KSK LED Lamp Controller
KSK-LK01

Product Description:

Our **LoRaWAN® ZHAGA KSK-LK01** Controller is a smart lighting solution that follows **ZHAGA** standards for seamless integration. LoRaWAN® connectivity enables remote management, energy efficiency, and secure communication. Easy to install and scalable, it's a future-proof choice for efficient, interoperable, and intelligent lighting control systems.

- **Interoperability**: ZHAGA compliance ensures compatibility with various luminaires and sensors.
- **LoRaWAN® Connectivity**: Our controller enables long-range communication, allowing for efficient and reliable control of luminaires across vast areas.
- **Remote Management**: The LoRaWAN® connectivity enables real-time communication, empowering users to adjust settings, monitor energy usage, and receive status updates from any location.
- **Energy Efficiency**: Optimize energy consumption by implementing dynamic lighting schedules, occupancy sensing, and daylight harvesting.
- **Secure Communication**: LoRaWAN® provides secure and encrypted communication, safeguarding your lighting control network against unauthorized access and cyber threats.
- **Scalability**: Add and configure luminaires seamlessly as your infrastructure grows.
- **Ease of Installation**: The ZHAGA standard ensures a standardized mechanical interface, simplifying the installation process.
- **Smart Integration**: Integrate the controller with other smart building systems and platforms to create a comprehensive and cohesive smart infrastructure.

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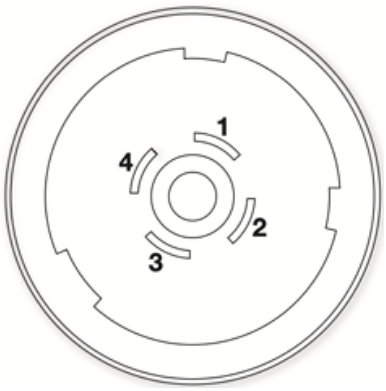
Technical specification:

Power supply:	24 VDC (min 21.6 VDC- max 26 VDC)
Peak power consumption:	1W @ 24V
Surge protection:	provided by DALI 2 control gear
Network security:	Encrypted communication based on security keys (AES128-bit)
DALI Control Device:	Controls up to 8 DALI ballasts.
DALI PSU:	Internal, auto-detects external supply
Logical Signal Input (LSI):	Configurable alert, dim levels
Dimming range:	0%-100% (linear or logarithmic depending on control gear settings)
Control interface:	DALI-2 / DiiA (IEC 62386) / D4i / Philips SR
Sensors:	Light sensor, GPS, Accelerometer
Operating temperature:	-30° do +60° C;
Dimensions:	Height: 80 mm Diameter: 90 mm
Connection:	Wireless LoRaWAN 868MHz / 915MHz / 923MHz
Ingress protection:	IEC IP67
Impact protection:	IEC IK09
Mechanical:	40g 51.4 mm x 33.4 mm ABS Plastic
Communication protocol:	LoRaWAN

1	+24V Auxiliary power supply
2	DALI - / Ground for +24V
3	DALI +
4	LSI



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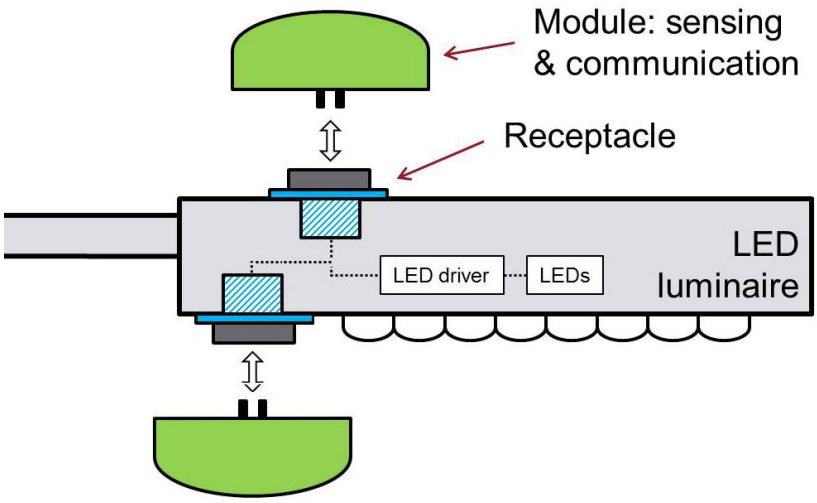
Principles of operation:

ZHAGA controller typically includes various input and output ports, such as power supply input, communication input, and output for controlling the LEDs. It receives signals from the driver or control system, interprets them, and translates them into commands that can be understood by the LED module.

The controller also monitors the operating conditions of the LEDs, such as temperature and current, and adjusts the performance accordingly. It ensures that the LEDs operate within their specified parameters and protects them from overvoltage, overcurrent, and overheating.



Markings:

The product is marked with the mark CE

Warnings:

Improper use:

KSK Developments allows the device to be used only as intended, i.e., to monitor controller parameters.

KSK Developments is not responsible for any damage related to the use of the system contrary to its intended use.

Incorrect connection:

The device is designed to work with a rated voltage of 24V. Connecting a different voltage may cause irreparable damage to the equipment.

KSK Developments is not responsible for damages related to incorrect connection of the device

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About:

This document is for a system developed by the company KSK Developments sp. z o.o.

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