

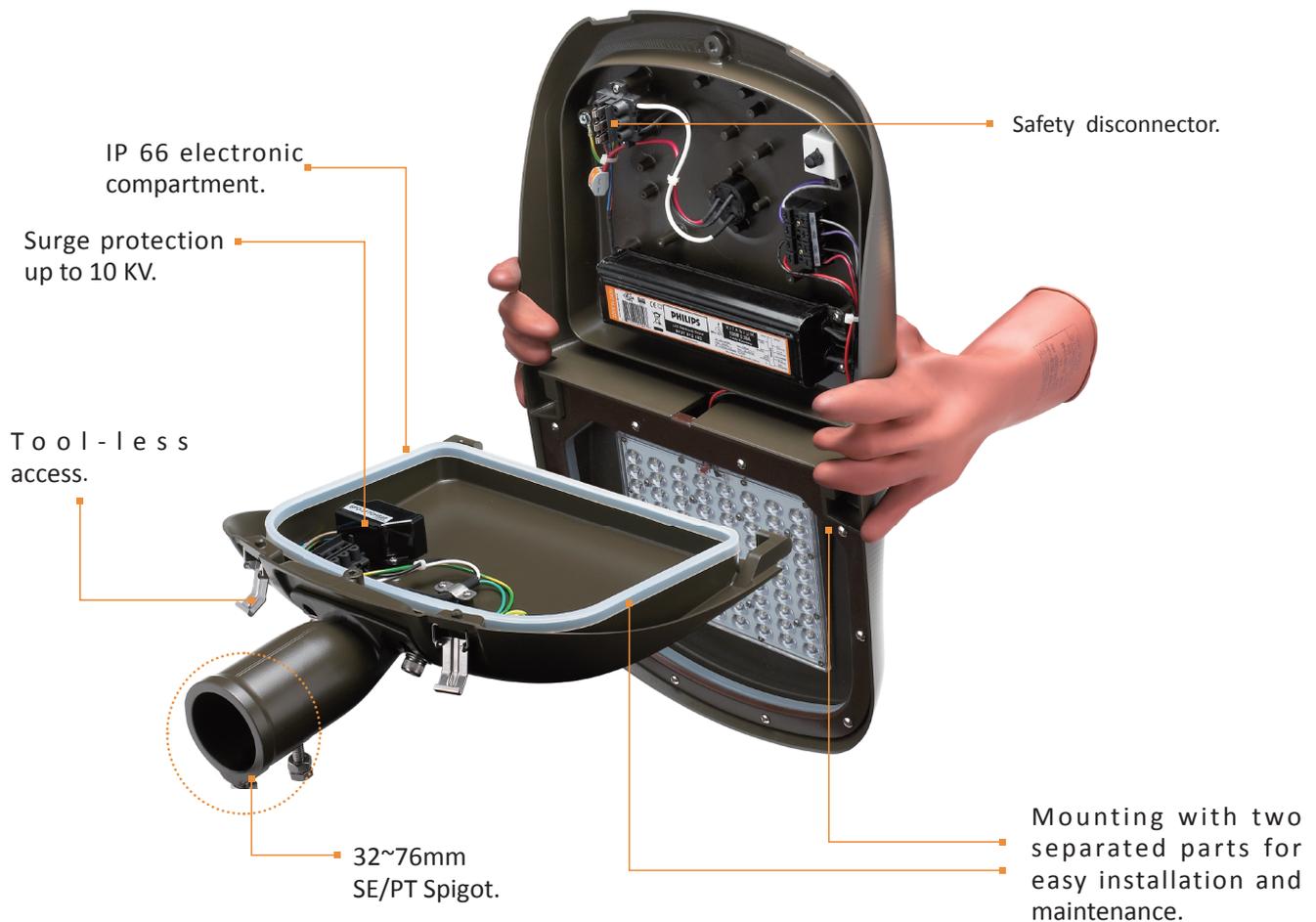


The PERMiA is designed to meet all types of UK and European roadways. Its unique modular optical lens create multiple lighting designs using a single type of housing. The luminaire is fully future proof and specifically designed to reduce payback period on total investment. The PERMiA not only commits to high quality performance, it provides numerous features to simplify installation and reduce the need for maintenance .

PERMiA

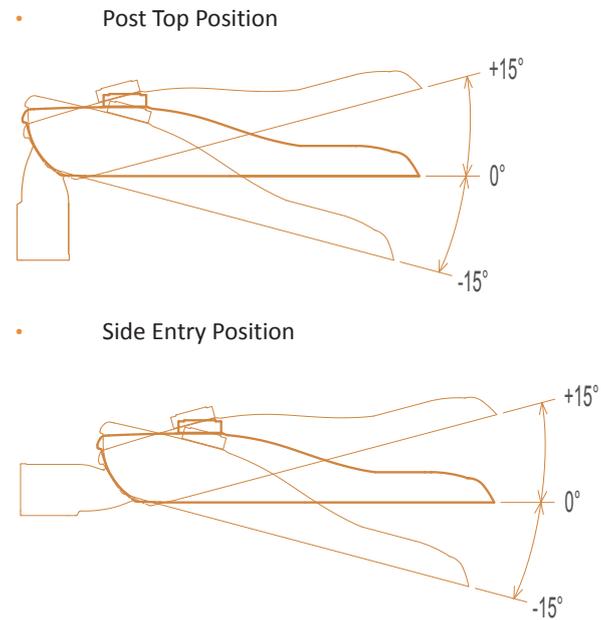
Expert Selection

Professional Road and Urban Luminaires



Flexibility and Convenience

Wide-Angle Setting to Fulfill the Most Requirement



Simple Steps to Manage Time and Money



Clever Optical Design

Light Distributed in a Specifically Desired Way

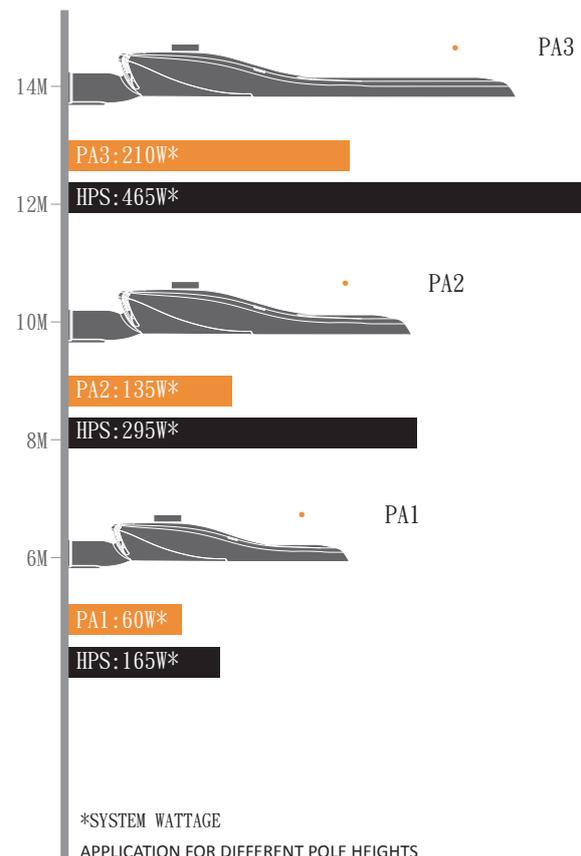
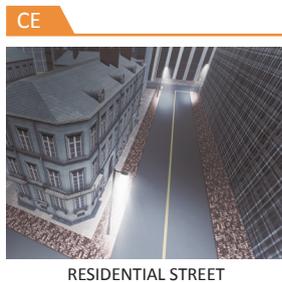
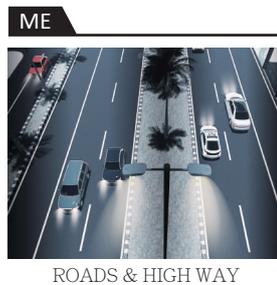
PERMiA series offers different type of applications. It's strong scalability providing a wide choice of optics to fulfill various types of application as efficiently as possible.

(COMPLY WITH EN13201)

ME Traffic routes of medium to high driving speed.

CE Drivers of motorized vehicles, and other road users, on conflict areas.

P Pedestrians and pedal cyclists on footways, cycleways, and parking place, residential roads...



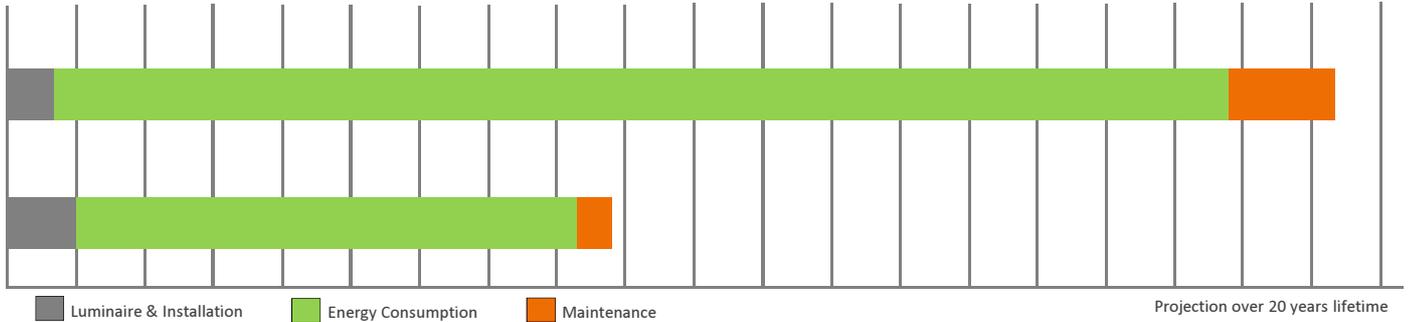
Lower Your Total Cost of Ownership

Efficient Way to Get the Money Back

PERMiA covers every aspect and characteristic of its product. Not only is it cost efficient but it also accelerates the payback period by reducing the total cost of ownership for your street light assets.

PERMiA vs 250W HPS

Replacing 250W HPS with **PERMiA PA2** 128W LED luminaires for ME2 class roadway using existing columns at 40m spacing, 12m height and opposite arrangement.

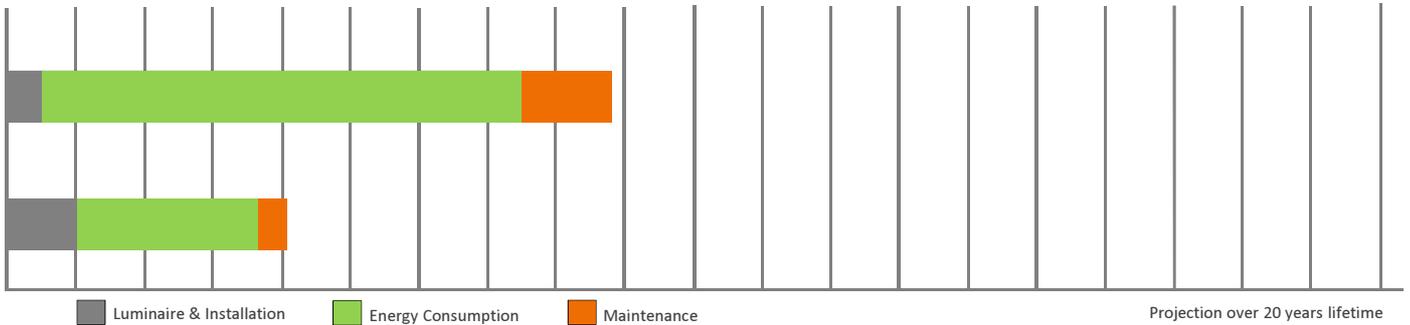


Reduce TOC:

68%

PERMiA vs 100W HPS

Replacing 100W HPS with **PERMiA PA1** 53W LED luminaires for P2 class roadway using existing columns at 36m spacing, 8m height and single sided arrangement.



Reduce TOC:

69%

PERMiA vs 35W SOX

Replacing 35W SOX with **PERMiA PA1** 16W LED luminaires for P4 class roadway using existing columns at 30m spacing, 5m height and single sided arrangement.



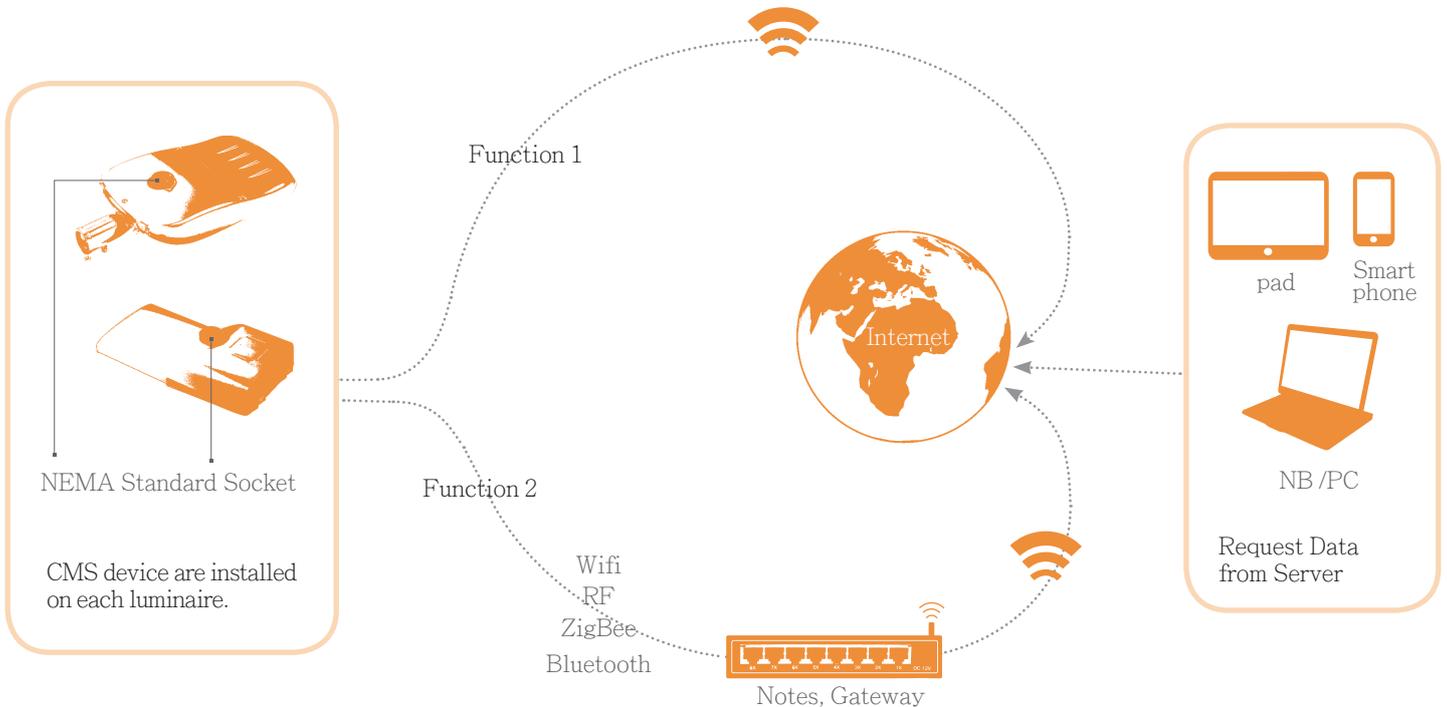
Reduce TOC:

74%

Smart Light - An Integrated Lighting Solution Provider

A Better Way of Living!

Leotek provides the total solution of smart lighting system based on any specific project and customer requirement. We focus on improving safety, reducing environmental impact, energy and maintenance cost.



Function 1: Small system, suitable for discrete lighting area.
Function 2: Large system, suitable for centralised lighting area.

Further Saving! - Light Only When Necessary!

Dimming function

The multi-level dimming program is fully tailored to your need for its adaptation to any place and time regarding the lighting level desired. Once programmed, the dimming system will adapt automatically depending on the different solutions.

Photocell

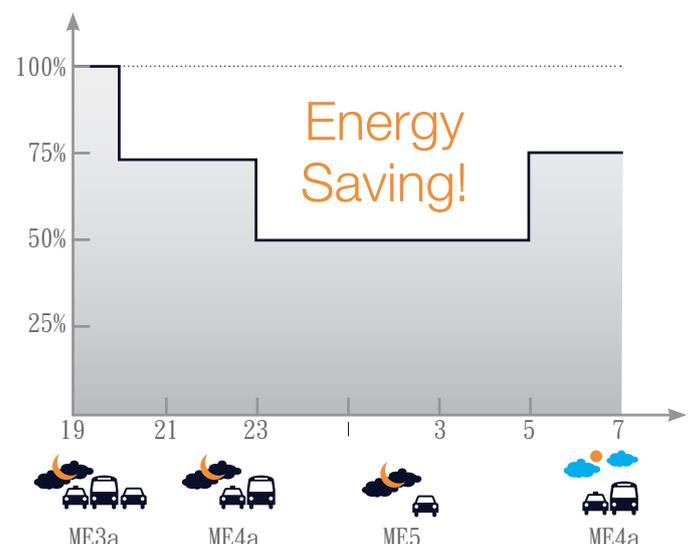
By installing a photocell on top of the luminaire, the light will adjust itself in turning on or off according to the natural light detected.

Motion sensors

Motion sensors detect people or vehicles passing by and at once trigger the light to turn on; in other words, it helps to illuminate an area when needed and reduce the energy consumption in the other way around.

Additional savings

PERMiA with dimming function.



Achieve **36%** additional energy savings

PERMiA

Full product line to meet customer needs!

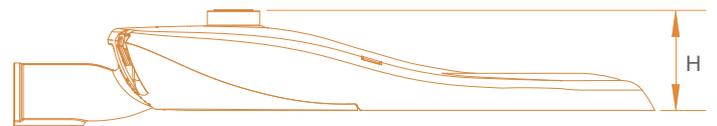
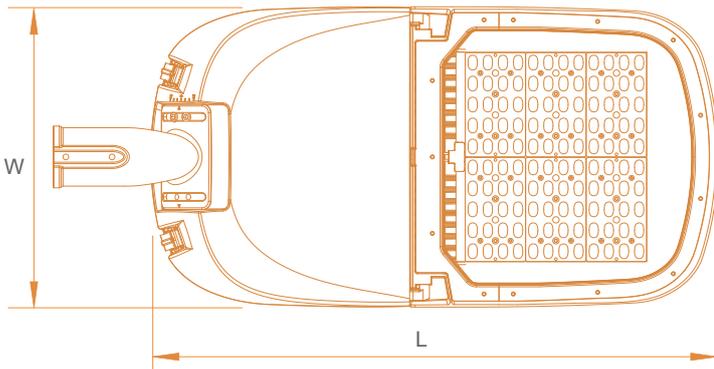
Product Specification

	PA1	PA2	PA3
Lumen Package Range(lm)*	1, 200-7, 500 lm	7, 500-17, 300 lm	17, 500-34, 000 lm
Luminaire Efficacy(lm/W)**	Up to 180 lm/W		
Weight (kg/lbs)	7kg/151bs	10kg/221bs	15kg/331bs
Correlated Colour Temperature***	Cool/Neutral/Warm White		
Minimum CRI	70		
Ingress Protection	IP66		
Impact Resistance (Glass/Plastic)	IK09/IK10		
Nominal Voltage	120-277V 50/60Hz		
Electrical Class	Class I/Class II		
Surge Protection	ANSI C62.41.2 high exposure 10KV level		
Operating Temperature	-40 °C~50 °C		
Installation	32~48mm/48~60mm/60~76mm SE/PT spigot		
Post Top/Side Entry Tilt	-15° ~15°		
Certification	ENEC/UL/CE		

(*)Lumen package range is based on the luminaire lumen output and includes dimmed options.

(**)Lamp efficacy is an indicative LED efficacy at t_j25OC based on the LED manufacturer data. The real efficacy of the luminaire will vary depending on environmental conditions.

(***)Cool white will have a nominal CCT of 5000K, Neutral white will have a nominal CCT of 4000K, and Warm white will have a nominal CCT of 3000K.



Dimensions

	PA1	PA2	PA3
L	550 [21.7]	675 [26.6]	915 [36.0]
W	300 [11.8]	380 [15.0]	380 [15.0]
H	105 [4.1]	105 [4.1]	105 [4.1]

unit:mm[inch]

Materials

	PA1	PA2	PA3
Body	Die-cast Aluminum/Marine grade LM6 Aluminum		
Protector	Tempered Glass/Plastic		
Colour	Grey/White/Dark Brown		

Please visit Leotek at www.leotek.com

Information provided subject to change without notice.

