

Shape Discrimination Sensor

Réf. : KARA-Z18.1



EN

- Real-time adjustment of lighting levels based on detected motion discrimination.
- Energy saving: reduces consumption by a factor of 3.
- Remote management: configuration, control, and inventory.
- Local control via Wi-Fi.
- Bluetooth communication between luminaires.
- Remote control and configuration over 4G LTE.
- High precision astronomical clock function.
- GPS localization of the lighting point.
- Upgradable to user flow counting, parking occupancy status identification.
- Compatible with Zhaga Book 18.
- Compatible with Kwartz astronomical clocks and Karrick controllers .



MECHANICAL CHARACTERISTICS

Dimensions (D x h): 83 x 54 mm

Zhaga connector 80mm (Zhaga Book 18 standard)

Sealing: IP67

Mechanical protection: IK09

Anti-soiling protective glass: Gorilla Glass type

ELECTRICAL CHARACTERISTICS

Nominal voltage: 24 VDC

Power supply range: 9-27 VDC

Average consumption: 1.5W

ENVIRONNEMENT AND PERFORMANCE ⁽²⁾

Operating temperature: -30 to +60°C @ 90% humidity (+70°C max)

Operating height: 4 to 12m

MTBF: > 100,000H

RADIO COMMUNICATION ⁽²⁾

2.4 GHz Bluetooth & WiFi for local configuration.

2.4 GHz Bluetooth for pre-lighting (option).

4G LTE with embedded SIM (eUICC)..

CONTROL AND DIMMING

Compatible with all ZD4i/Zhaga Book 18 luminaires.

Drives up to 4 DALI2 LED drivers (multi-zone and/or tunable white) (contact us for non-D4i drivers with 24V).

CONFIGURATION

Levels, durations, ramps, priority of detected objects: selection of hours, days, and dimming power as well as detection scenarios.

Auto-configuration: embedded plug & play software.

Lighting software: 'eKlirage' web platform and/or Wi-Fi interface.

CERTIFICATIONS

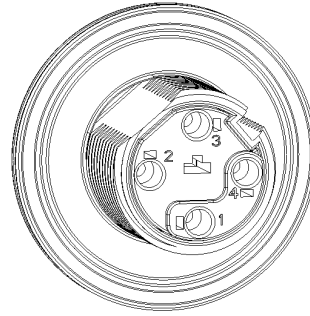
⁽²⁾ Radio functions and product performance can only be guaranteed if the implementation of the Kara Z18 complies with Kawantech's requirements.

KARA Z18

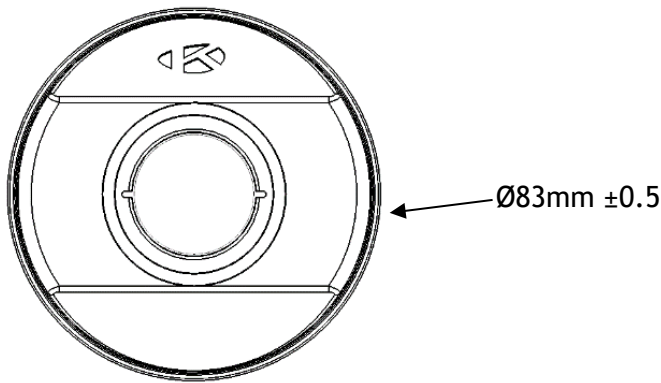


Zhaga Book 18 Signals :

Broche	Fonction	DESCRIPTIF
1	24V AUX	+24 VDC Power Supply
2	GND	Power ground, DALI common -
3	DALI+	DALI BUS + (Signal)
4	NC	Not Connected



Contrôleur Kara Z18 Top view, (cover & sensor) :



Remote Management Protocol and Actions:

The Kara Z18 can be remotely managed via a web application, with data using the MQTT protocol enabling:

- Retrieve Kara Z18 inventory status (lighting point position, date and time of last transmission).
- Execute and schedule one-off or recurring lighting commands.
- Configure calendar and lighting rules.
- Obtain status and inventory information of connected driver(s) (requires D4i driver).
- Retrieve precise luminaire power consumption via D4i driver (~1% accuracy on DALI2 D4i certified drivers).
- Report operating hours, LED current/voltage operating point, and internal driver temperature for improved knowledge of electronics lifespan
(liste non exhaustive)

Flexible Smart mobility data: V2X evolution

The Kara Z18 has been developed as a convergence between Smart lighting and Cooperative Intelligent Transport Systems (C-ITS). New cities are more and more pedestrian centric: They focus on people safety and comfort. Kara sensors are able to generate ITS G5 CPM frames (ETSI "Collective Perception Service") in order to map all motions in real time for mapping and collision awareness. Kara helps cities build their new mobility management platforms based on international open formats and protocols. Car may not only receive available parking places, but also the room available. Traffic lights can take into account the number of bikes and people waiting...

Kawantech Offer

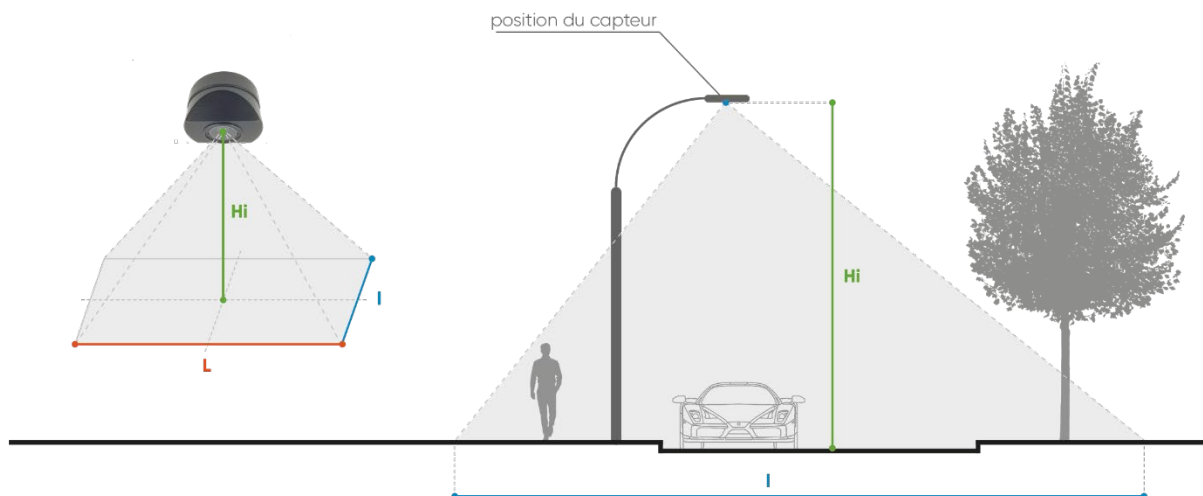
The Kara Z18 can be sold with a service package including connectivity + warranty + support for 5 or 10 years (15 years upon request): pre-activated connectivity with 4G LTE-M usage (immediate responsiveness).

KARA Z18

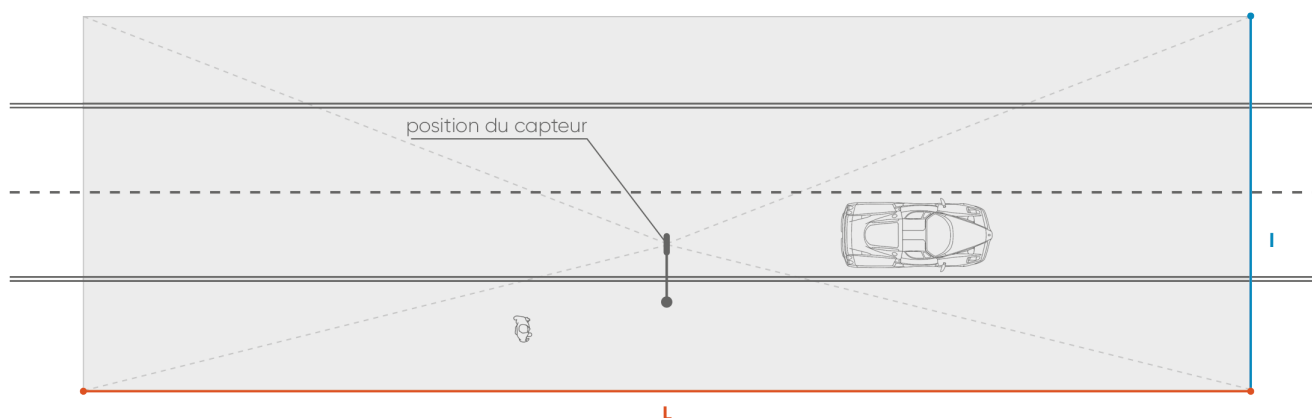


ZONE DE VISION ⁽³⁾

HAUTEUR D'IMPLANTATION (Hi) ⁽³⁾



Kara Vision Area :Length (x) x Wide (y)



Hi [m]	L [m]	I [m]
4	30	13
5	37	16
6	45	19
7	52	23
8	60	26
9	67	29
10	75	32
11	82	36
12	90	39

Sous réserve de modifications. Sauf erreur ou omission.
Veillez à toujours utiliser la version la plus récente.

⁽³⁾ Représentations schématiques et données simplifiées non contractuelles. La zone de détection est incluse dans la zone de vision et dépend notamment de la vitesse de l'objet détecté et de l'inclinaison du capteur.

Kawantech Advantage

Kawantech also offers support for luminaire lifetime management based on diagnostic data and analysis of similar electronics (cross-checking with similar luminaires used by Kawantech customers). Contact us for maintenance, performance, and lifecycle assistance programs.

Kawantech est membre du **SYNDICAT DE L'ÉCLAIRAGE** et co-rédacteur de la

