# ECCOS city

ARQUILED

BRIGHT NEW FUTURE

ECCOS CITY is an integrated remote-control management system for street lighting, that contributes significantly to reduce energy consumption and maintenance costs and ultimately to improve lighting system's reliability.

Through an intuitive online platform, it is possible to control and manage a luminaire, either individually or as part of a group of different light fixtures, as well as adapt the power saving options according to the needs of the project. This Street Light network management solution provides detailed information of the activity on the lighting system, enabling and maximizing its monitoring and management. The modular system can be increased progressively according to the expansion needs of the Street Light network.

This is the right solution for municipalities, that want to maximize savings, and to build a smart city.

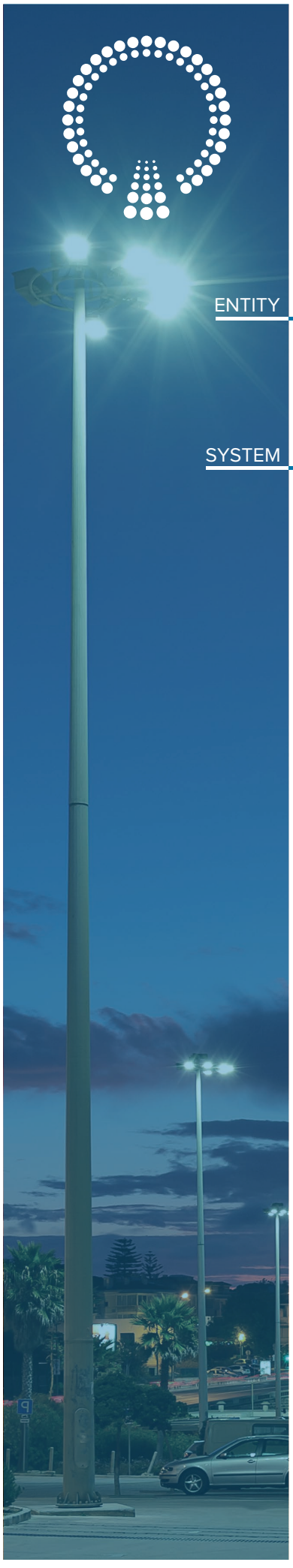
## OPERATING MODE

The bidirectional system enables the management of a wide range of light fixtures, individually or grouped. Each luminaire has its individual communication module built-in, supporting GSM /M2M or Low Power WAN (LPWAN) using LoRa WAN™ or NB-IoT too, according to the product technology version required. Managed within a central platform, using a Software as a Service (SaaS) model, accessible via a simple Internet browser.

With a very intuitive interface, it enables a bidirectional communication with the luminaires, receiving technical data and optimizing the management and maintenance operations. At the same time, it produces reports or structured data for further analysis.

## FUNCTIONALITIES

Thanks to a user-friendly interface, the users access the main dashboard with the lighting fixtures georeferenced, pin-pointed in a map and with all the relevant information in a simple and intuitive manner. The interface has also several visual components that provide detailed run-time operating information regarding each luminaire such as: dimming level, power consumption, temperature, network signal and generic installed sensors.



# BENEFITS

- Additional energy savings.
- Reduction of operational costs.
- Real-time fault detection.
- Grid progressive expansion.
- Increased luminaire longevity
- Calendar based programming of luminaires: individually or per groups.
- Luminous flux adjustment according to the atmospheric conditions[1].
- User-friendly interface.

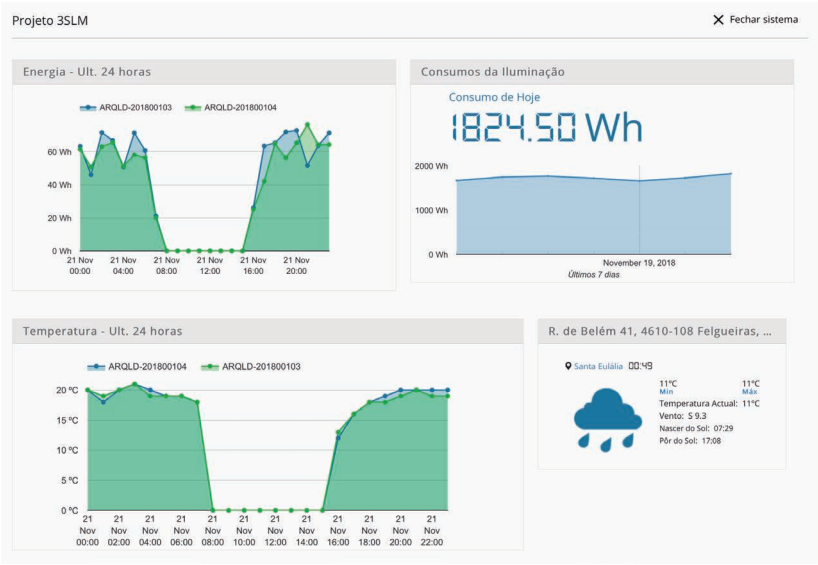
## ENTITY

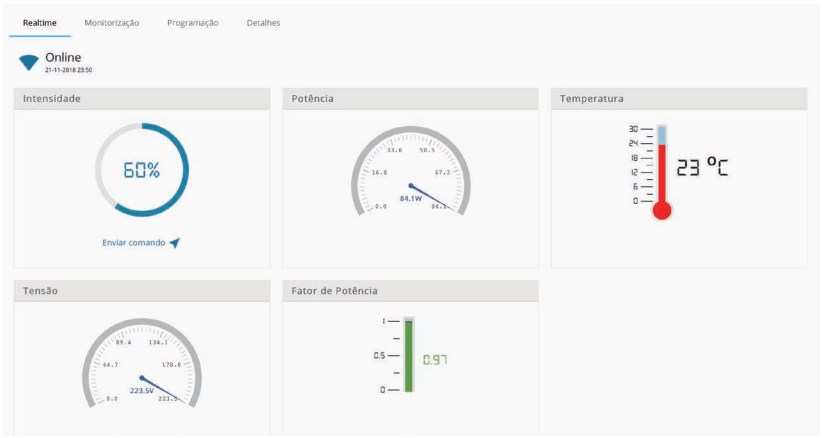
- System user management.
- Characterization of energy supply contracts and respective tariffs.
- Entity data registration.
- Multi-tenant instance.

## SYSTEM

### DASHBOARD

- Entry panel with graphical customized presentation.
- Graphical components with processed real-time system information.

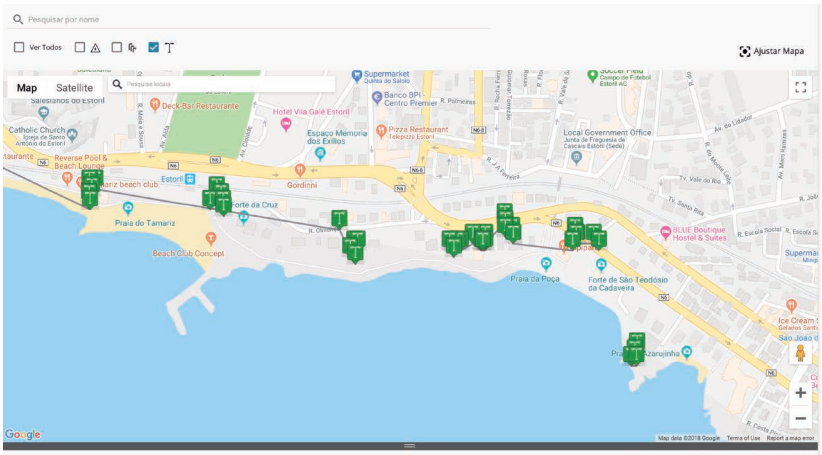



[1] This feature requires optional sensors or atmospheric WEB API integration.

## REGISTRY

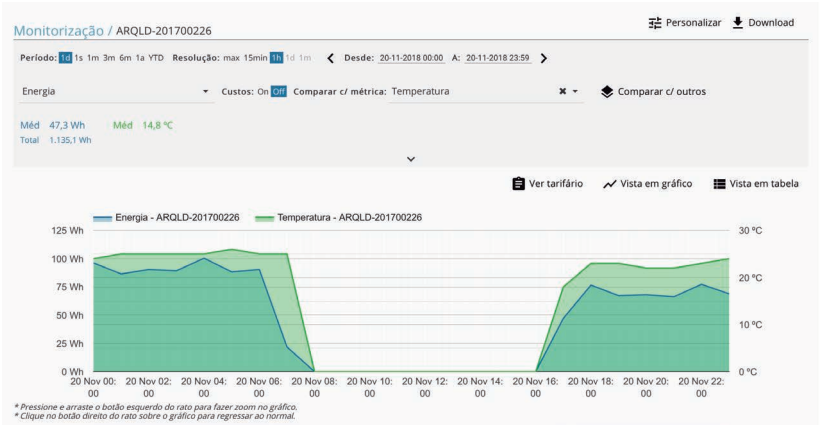
- Luminaire organization and management by association with substation transformers.
- Properties listing and edition of the devices associated in the system.
- Search of devices per geographical map or list.

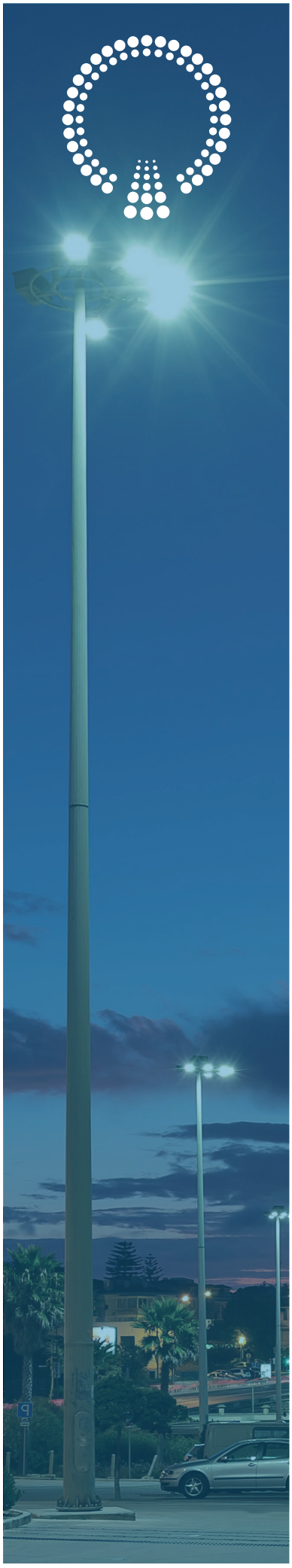


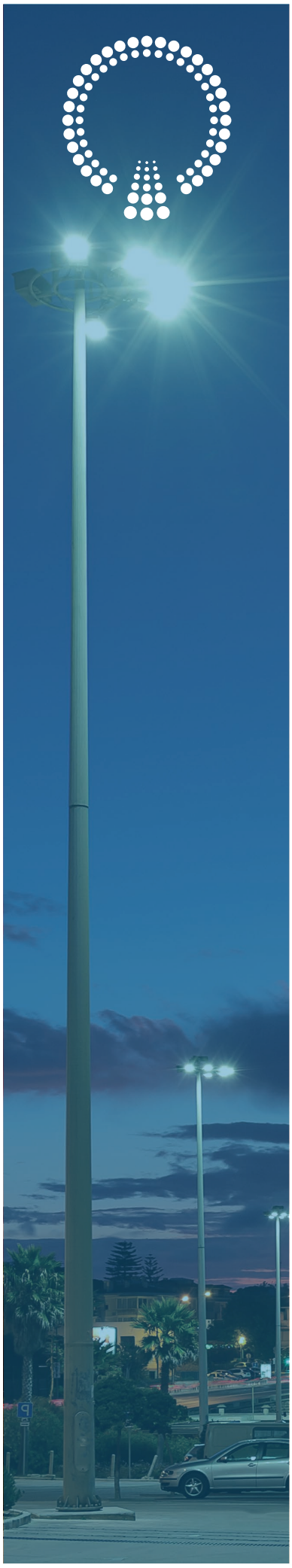

# OPERATIONS

## MONITORING

- Visualization of the luminaires in the system, pin-pointed in a geographical map.
- Luminaires selection per marker.
- Real-time visualization and graphical comparison of the luminaire's information:
  - Energy consumption.
  - Instant power.
  - Power factor.
  - Power supply voltage.
  - Luminaire dimming percentage value.
  - Mobile network signal.
  - Temperature.
  - Turn-on time.
- Dimming profile regulation simulation up to 48 hours.
- Edition of devices information.



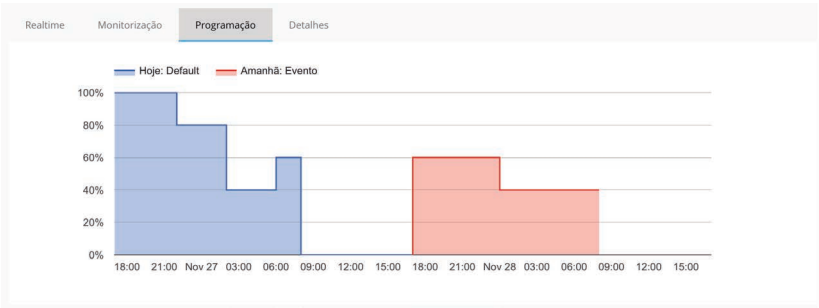


## DIMMING

• Manual control of the lighting flux of an individual luminaire or a circuit of luminaires.

## PROGRAMMING

• Programming of flow regulation in active time slots either by calendar and / or day of the week.




## NOTIFICATIONS

• Notifications and configuration of alerts.

## CONFIGURATIONS

• Luminaire groups association to system circuits.
• Association of the tariff of each luminaire.

BRIGHT SCIENCE

LoRa Alliance Member