

# 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.

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



## 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 remote management solutions such as standard NEMA 7-pins or Zhaga sockets.

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



As an option, this luminaire can be equipped with standard 7-pin NEMA or Zhaga socket



KAZU offers a slip-over mounting onto Ø60mm or Ø76mm poles



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
- Based on open and interoperable standards
- Compatible with Schröder EXEDRA control platform
- Connected-ready for your future Smart cities' requirements



LensoFlex®2

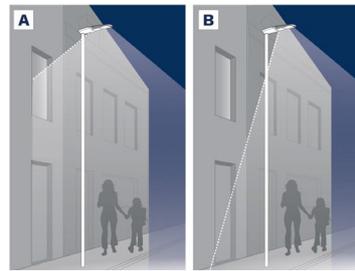
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution.



Back Light control

As an option, the LensoFlex®2 and LensoFlex®4 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.



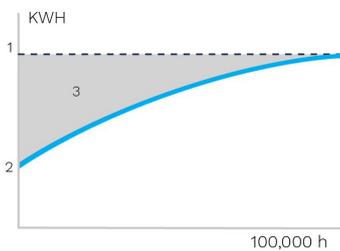
A. Without Back Light control | B. With Back Light control



### 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.



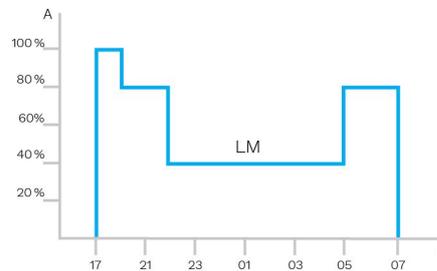
1. Standard lighting level | 2. LED lighting consumption with CLO | 3. Energy savings



### 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.

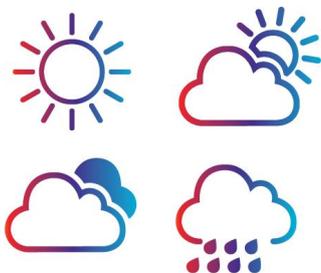


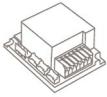
A. Dimming level | B. Time



### 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 nightfall so as to provide safety and comfort in public spaces.





# IzyHub

IzyHub is an innovative device that aims to keep luminaire installation and maintenance hassle-free. This single central connection hub distributes electricity and control information to all parts of the luminaire, ensuring that all components work together and offering reliable, long-term performance.

Its compact size and error-proof connections enable smaller and lighter luminaires that are easier to maintain and upgrade.



## Surge Protection

IzyHub features a built-in surge protection device. This prevents electrical surges resulting from lightning strikes and other transient voltages that originate from the mains network from damaging the luminaire, even in the most demanding conditions. The protective device also includes an end-of-life LED warning light, indicating that the luminaire is protected correctly.

## User-friendly

Installing a luminaire has never been easier. IzyHub features tool-free connector as the main connection terminal. It enables 30% shorter installation times compared with standard solutions. Lever actuated spring-loaded electrical connectors provide optimal contact throughout the entire life of the product.

## Easy maintenance

On the rare occasion that a component needs to be replaced in the luminaire, IzyHub makes sure that operations are carried out quickly and easily. Luminaire component connections are keyed so that mixing up electrical connections is physically impossible. Installers do not need to trace wires individually: plug it in, and it works straight away.



## Versions and upgrades

IzyHub has several versions featuring different connectivity options.

IzyHub can include an SPD, can work with external dimming and operate with all type of control sockets. It is also able to provide bi-power control and to include fuse options.

These options provide flexibility for future upgrades by only having to replace the IzyHub to connect the new equipment. No complicated re-wiring needed.





Schröder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.



### Tailored experience

Schröder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

### A powerful tool for efficiency, rationalisation and decision making

Data is gold. Schröder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

### Protected on every side

Schröder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services.

### Standardisation for interoperable ecosystems

Schröder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schröder EXEDRA system relies on shared and open technologies.

Schröder EXEDRA also relies on Microsoft™ Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

### Breaking the silos

With EXEDRA, Schröder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schröder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

### A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface.

**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  |
| UL certified  | Yes  |
| ROHS compliant  | Yes  |
| French law of December 27th 2018 - Compliant with application type(s) | a, b, c, d, e, f, g  |
| 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 |
|----------------------------------|--|

· 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<br>220-240V – 50-60Hz                       |
| Power factor (at full load)         | 0.9  |
| Surge protection options (kV)       | 10<br>20   |
| 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                              | Zhaga (optional)<br>NEMA 7-pin (optional)                      |
| Associated control system(s)        | Owlet Nightshift<br>Owlet IoT<br>Schröder EXEDRA               |

**OPTICAL INFORMATION**

|                                  |   |
|----------------------------------|---|
| LED colour temperature           | 2200K (Warm White 822)<br>2700K (Warm White 727)<br>3000K (Warm White 730)<br>4000K (Neutral White 740) |
| Colour rendering index (CRI)     | >80 (Warm White 822)<br>>70 (Warm White 727)<br>>70 (Warm White 730)<br>>70 (Neutral White 740)         |
| Upward Light Output Ratio (ULOR) | 0%  |

· ULOR may be different according to the configuration. Please consult us.

**LIFETIME OF THE LEDS @ TQ 25°C**

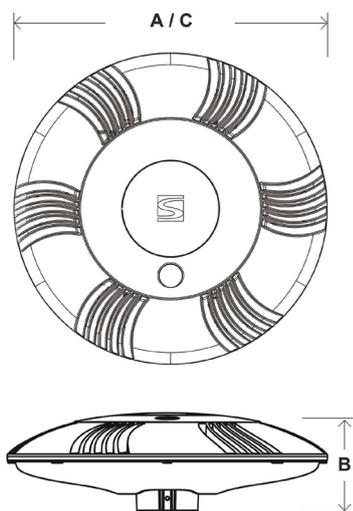
|                    |                |
|--------------------|----------------|
| All configurations | 100,000h - L90 |
|--------------------|----------------|

## DIMENSIONS AND MOUNTING

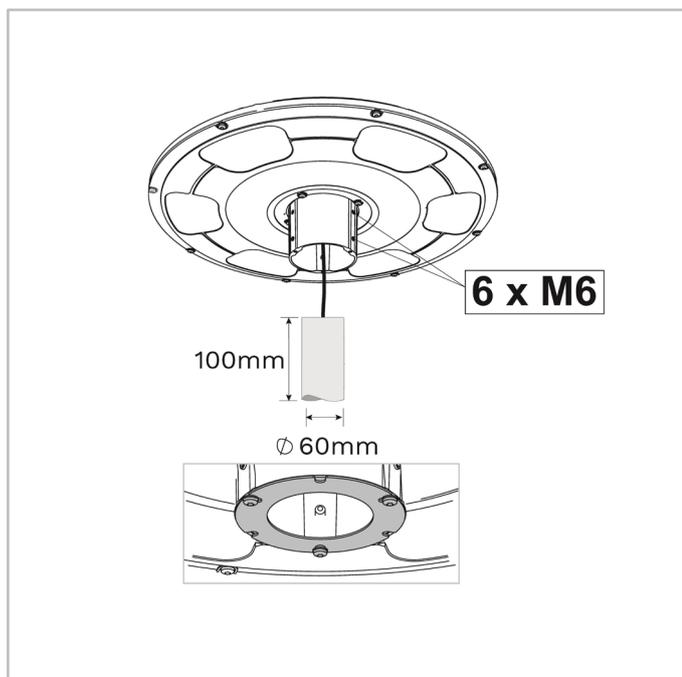
AxBxC (mm | inch) KAZU - 525x160x525 | 20.7x6.3x20.7

Weight (kg | lbs) KAZU - 8.7 | 19.1

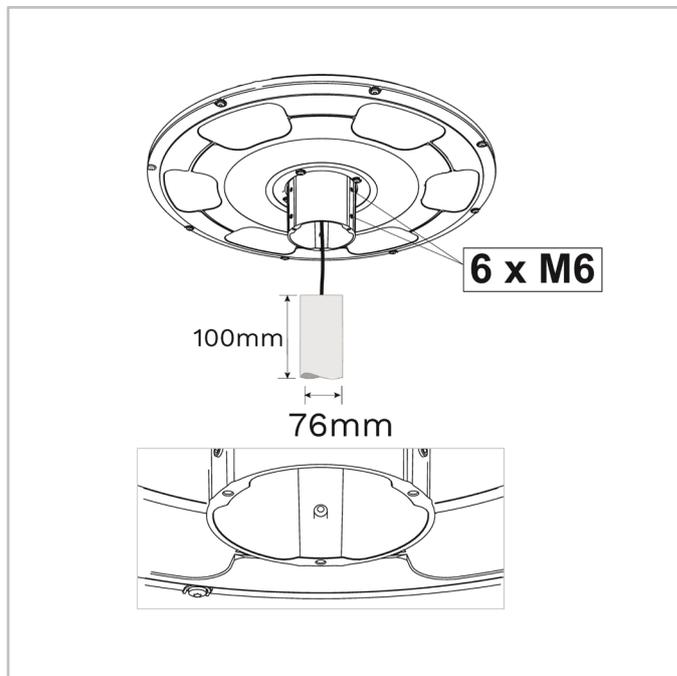
Mounting possibilities  
 Post-top slip-over – Ø60mm  
 Post-top slip-over – Ø76mm



KAZU | Slip-over mounting Ø60 mm pole - 6XM6 screws



KAZU | Slip-over mounting Ø76 mm pole - 6XM6 screws





| Luminaire | Number of LEDs | Current (mA) | Luminaire output flux (lm) Warm White 727 |      | Luminaire output flux (lm) Warm White 730 |      | Luminaire output flux (lm) Warm White 822 |      | Luminaire output flux (lm) Neutral White 740 |      | Power consumption (W) |      | Luminaire efficacy (lm/W) | Photometry |
|-----------|----------------|--------------|---|------|---|------|---|------|--|------|-----------------------|------|---------------------------|------------|
|           |                |              | Min                                       | Max  | Min                                       | Max  | Min                                       | Max  | Min  | Max  | Min                   | Max  | Min                       |            |
| KAZU      | 12             | 350          | 1100                                      | 1400 | 1200                                      | 1600 | 800                                       | 1100 | 1200   | 1700 | 14.2                  | 14.2 | 120                       |            |
|           | 12             | 400          | 1200                                      | 1600 | 1400                                      | 1800 | 1000                                      | 1300 | 1400   | 1900 | 16                    | 16   | 119                       |            |
|           | 12             | 500          | 1500                                      | 2000 | 1700                                      | 2200 | 1200                                      | 1600 | 1700   | 2300 | 20                    | 20   | 115                       |            |
|           | 12             | 600          | 1800                                      | 2400 | 2000                                      | 2600 | 1400                                      | 1900 | 2000   | 2700 | 23.8                  | 23.8 | 113                       |            |
|           | 12             | 700          | 2000                                      | 2700 | 2200                                      | 3000 | 1600                                      | 2100 | 2300   | 3100 | 27.9                  | 27.9 | 111                       |            |
|           | 12             | 800          | 2300                                      | 3000 | 2500                                      | 3400 | 1800                                      | 2400 | 2600   | 3500 | 32                    | 32   | 109                       |            |
|           | 12             | 900          | 2500                                      | 3300 | 2800                                      | 3700 | 2000                                      | 2600 | 2900   | 3800 | 36.2                  | 36.2 | 105                       |            |
|           | 12             | 1000         | 2700                                      | 3600 | 3000                                      | 4000 | 2100                                      | 2800 | 3100   | 4200 | 40.5                  | 40.5 | 104                       |            |
|           | 16             | 350          | 1500                                      | 1900 | 1700                                      | 2200 | 1200                                      | 1500 | 1700   | 2200 | 18.5                  | 18.5 | 119                       |            |
|           | 16             | 400          | 1700                                      | 2200 | 1900                                      | 2400 | 1300                                      | 1700 | 1900   | 2500 | 21                    | 21   | 119                       |            |
|           | 16             | 500          | 2000                                      | 2700 | 2300                                      | 3000 | 1600                                      | 2100 | 2300   | 3100 | 26.3                  | 26.3 | 118                       |            |
|           | 16             | 600          | 2400                                      | 3100 | 2700                                      | 3500 | 1900                                      | 2500 | 2700   | 3600 | 31.1                  | 31.1 | 116                       |            |
|           | 16             | 700          | 2700                                      | 3600 | 3000                                      | 4000 | 2100                                      | 2800 | 3100   | 4100 | 36.3                  | 36.3 | 113                       |            |
|           | 16             | 800          | 3000                                      | 4000 | 3400                                      | 4400 | 2400                                      | 3100 | 3500   | 4600 | 43                    | 43   | 107                       |            |
|           | 16             | 900          | 3400                                      | 4400 | 3800                                      | 4900 | 2700                                      | 3500 | 3900   | 5100 | 48.5                  | 48.5 | 105                       |            |
|           | 16             | 1000         | 3700                                      | 4800 | 4100                                      | 5300 | 2900                                      | 3800 | 4200   | 5500 | 54                    | 54   | 102                       |            |
|           | 24             | 350          | 2300                                      | 3000 | 2500                                      | 3300 | 1800                                      | 2300 | 2600   | 3400 | 27.5                  | 27.5 | 124                       |            |
|           | 24             | 400          | 2500                                      | 3300 | 2800                                      | 3700 | 2000                                      | 2600 | 2900   | 3800 | 31.2                  | 31.2 | 122                       |            |
|           | 24             | 500          | 3100                                      | 4100 | 3500                                      | 4500 | 2500                                      | 3200 | 3600   | 4700 | 38.9                  | 38.9 | 121                       |            |
|           | 24             | 600          | 3600                                      | 4800 | 4100                                      | 5300 | 2900                                      | 3800 | 4200   | 5500 | 46.5                  | 46.5 | 118                       |            |
| 24        | 700            | 4100         | 5400                                      | 4600 | 6100                                      | 3300 | 4300                                      | 4800 | 6300   | 54.5 | 54.5                  | 116  |                           |            |
| 24        | 800            | 4600         | 6000                                      | 5200 | 6700                                      | 3700 | 4800                                      | 5300 | 7000   | 62.5 | 62.5                  | 112  |                           |            |
| 24        | 900            | 5100         | 6600                                      | 5700 | 7400                                      | 4000 | 5200                                      | 5800 | 7600   | 71   | 71                    | 107  |                           |            |
| 24        | 1000           | 5500         | 7200                                      | 6100 | 8000                                      | 4300 | 5700                                      | 6300 | 8300   | 79   | 79                    | 105  |                           |            |

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

