



# Apollo

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Wi-Fi Based Outdoor  
Lighting System for  
Smart Cities

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An integration platform for external components related to municipal management and control such as cameras and sensors.



Integration with all cloud-based smart-city systems



Building a lighting control scenario independently for each luminaire



Simple post-installation activation and control through smart mobile devices.



The use of Philips components ensures the durability and long lifespan of the systems.

## Street lighting - where the smart cities come to life

Modern street lighting is under constant pressure to improve its performance on a variety of levels. The main focus of street lighting systems is the optimal illumination of streets and roads, parking and public areas; however in addition to that, it must also provide security for pedestrians and drivers, be energy-efficient and compatible with a variety of IoT applications.

### When design and technology meet

Gaash Lighting introduces Apollo, a designated smart-city luminaire, which includes a Wi-Fi-based control system. The internal operating system allows creating individual control scenarios for each individual luminaire or group of luminaires, and controlling them via smart mobile devices, alongside control from the municipal control center, without requiring any special infrastructure.

### Creating smarter and safer cities

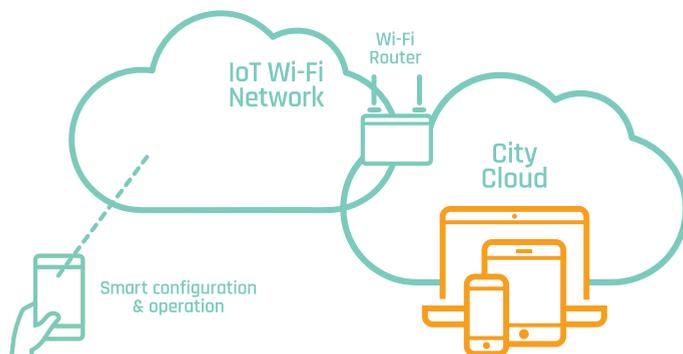
Apollo's engineering design allows integrating a flexible lens system, creating smarter and safer cities. For example, security cameras running on the wireless infrastructure, keeping track of the city's events, traffic monitoring sensors, weather sensors and so on.



Apollo includes a sealed equipment compartment allowing the integration of external components, such as security cameras or sensors, which assist in the management of the smart-city.



The built-in communications terminal allows control over the luminaire by the control center or via mobile devices.



## Technical Information:

### Network and communications:

- 1:250 ratio (one Wi-Fi router to every 250 lamps)
- Standard Wi-Fi connection
- A range of up to 1 Km between luminaire and router
- Ethernet and GPRS connections available GPRS
- AES128 network security

### Power consumption:

- 0.1 W lamp
- Router exchange 2-4W

## Primary applications:

- Control option for a number of luminaires as a group
- Integration with a variety of applications via cloud technologies
- Independent operation option in accordance with fixed programs and sensors (even without a control center)
- Built in battery allowing continuous communications even during a power outage
- 99% accuracy in electricity metering
- DALI dimming
- Remote turn on / off option
- Operation according to astronomical clock
- Built in real-time clock in the luminaire
- Turn on / turn off option via photoelectric cell
- Continuous tracking of malfunctions and alerts
- 8 additional analogical / digital ports for sensors



**Innovation: the application of better solutions that meet new requirements, unarticulated needs, or existing market needs” (Wikipedia, The Free Encyclopedia).**

Innovation is the driving force behind any product or new and evolving field. We, at Gaash Lighting, have set ourselves a goal to create new opportunities for developing cutting-edge solutions in the field of lighting.

The design and development of Apollo, a smart street luminaire, arose from the understanding that street light and luminaires are expensive ‘real-estate’ in urban areas and can be used for a variety of other applications in addition to the basic function they were designed to fulfill.

Using a combination of external components, such as security cameras and various sensors, Apollo will play a significant role in the municipal control system and will be able to be integrated with future technologies in the field.

Gaash Lighting is an established, reputable Israeli lighting company with over 50 years of experience.

The company provides the professional market with overall lighting solutions and specializes in designing, developing and manufacturing a variety of luminaires and technologies in the fields of indoor and outdoor lighting, providing solutions in the field of energy efficiency and control. Founded in 1964, the company manufactures its products in Israel and its products are marked with the Made in Israel, blue and white label.

