

Kazu



Designer : Creare Domus



Efficient, discreet, flexible

Inspired by the Kaza hat worn by the Samurai, the Kazu is an excellent example of adaptability, anticipation and flexibility.

The minimal and modern look of the Kazu was designed around the compactness of the LED engine. It blends into landscapes while providing a sustainable lighting solution that dramatically reduces energy consumption and improves visual comfort for motorists, cyclists and pedestrians.

Kazu is available with a flat (standard version) or a dome-shaped (comfort version) protector to guarantee the perfect fit in any landscape.



IP 66	IK 10	IK 09



Concept

Kazu is an urban post-top LED luminaire offering two distinctive designs: one with a flat protector (standard) and one with a shaped protector (comfort) providing a curved aesthetic form.

The body of the Kazu is composed of high-pressure die-cast aluminium while the protector is made of polycarbonate. On the upper canopy, the fins optimise heat extraction to protect the electronic assembly from overheating. Their curved design prevents the accumulation of dirt.

Kazu is equipped with a LensoFlex®2 photometric engine, incorporating either 12, 16 or 24 LEDs, to provide the right light for various applications such as urban and residential streets, bike paths, squares, pedestrian areas or bridges while minimising the power consumption. To cut energy costs even more, Kazu can be combined with various dimming and remote management options.

The Kazu luminaire can be supplied pre-wired for an easy installation. It can be installed using a post-top fixation adapted to Ø60mm and Ø76mm spigots.



Kazu is available with two designs: with a flat or a dome-shaped protector.



For an optimal thermal management in hot conditions, Kazu has curved cooling fins.



Kazu offers a slip-over mounting onto Ø60mm or Ø76mm pole.



With the flat protector, Kazu is dark-sky compliant (ULOR 0%).

Types of application

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

Key advantages

- Cost-effective and efficient lighting solution for a fast return on investment
- LensoFlex®2 photometric engine with photometry adapted to various applications
- IP 66 tightness level for long lasting performance
- ThermiX® to withstand high temperatures
- 2 designs : standard or comfort
- Post-top mounting adapted to Ø60mm and Ø76mm spigots
- Optional control solutions: photocell or Owllet control systems



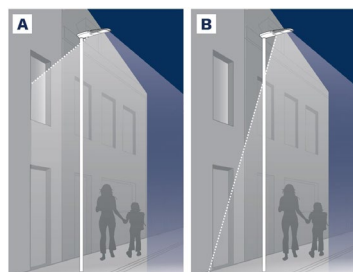
LensoFlex®2

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.

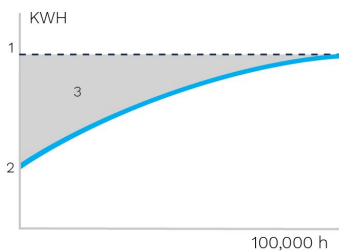


A. Without Back Light control | B. With Back Light control



Constant Light Output (CLO)

This system compensates for the depreciation of luminous flux to avoid excess lighting at the beginning of the installation's service life. Luminous depreciation over time must be taken into account to ensure a predefined lighting level during the luminaire's useful life. Without a CLO feature, this simply means increasing the initial power upon installation in order to make up for luminous depreciation. By precisely controlling the luminous flux, the energy needed to reach the required level can be maintained throughout the luminaire's life.

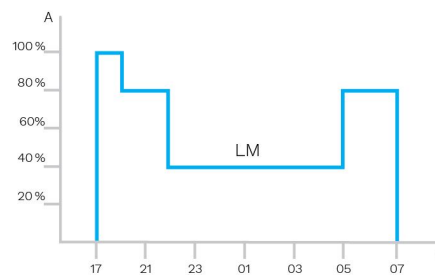


1. Standard lighting level | 2. LED lighting consumption with CLO | 3. Energy savings



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.

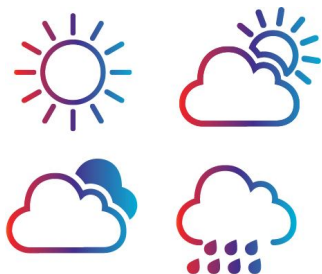


A. Performance | B. Time



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 6m 10' to 20'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE Mark	Yes
ENEC certified	Yes
ETL/UL certified	Yes
ROHS compliant	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Polycarbonate
Standard colour(s)	RAL 7038
Tightness level	IP 66
Impact resistance	IK 09, IK 10
Vibration test	Compliant with ANSI 1.5G and 3G and modified IEC 68-2-6 (0.5G)

· Any other RAL or AKZO colour upon request
 · IK may be different according to the size/configurations. Please consult us.

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 1US, Class I EU, Class II EU
Nominal voltage	120-277V – 50-60Hz 220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10 20
Electromagnetic compatibility (EMC)	EN 61547 / EN 61000-4-2, -3, -4, -5, -6, -8, -11
Control protocol(s)	1-10V, DALI
Control options	Custom dimming profile, Photocell, Remote management
Socket option(s)	NEMA 7-pin (optional)
Associated control system(s)	Owlet Nightshift Owlet IoT

OPTICAL INFORMATION

LED colour temperature	3000K (Warm White) 4000K (Neutral White)
Colour rendering index (CRI)	>70 (Warm White) >80 (Warm White) >70 (Neutral White)
Upward Light Output Ratio (ULOR)	0%

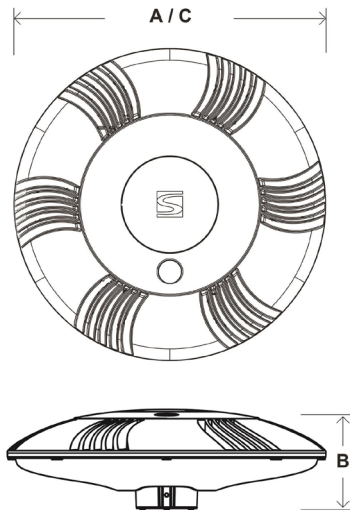
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LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm inch)	KAZU - 525x160x525 20.7x6.3x20.7
Weight (kg lbs)	KAZU - 8.7 19.1
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm





Luminaire	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		Power consumption (W) *	Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max			
KAZU	12	350	1200	1600	1200	1600	1000	1400	14	121	
	12	500	1700	2200	1700	2200	1400	1900	19.6	117	
	12	700	2200	3000	2200	3000	1900	2500	27.5	113	
	16	350	1700	2200	1700	2200	1400	1800	18.3	126	
	16	700	3000	4000	3000	4000	2600	3400	35.7	115	
	16	1000	4100	5300	4100	5300	3500	4500	53	106	
	24	350	2500	3300	2500	3300	2100	2800	27.2	129	
	24	500	3500	4500	3500	4500	2900	3800	38.9	123	
	24	700	4600	6100	4600	6100	3900	5100	54.5	116	
	24	1000	6100	8000	6100	8000	5200	6800	79	106	

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



