

Signify Sensor Ready Luminaires

Setting the foundation for current and future smart city applications





The Sensor Ready Platform

The digital revolution and the Internet of Things presents exciting opportunities for cities to benefit from future innovations in connectivity. But advances in technology happen so quickly, it can be difficult to decide when to opt in.

Our Zhaga-D4i certified luminaires gives customers a future-ready foundation that you can build on whenever your city is ready to opt into new advances in technology. It is designed to work with industry-recognized LED drivers, controllers and sensors that have the potential to increase energy efficiency and collect different types of data.

Our Zhaga-D4i luminaires are:

- Future ready: you can upgrade your luminaire with communication and sensor nodes now or later, giving you full flexibility and scalability
- Easy to install and maintain: you can install the nodes and sensors quickly and easily by twisting and locking onto the luminaires and through plug-and-play technology
- Aesthetically pleasing: they fit seamlessly into your urban landscape
- Standardized: you can connect nodes from different suppliers

With Zhaga-D4i luminaires, you can upgrade to a dynamic world of sensing capabilities and data at a pace that suits your needs.

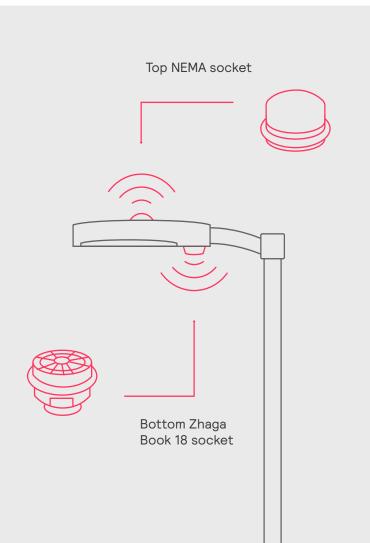
Zhaga-D4i Iuminaires

Zhaga-D4i is a standardized smart interface between LED outdoor luminaires and one or two sensor or communication nodes. It's plug-and-play interoperability enables seamless IoT connectivity, and D4i drivers allow for an easy exchange of different IoT nodes or sensors on luminaires.

The smart interface consists of:

- One or two standardized and certified Zhaga Book 18 sockets
- · Standardized and certified DALI D4i drivers

What's more, Zhaga-D4i certified luminaires enable Zhaga-D4i sensors and communication nodes to be added/upgraded in the field.





Setting the standard

As the world leader in lighting, Signify is committed to setting industry standards. It's why we worked hard in contributing to the DALI Alliance and the Zhaga Consortium certification programs that help mark and control quality across all Zhaga-D4i installations.

"The Zhaga-D4i standard is key for our customers as it makes it easier than ever before to adopt connectivity within smart cities." – Wim Visser, Product Manager Outdoor Luminaires at Signify.

By adopting a clear certification program and standardizing specifications, we can ensure compatibility with mutual interoperability testing with partners. "It is important to note that the combination of a sensor in a connected smart streetlight has to be released by the smart streetlight management system supplier to ensure reliable performance of the complete end-to-end system" – Eng Yong Liang, Global Segment Manager Smart Cities at Signify.



"

The Zhaga-D4i standard is key for our customers as it makes it easier than ever before to adopt connectivity within smart cities."

Wim Visser, Product Manager Outdoor Luminaires at Signify

How Zhaga D4i sensors work

By taking advantage of something you already have — your street lighting — you can make the path to becoming a smart, connected city even easier. Our Philips Outdoor Multisensor is an example of a Zhaga-D4i sensor that help you achieve your smart city vision – but how do they work?

Communication node:

- Upgrade your existing streetlights by plugging the control node in the standard socket on top of the streetlight.
- Once you have installed a control node, you can monitor status and energy consumption while remotely managing each light point.
- The data you receive also eliminates much of the on-site investigation that work crews typically have to perform prior to repairs, reducing response times from days to hours.
- Use Signify's Philips control nodes certified to D4i
 Type A for multi-master control capability to work
 with Type B certified sensors. Signify is fully compliant
 to the Zhaga-D4i interoperability standard which
 stipulates how a Type A node and a Type B sensor
 can work together.

Sensors:

- System-connected sensors are part of the growing smart city ecosystem and give intelligent opportunities beyond what standalone sensors can do.
- At Signify, our portfolio of sensors certified to Zhaga-D4i connects to streetlight luminaires via the Zhaga Book 18 socket interface.
- For example, when the Signify Outdoor Multisensor is attached to a luminaire connected to Interact, the embedded D4i compliant software enables the node and the Multisensor to work together. The sensing functions can also be remotely configured with the data transported into the Interact application via the connected lighting network.
- Sensors that are certified to Zhaga- D4i Type B and SR, ensure compatibility with luminaires fitted with either SR or D4i certified LED Drivers.







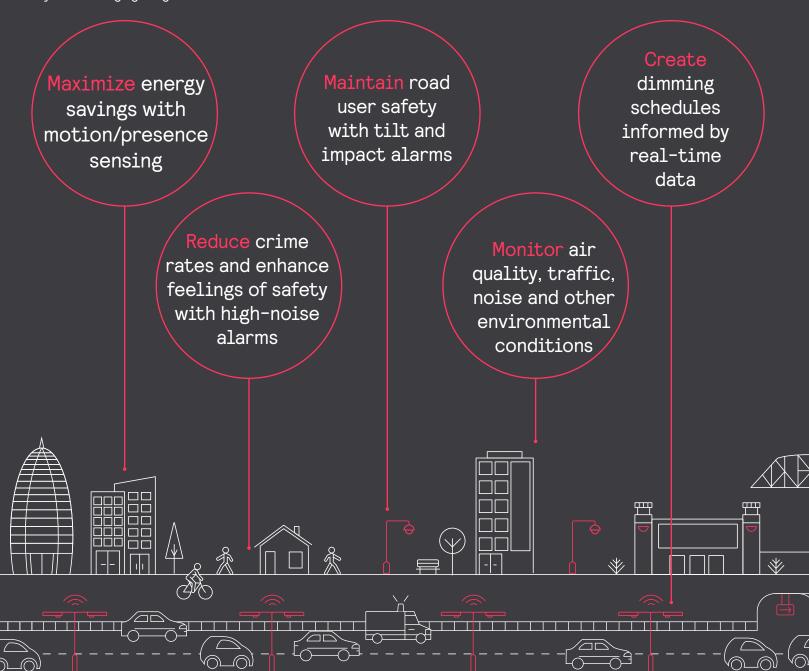
What is Interact?

Interact is a secure and scalable software application that unites connected lighting systems and the data that those systems collect with your intelligent building, smart city, and other Internet of Things solutions.

Put simply, it allows you to unlock value in your lighting that goes beyond illumination. Interact connected lighting turns your streetlights into data points. You can then use this data to analyze and gain new insights into your operations, allowing you to create urban environments that continuously deliver value to improve your citizens' quality of life.

Smart city capabilities

You can improve the lives of people in your city by simply adopting sensors and integrating them into your existing lighting infrastructure. You can:



To learn more about how Sensor Ready Luminaires can start your smart city journey, visit us at:



© 2023 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Signify North America Corporation 400 Crossing Blvd, Suite 600 Bridgewater, NJ 08807 Telephone 800-555-0050 Signify Canada Ltd. 281 Hillmount Road, Markham, ON, Canada L6C 2S3 Telephone 800-668-9008

I trademarks are owned by Signify Holding or their respective owners