PL

URBAN

Group in catalogue: SMART

The heart of **SMART City**

The **Urban** Smart City system monitors and manages infrastructure lighting and connected sensors forming a neural network of the city. It is a basis for the further development of intelligent functions, which will be provided as part of one Smart City platform.

MEET URBAN

- Cloud management system.
- Central and mobile Urban application.
- External devices: gateways, controllers installed inside or outside of the luminaires.

Cloud application

- Installed on a cloud server.
- Available 24 hours a day, 365 days a year from via a web browser or as a dedicated application for mobile devices.
- Provides access via a web interface without installing dedicated software.
- Collects and stores statistics, configurations and event logs from managed devices.
- Automatically manages HUB and controller software updates in a way that requires no action from the user.
- Implemented security mechanisms triggered in the event of unauthorized access and theft of SIM cards.
- Includes full communication encryption.

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Hardware requirements

The **desktop application** requires a stable internet connection and a desktop or laptop computer meeting the following specification:

- Intel® i5 @ 1.6 Ghz processor or higher
- 8GB RAM or more
- Intel® UHD 620 or newer graphics card
- Windows 10
- Firefox or Chrome browser

The **mobile application** requires a stable internet connection and a smartphone or tablet running one of the following operating systems:

iOS: version 9.0+

Android: version 7.x+

Learn more about our SMART offer:

biotcloud

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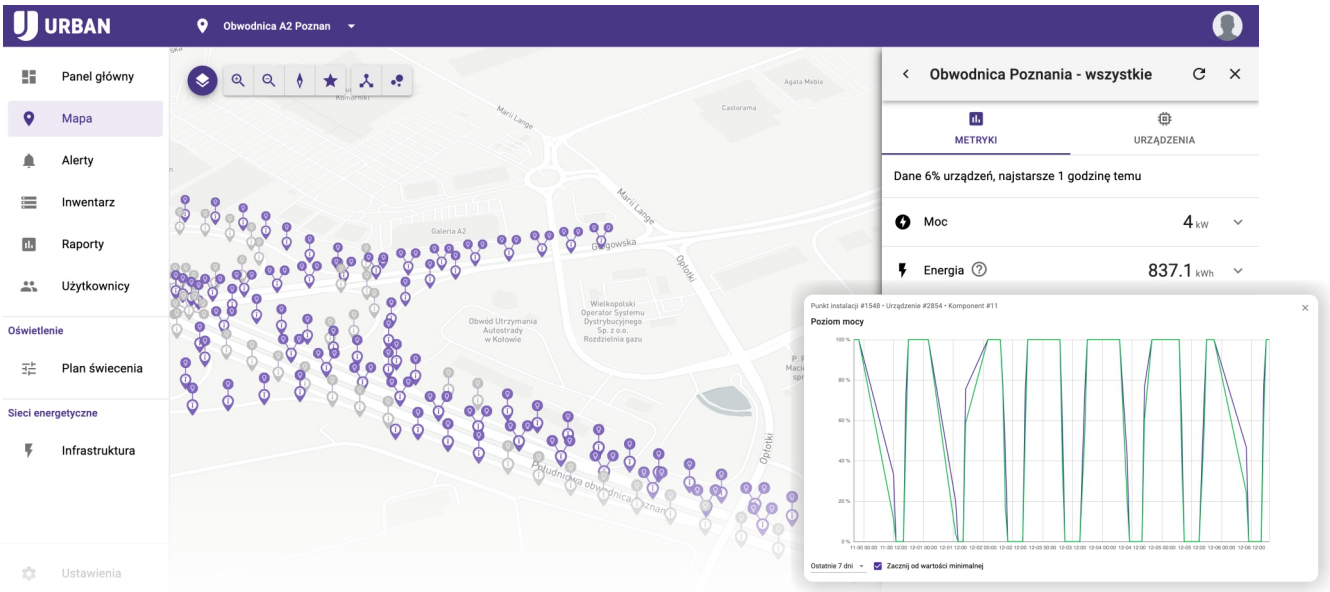
System description

The **Urban** management system is installed on cloud servers accessable via a web browser. It manages the work of the entire BIOTcloud environment. Communicates, collects and analyzes data from controllers. Takes actions based on implemented algorithms. The management system is also responsible for software updates and configuration of field-installed devices.

- Two-step user authentication.
- Configurable user settings.
- Administrator function with user management (creating, modifying and deleting accounts, assigning roles and permissions to users).
- Dashboard with the most important information.
- Map presentation with street and building plans, lighting network diagram, icons illustrating the installation points on the map.



Design and installation

- Lighting points registration,
- Infrastructure database maintenance,
- Lighting plans creation,
- Support during luminaire assembly,
- Precise placement on the map,
- Creating, deleting and editing installation points (POIs).

Management

- Behavior rules and patterns creations,
- Data aggregation and analytics,
- Remote management and control,
- Automatic reporting.

Maintenance

- Energy consumption reports,
- Technical condition and luminaire status reports,
- Remote management: dimming or luminaire ON/OFF,
- Automatic system notifications,
- Events and warnings reports via SMS and e-mail,
- Quality and connection pattern indication,
- Existing lighting plans modification,
- Creating and managing groups of luminaires.

The **Urban** Smart City system monitors and manages infrastructure lighting with connected sensors in a MESH network (THREAD protocol).

The main advantages of using the MESH topology network:

- automatic network reconfiguration in case of disturbances and damages of individual devices,
- possible use of advanced scenarios (e.g. follow-up light),
- no need to install a separate SIM card in each device.

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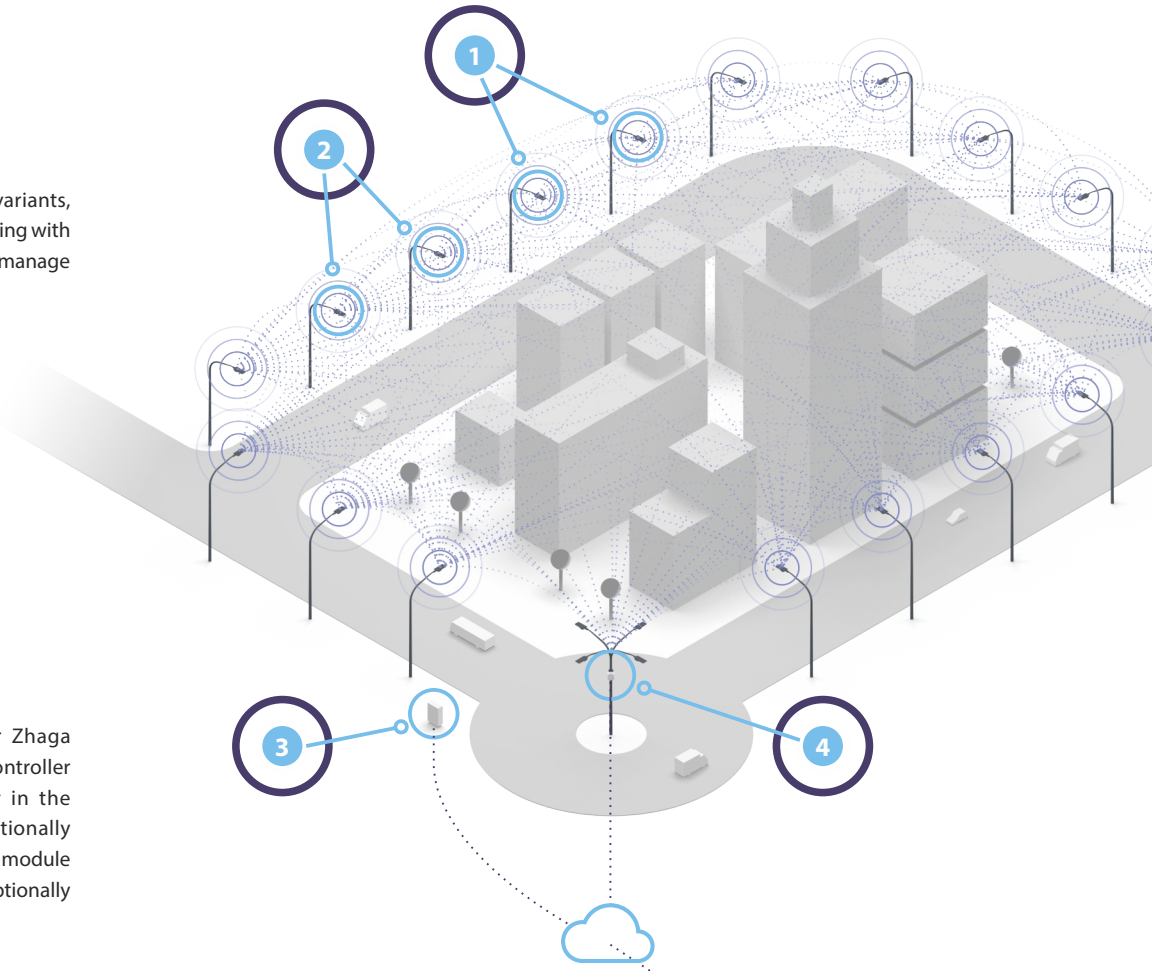
System topology

iBLOC

The iBLOC is available in multiple variants, which allow the user to control the lighting with DALI, 1...10 V power supply and to manage other components of luminaires

eBLOC

Luminaire controller with NEMA or Zhaga standard connector. 2.4GHz radio controller with communication with a router in the THREAD standard (radio-mesh). Optionally equipped with LTE-M communication module for communication with the cloud. Optionally equipped with a GPS locator.



HUBIoT-2

The device is meant to be installed in a electrical box on a DIN TS-35 rail acts as a bridge connecting the management system installed in the internet cloud with controllers and sensors.

HUBIoT-1

The device is meant to be installed on a pole, serving as a bridge connecting the management system installed in the cloud with controllers and sensors.

URBAN

Cloud application for managing intelligent lighting. Available from a web browser or as a mobile application for Android or iOS.

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