







Car parks have an intensive activity, so detecting their real use helps to make better use of light while saving energy.



# The challenges

### Use 24/7

Parkings never close or are open for many hours a day, although its use varies.

Light can be adapted to the real use, reducing unnecessary costs. Energy savings and **long lifetime products** contribute to installation efficiency.

### Dirt and fumes

Dust and gas, like fumes from cars, could enter into the luminaires and damage the electronic components.

Robust products with high IP rating are required.

### Impacts protection

Luminaires mounted in walls could be damaged easily.

A high IK rating is essential, especially in luminaires within reach of vehicles.

### Safe and sound

Safety and a good orientation for people and cars prevent accidents.

An **appropriate light level** facilitate a proper recognition of vehicles, people and signage, avoiding dark zones and the lack of light in peak times.

### Visual comfort

Warm light can reduce visual accuracy, while cold darken the area.

A **neutral white light** makes people walk through more comfortable, gets seen better by the drivers and helps CCTV, creating a safe environment.

### Optimal light distribution

Indoor parking are dark spaces with columns and corners.

A **diffuse and uniform distribution** reduces the number of light points, which cut investment, installation and operation costs.

### Different use from areas

Some areas have a lot of traffic, while others are empty. Cars move, so light needs to be ready timely or dim down gradually.

Dimmable luminaires and presence sensors adapt the light to improve efficiency.

### Different use during time

Parkings have from light to heavy traffic in peak hours, as well as natural light.

**Dimmable luminaires** provide just the needed light in each moment and **daylight sensors** adjust it to the time of the day.

### Flexibility

Quick installation and easy maintenance improve installation profitability.

Intelligent control provides real time information to facilitate commissioning and anticipate maintenance. Its **wireless configuration** is more flexible.

The solution

- Protected luminaires with longer lifetime guarantee quality lighting over long periods.
- LED technology increases energy efficiency and reduces environmental impact.
- The appropriate light level and colour guarantee safety for people and cars.
- Intelligent controls adapt the light when and where needed, saving energy and maintenance costs.
- Transition to darkness is done naturally to **reduce risks** from sudden light changes.
- Robust luminaires with easy mounting and flexible configuration reduce installation costs.

# The products



# ZALEDA EVOL II

# For indoor and outdoor

Up to 139lm/W Up to 6,100lm L80 85,000 hours at 35°C Different optics



## Real weatherproof

- IP66 suitable for outdoor.
- Excellent thermal management.

### Protection and safety

- With weatherproof fast connector.
- Easy tool-free installation.
- Optional antitheft brackets.



# ZALUX BASE WIRELESS 🕴

# The smart solution

+35°C

-25°C

IP 66

IK 08

Up to 138lm/W
Up to 6,000lm
L80 70,000 hours
Diffuse light

CE ROHS

+45°C

-30°C

IP 66

IK 08

## Quick, easy and safe mounting

- Single-part polycarbonate housing with cable gland.
- Impact-resistant end caps.

### Intelligent lighting

- Bluetooth wireless control and sensors to optimize light use.
- Suitable for dimming, scenes control and data monitoring.
- Flexible and quick configuration.

+35°C

-25°C

IP 66

IK 08

C F

RoHS

# A A

# DUNA FLEX STP / ST

# As flexible as you need

Up to 120lm/W	+35°C
Up to 6,000lm	+35°C
Up to L80 50,000 hours	
0p to Loo 30,000 nours	IP 66
Different entire	
Different optics	
	IK 08



# The right mix for parkings

- Polycarbonate housing and diffuser with UV protection.
- Polyamide closing clips and stainless steel fixing clips.

### Options for higher flexibility

- IK03 PMMA diffuser and GFRP housing.
- Up to 10,000lm and 70,000 hours.
- Through wiring and emergency kit.

# Luminaires with LED tube



# ALHAMA T-LED

# Outstanding all-round solution

Up to 160lm/W

Up to 7,300lm

L70 50,000 hours

Diffuse light

2 tubes version

• High resistance with polycarbonate housing and diffuser.

• With one of the most efficient LED tubes on the market.



# PEP T-LED

# Traditional design with high efficiency

Up to 158lm/W
Up to 7,200lm
L70 50,000 hours
Diffuse light
2 tubes version

- Fibreglass reinforced polyester and polycarbonate diffuser.
- As simple as an LED tube, made by glass to prevent sagging.



(F

RoHS

+25°C

-20°C

IP 65

IK 07



# Why intelligent lighting for parkings?



- Dimming adapts the luminous flux to the needs of the space.
- Presence sensors provide the right level and save energy when light is not necessary.
- Daylight sensors take advantage of natural light to illuminate the parking.
- Professional and easy commissioning makes installation faster and effective, which reduce costs.
- Scenes control allows to choose the most efficient lighting configuration in each time.
- Data monitoring shows the use of the space, to optimize the installation and anticipate maintenance works.



Parkings need to guarantee safety and optimal visual conditions for pedestrians and cars in the right time.

ZALUX luminaires are developed to offer high protection and visual comfort, while improving energy efficiency.

- Robust materials guarantee lighting performance over long times, even in outdoor.
- Intelligent luminaires provide the right light only when and where it is needed.
- Wireless lighting control and sensors optimize the installation to save costs with flexibility.

ZALUX is since 1980 your expert partner for weatherproof luminaries. Developed and manufactured to achieve high efficiency, maximum safety and optimal functionality.

Perfectly made for all conditions  $\langle x \rangle$ 



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