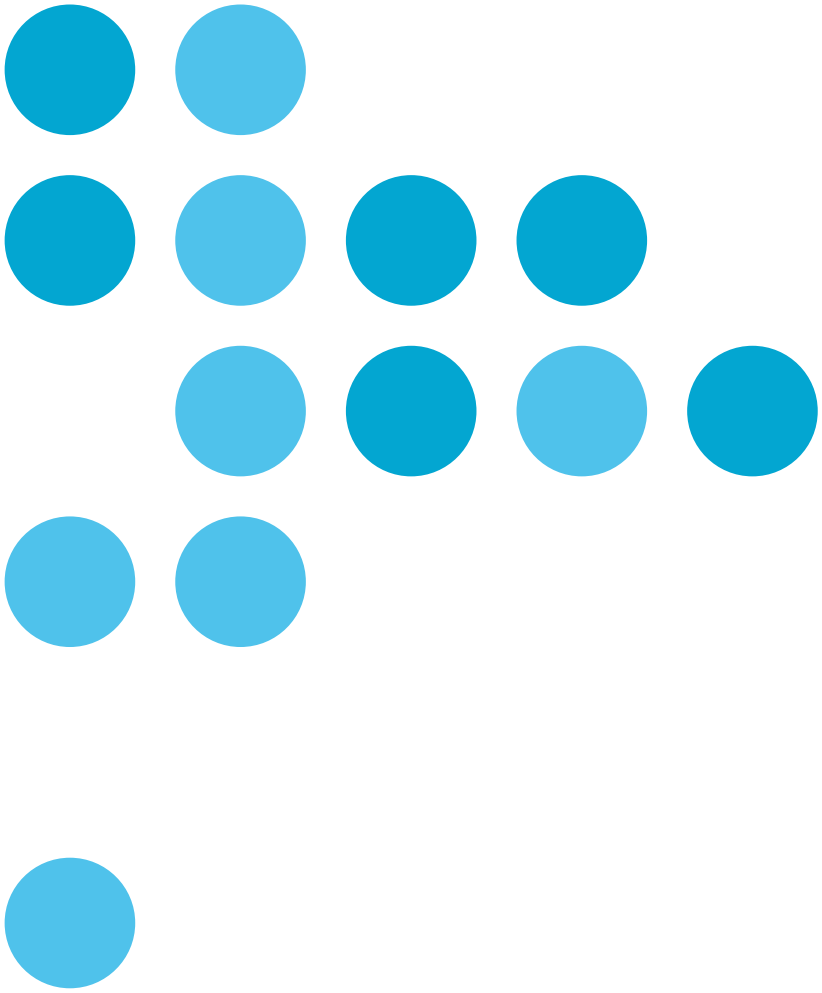
LUXON LED

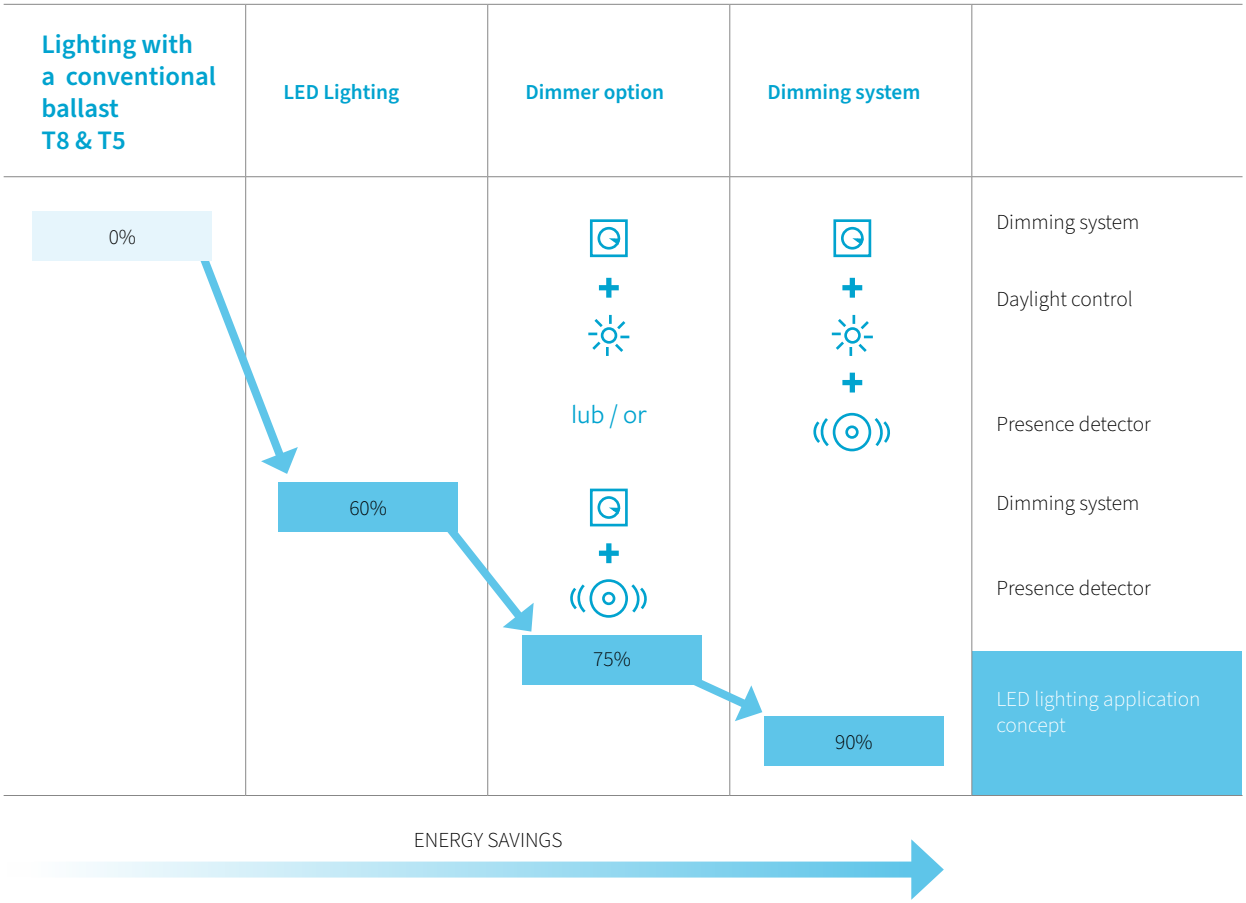


Catalogue

2021

CONTROL SYSTEM

COMPARISON OF ENERGY SAVINGS BETWEEN FLUORESCENT LAMPS AND LED TECHNOLOGY



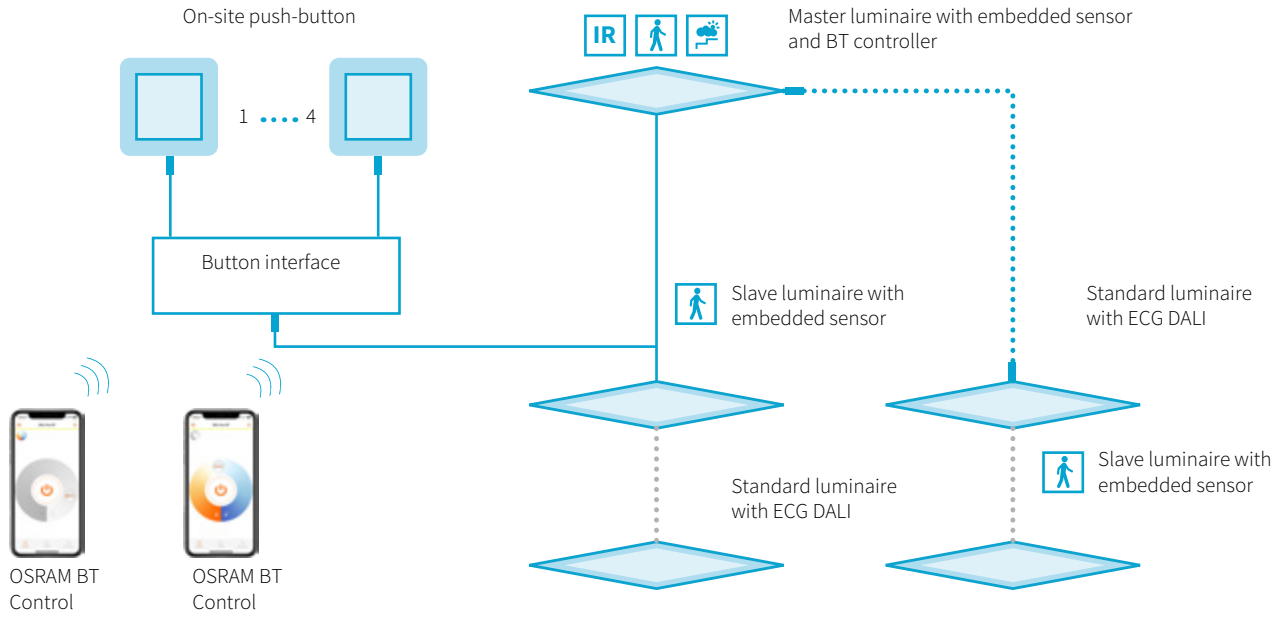
LIGHTING CONTROL SYSTEM		SIMPLE	ECO	PRO
ENERGY SAVINGS	Full-range dimming	–	◐	●
	Tailored occupancy	◐	◐	●
	One-button daylight harvesting	–	–	●
	Flexible scheduling	◐	◐	●
	LEED point contribution	◐	◐	●
	Demand response	–	–	●
	Level of energy savings	◐	◐	●
SMART BUIDLING	Space utilization reporting	–		●
	Temperature mapping	–	–	●
	Comprehensive power metering	–		●
	Real-time data and alerts	–		●
PLATFORM FLEXIBILITY	Simple setup and operating	◐	–	●
	Extensible sensor platform	–	–	●
	Web and mobile device access	–		●
	Scalable, reliable and secure	–		●

DALI ECO BT

CONVENIENT CONTROL OF UP TO 32 DALI DEVICES THROUGH AN APP FOR A SMARTPHONE

Powerful stand-alone system for motion, presence and light level control.

DALI ECO BT – PRINCIPLE OF OPERATION



Push-button interfaces and slave luminaires can be randomly distributed on window and corridor lines.

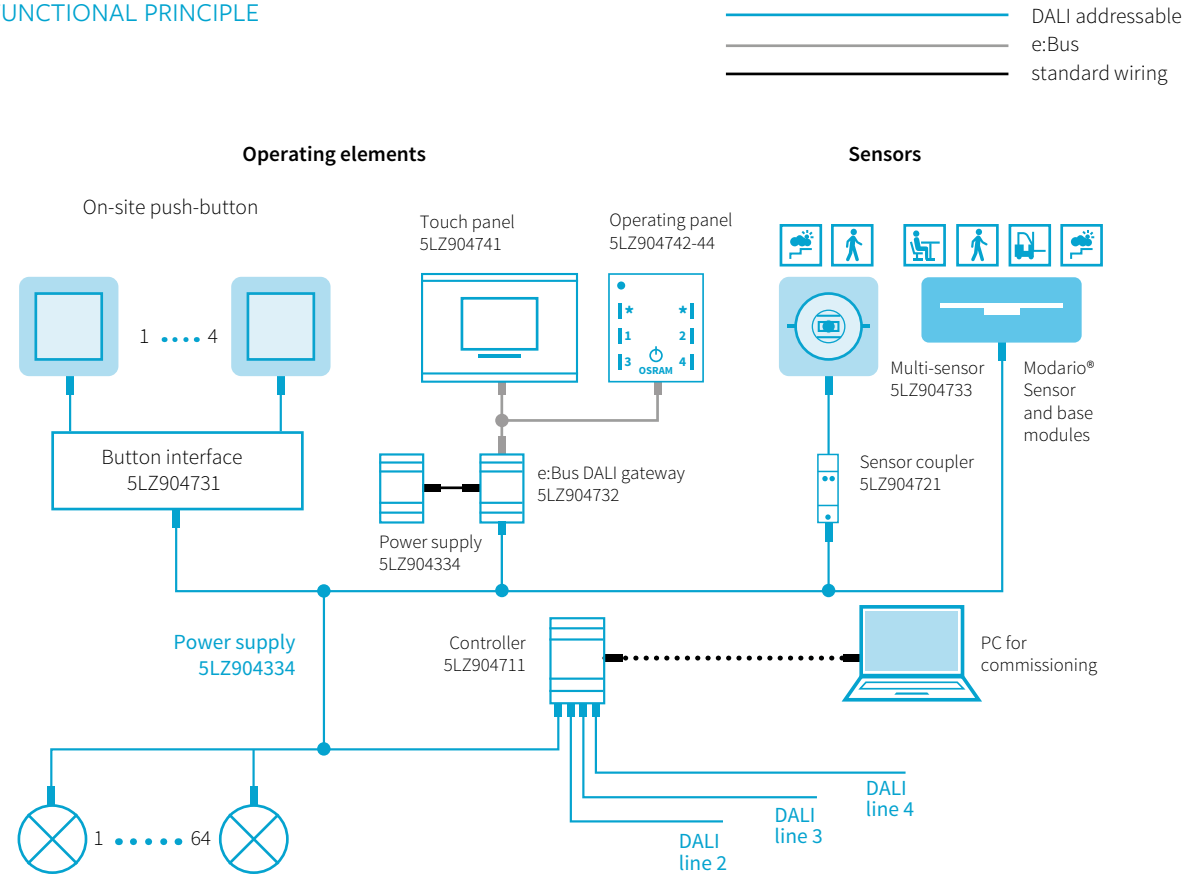
SYSTEM SIZE	PROGRAMMING	SPECIAL FEATURES	FUNCTIONS
• max. 32 DALI ECGs per master base module • DALI broadcast addressing	• Plug and Play - basic functions available without an application • preloaded operating modes • using the smartphone application	• easy creation of scenes thanks to the app • possibility to change selected DALI parameters in the application	• daylight adjustable • lighting control depending on the presence of people • intensity regulation • light temperature control

DALI PRO

INDIVIDUAL CONTROL OPTIONS WITH DALI TECHNOLOGY

DALI Pro provides high levels of flexibility. The system is suitable for complex lighting control applications and the daylight-dependent control of light. A total of 256 DALI ECGs can be connected to a controller and groups and specific light scenes can be configured, enabling flexible modifications to customer-specific demands.

DALI PRO FUNCTIONAL PRINCIPLE



SYSTEM SIZE	COMMISIONING	SPECIAL FEATURES	FUNCTIONS
• max. 256 DALI ECGs, max. 16 groups, 16 scenes per DALI line • DALI single addressing	• via PC and DALI Pro software	• complete flexibility due to free grouping and addressing of all components • system expansion with DALI repeaters	• complete flexibility due to free grouping and addressing of all components • system expansion with DALI repeaters

HELVAR

APPLICATION OF CONTROL SYSTEM

HELVAR SOLUTIONS

- Selection of lighting scenes adapted to specific tasks or requirements
- Fully scalable system; from one room to an integrated solution in a complex
- Integration with the building management system, including ventilation and heating
- Control of various types of loads
- Monitoring of energy consumption and maintenance
- Automated control of scheduled activities

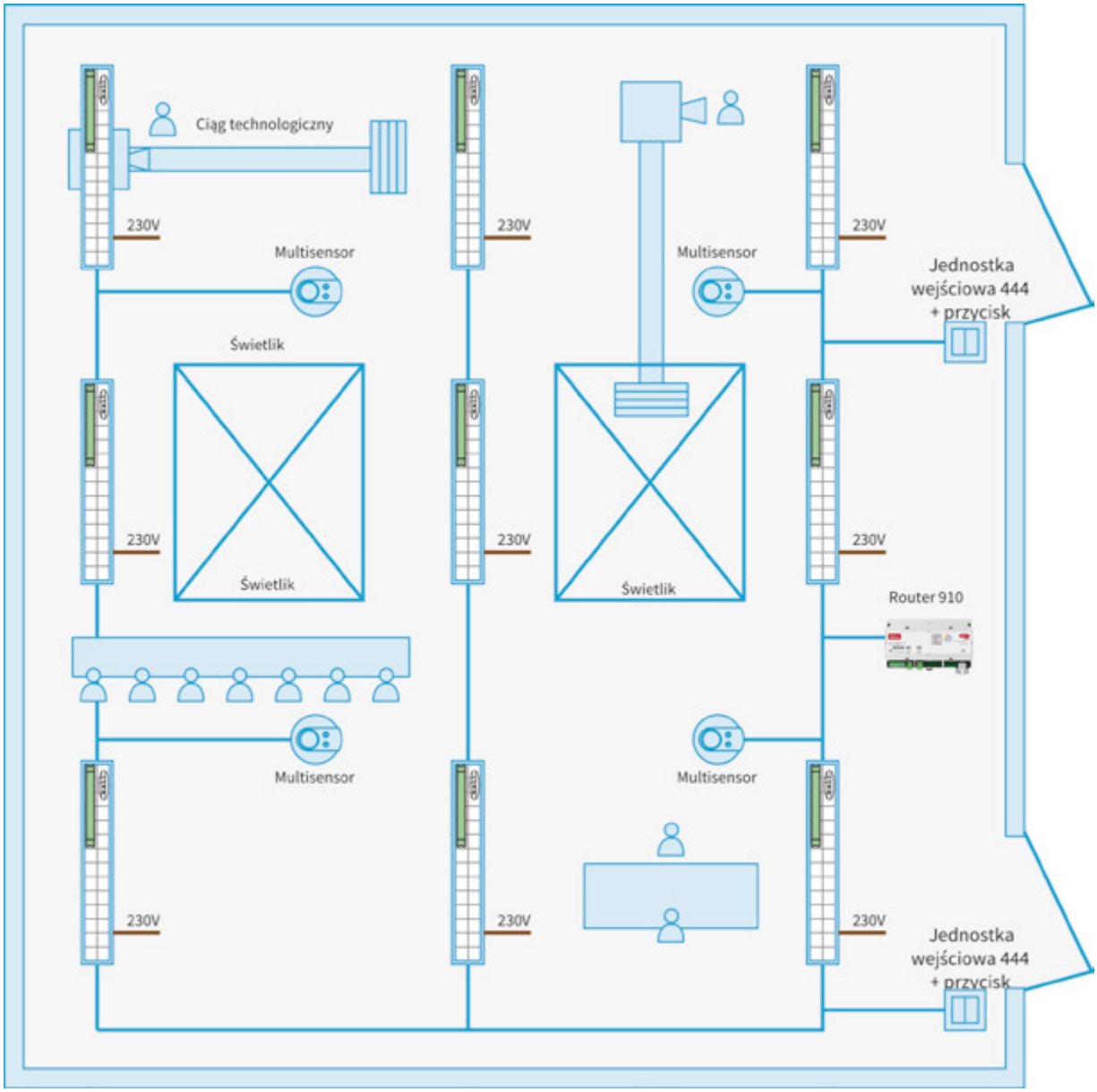
INTENDED FOR

- warehouse
- factory
- sorting facility
- data center
- production hall
- offices
- toilets

SYSTEM FUNCTIONALITIES

- Motion / presence detection
- Adjusting the light in the room, taking into account natural light
- Manual switching on / off
- Dimming
- Control of incoming sunlight - blinds
- Dynamic lighting
- Integration with AV devices
- Time functions
- Astronomical clock
- Monitoring
- Central service
- Feedback information
- Integration options with BMS
- Self-recovery feature
- Visualisation

APPLICATION EXAMPLE IN A HIGH BAY WAREHOUSE

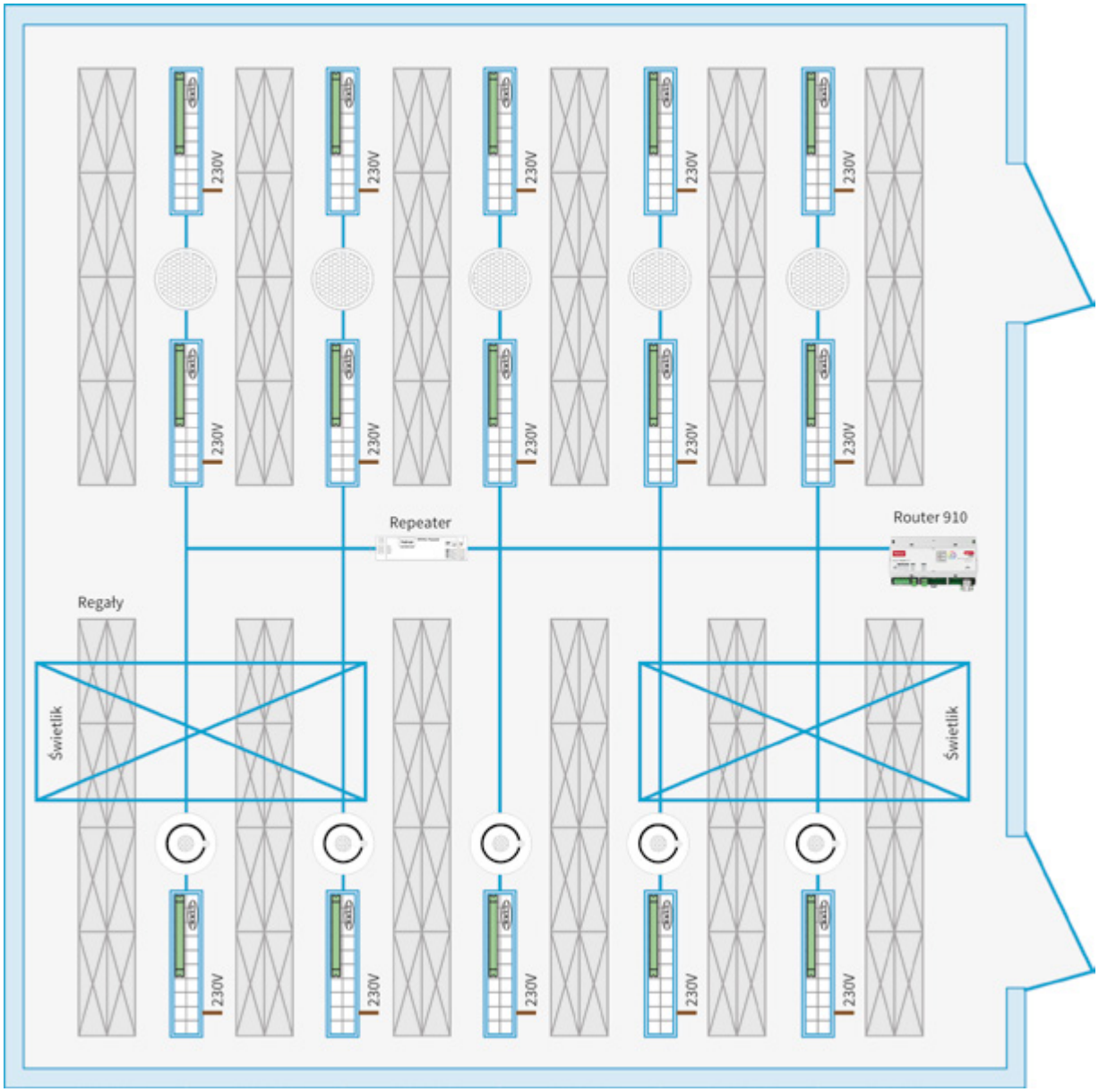


The drawing shows the high bay storage warehouse. The lower part of the warehouse has been lit with natural light through skylights. In this situation, we recommend the use of presence and light sensors. When motion is detected, the fixtures illuminate to the set value and adjust the light intensity relative to daylight.

After leaving the detection field, the sensors disable the luminaires and go into standby mode. In the upper part of the warehouse, where there is only artificial light, presence sensors have been used. After detecting movement in the alley, the sensors illuminate the luminaires to the set value and maintain the level of illumination for a certain time. After the set time has elapsed, luminaires can reduce their power to any value, eg 10%, 20%, 30% of light, and keep this level in loop mode or switch off the luminaire completely.

After the re-emergence of traffic in the alley, the whole process starts from the beginning. Using this solution, we can save an additional 50% on electricity consumption. However, in order to estimate real savings, each project requires an individual approach.

APPLICATION EXAMPLE IN PRODUCTION HALL



The drawing shows the production hall with access to external light (skylights). The hall has been divided into sections thanks to the individual addressing of the luminaires. Each section has been equipped with a light sensor.

Thanks to this solution, the regulation of lighting intensity relative to daylight takes place independently for each group. The use of input units allows switching on and off lighting, each group of fittings independently. Holding down the button for a few seconds causes the fittings to be dimmed to the set value by hand.

Both presented solutions allow the system to be expanded with additional devices, ie pushbuttons, microwave sensors, LCD panels, etc., and even devices for monitoring energy consumption and access to the system via a web browser. The system also enables integration with BMS using the BACnet protocol. It is assumed that by using only daylight we are able to reduce costs by an additional 30%