

Pilzeo



Designer : Achilles Design

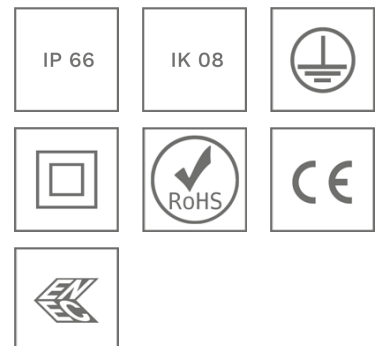


Elegant and cost-effective solution with cutting-edge LED technology

The post-top luminaire Pilzeo transforms the classic 'mushroom' lantern into a contemporary design. Based on the proven LensoFlex®2 LED engine, the Pilzeo ensures photometric performance to provide safety and well-being in the public space.

The name Pilzeo refers directly to the 'Pilzleuchte' - literally 'mushroom luminaire' - a very popular type of lantern in German-speaking countries. This classical form has been refreshed to provide an aesthetic continuity while generating massive energy savings.

The Pilzeo luminaire is adapted to various urban landscapes such as residential areas, parks, squares, bicycle paths and historical urban centres.



Concept

Pilzeo offers a pleasing and modern take on a classic design and has been specifically designed to use LEDs to provide maximised savings in energy and maintenance costs.

The base section and body of the luminaire are made of high-pressure die-cast aluminium while the protector and the top cover are composed of polycarbonate. The design of the Pilzeo luminaire guarantees an IP 66 tightness level to maintain performance over time.

The photometric versatility of the Pilzeo luminaire, which provides both asymmetrical and symmetrical light distributions, makes it the perfect tool for various lighting applications: pedestrian areas (parks, squares...), bike paths, residential streets, car parks and urban roads.

Pilzeo is FutureProof. Both the LED unit and the electronic assembly can be replaced, without any tools, to take advantage of future technological developments.



To facilitate installation, the luminaire is delivered pre-wired.



The Pilzeo body is designed without ribs to avoid dirt or sand accumulation.

Types of application

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- SQUARES & PEDESTRIAN AREAS

Key advantages

- Cost effective lighting solution for creation of ambiance
- Elegant design for low height installation
- IP 66 tightness level for long lasting performance
- Tool free access for maintenance
- Designed to incorporate the Owlet range of control solutions



Some versions of Pilzeo can be equipped with a Back Light Control system.



The LED unit and the electronic assembly can be replaced without using any tools.



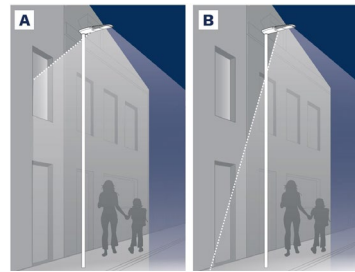
LensoFlex®2

LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. The proven LensoFlex®2 concept includes a glass protector to seal the LEDs and lenses into the luminaire body.



Back Light control

As an option, the LensoFlex®2 modules can be equipped with a Back Light control system. This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.

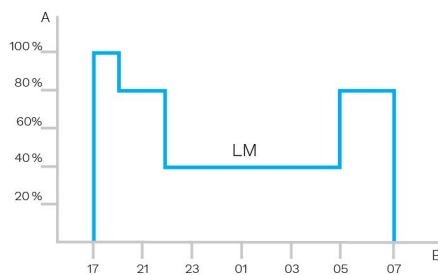


A. Without Back Light control | B. With Back Light control



Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring. The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.

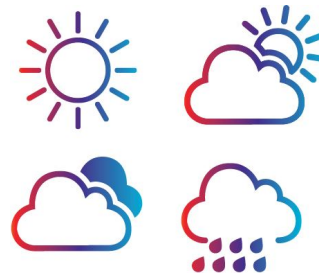


A. Performance | B. Time



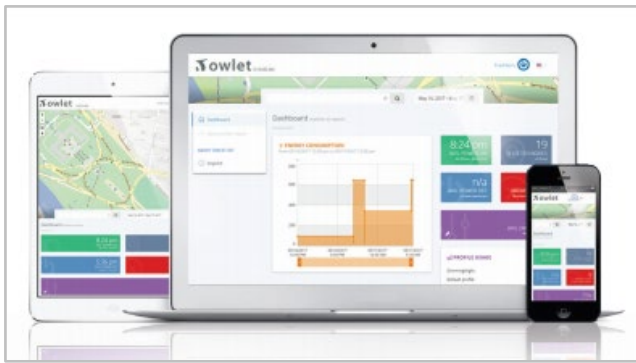
Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at night fall so as to provide safety and comfort in public spaces.



Owlet IoT

Owlet IoT remotely controls luminaires in a lighting network, creating opportunities for improved efficiency, accurate real-time data and energy savings of up to 85%.



ALL-IN-ONE

The LUCO P7 CM controller includes the most advanced features for optimised asset management. It also provides an integrated photocell and operates with an astronomical clock for seasonal dimming profile adaptations.

EASY TO DEPLOY

Thanks to wireless communication, no cabling is needed. The network is not subject to physical constraints or limitations.

From a single control unit to an unlimited network, you can expand your lighting scheme at any time.

With real-time geolocation and automatic detection of luminaire features, commissioning is quick and easy.

USER-FRIENDLY

Once a controller is installed on a luminaire, the luminaire automatically appears with its GPS coordinates on a web-based map.

An easy-to-use dashboard enables each user to organise and customise screens, statistics and reports. Users can gain relevant, real-time insights.

The Owlet IoT web application can be accessed at all times from anywhere in the world with a device connected to the Internet. The application adapts to the device to offer an intuitive and user-friendly experience.

Real-time notifications can be pre-programmed to monitor the most important elements of the lighting scheme.



Plugging the LUCO P7 CM controller onto the 7-pin NEMA socket.

SECURE

The Owlet IoT system uses a local wireless mesh communication networks to control the on-site luminaires combined with a remote control system utilising the cloud to ensure smooth data transfers to and from the central management system.

The system uses encrypted IP V6 communication to protect data transmission in both directions. Using a secure APN, Owlet IoT ensures a high level of protection.

In the exceptional case of a communication failure, the built-in astronomical clock and photocell will take over to switch the luminaires on and off, thus avoiding a complete blackout at night.

EFFICIENT

Thanks to sensors and/or pre-programmed settings, lighting scenarios can be easily adapted to cope with live events, providing the right lighting levels at the right time and in the right place.

The integrated utility grade meter offers the highest accuracy available on the market today, enabling decisions based on real figures.

Accurate real-time feedback and clear reporting ensures that the network operates efficiently and maintenance is optimised.

When LED luminaires are switched on, the inrush current can create problems for the electricity grid. Owlet IoT incorporates an algorithm to preserve the grid at all times.

OPEN

The LUCO P7 CM controller can be plugged onto the standard 7 pin NEMA socket and operates through either a DALI or 1-10V interface to control the luminaire.

Owlet IoT is based on the IPv6 protocol. This method for addressing devices can generate an almost unlimited number of unique combinations to connect non-traditional components to the Internet or computer network.

Through open APIs, Owlet IoT can be integrated into existing or future global management systems.

GENERAL INFORMATION

Recommended installation height	3m to 5m 10' to 16'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE Mark	Yes
ENEC certified	Yes
ROHS compliant	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium Composite materials
Optic	PMMA
Protector	Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 900 sanded
Tightness level	IP 66
Impact resistance	IK 08
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	Toolless access to gear compartment

OPERATING CONDITIONS

Operating temperature range (Ta)	-30 °C up to +55 °C / -22 ° F up to 131 °F
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· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 61547 / EN 61000-4-2, -3, -4, -5, -6, -8, -11
Control protocol(s)	1-10V, DALI
Control options	Bi-power, Custom dimming profile, Photocell, Remote management
Socket option(s)	NEMA 7-pin (optional)
Associated control system(s)	Owlet Nightshift Owlet IoT
Sensor	PIR (optional)

OPTICAL INFORMATION

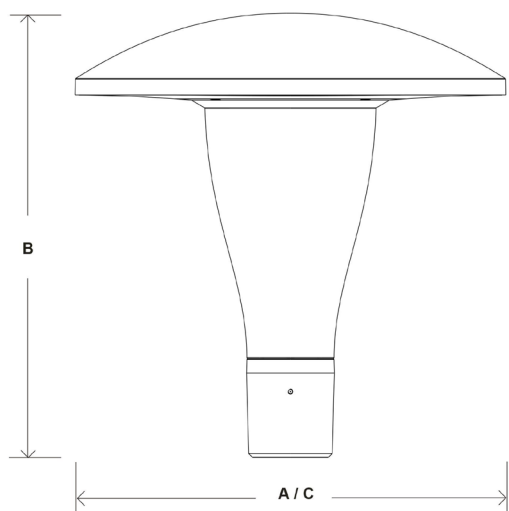
LED colour temperature	2700K (Warm White) 3000K (Warm White) 4000K (Neutral White)
Colour rendering index (CRI)	>70 (Warm White) >80 (Warm White) >70 (Neutral White)
Upward Light Output Ratio (ULOR)	<4%

LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm inch)	524x530x524 20.6x20.9x20.6
Weight (kg lbs)	6.7 14.7
Aerodynamic resistance (CxS)	0.08
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm





	Number of LEDs	Current (mA)	Luminaire output flux (lm) Neutral White 740		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Warm White 830		Luminaire output flux (lm) Warm White 727		Power consumption (W)	Luminaire efficacy (lm/W)	
			Min	Max	Min	Max	Min	Max	Min	Max		Up to	Photometry
PILZEO	8	350	900	1200	900	1200	700	1000	800	1000	9.7	124	
	8	500	1200	1600	1200	1600	1000	1300	1100	1400	13.6	118	
	8	700	1500	2000	1500	2000	1300	1700	1400	1800	19.1	110	
	12	350	1400	1800	1400	1800	1100	1500	1200	1600	14.1	135	
	12	500	1800	2400	1800	2400	1500	2000	1600	2100	19.6	128	
	12	700	2500	3000	2500	3000	2100	2500	2200	2700	27.4	117	
	16	350	1800	2400	1800	2400	1500	2000	1600	2100	18.2	137	
	16	500	2500	3200	2500	3200	2100	2700	2200	2900	25.7	128	
	16	700	3100	4100	3100	4100	2600	3400	2800	3600	36.2	116	
	24	350	2800	3600	2800	3600	2300	3100	2500	3200	26.8	142	
	24	500	3700	4800	3700	4800	3100	4100	3300	4300	38.1	131	
24	700	4700	6100	4700	6100	4000	5200	4200	5500	54.5	117		

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

