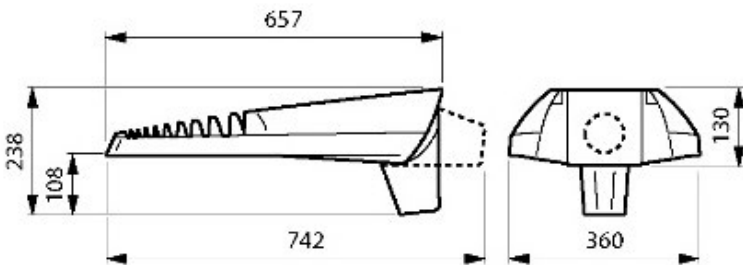
Luma gen2 mini compact



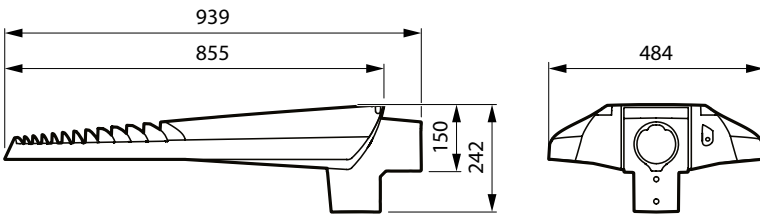
Luma gen2 mini



Luma gen2 medium



Luma gen2 large



You and Signify – a reliable partnership

Signify is the world leader in connected LED lighting systems, software and services. We proudly bring to market the best lighting brands in the world, including Signify, Philips and Interact.

We believe in close cooperation before, during, and after every project. Our local teams provide the support and information you need—with flexible, on-time delivery and reliable product availability.

To help you stay ahead, the [Signify Lighting Academy](#) offers a comprehensive range of educational resources to grow your expertise and earn certification.

Our global brands



Signify represents our commitment to sustainable innovation. As our leading brand for connected lighting systems, luminaires and components for the specification project business, Signify solutions serve the segments where we collaborate most closely with our customers.



Signify Interact is our IoT software platform for managing smart lighting systems and unlocking the value of the data they collect. Easy to install and configure, Interact supports a wide range of applications—from small offices to entire cities.



Philips stands for quality and energy efficiency in lighting. It is our leading brand for innovative, off-the-shelf lighting products for professionals and consumers alike.

Get more info on our products, services and tools:



Driven by responsible innovation

Signify and the Mercedes-AMG PETRONAS F1 Team share a passion for technology and a desire to push the boundaries of what is possible. Our innovations in lighting serve the well-being and performance of the team, deliver powerful experiences, both trackside and at home, and help the team pursue its ambition to become one of the most sustainable in sport.

Learn more at

Signify is Official Lighting Partner of Mercedes-AMG PETRONAS F1 Team



Official Lighting Partner





the meaning of light