

LED lighting for industry



## INTEGRATED MANAGEMENT, CONTROL AND MONITORING

SkyLight is a remote LED lighting control system for manufacturing halls, warehouses and other industrial facilities. The system is made of intelligent LED luminaires connected wirelessly to a central computer. It allows managers to obtain significant savings in electricity consumption due to exercising control over lighting. SkyLight connected wirelessly with intelligent LED luminaires allows the facility personnel to manage the settings, adjusting the lighting to requirements of conducted business and the existing provisions - all without the need for direct access to a luminaire. SkyLight system controller with a microcontroller is installed inside the luminaire and includes:



- ▶ light sensor
- ▶ motion sensor
- ▶ temperature sensor that prevents the luminaire from overheating
- ▶ 1-10 V output for controlling the luminaire
- ▶ communication system with the managing computer, operating in the 2.4 GHz range.

LED luminaire equipped with an integrated SkyLight system in a given period of time can work in one of three modes:

**System mode** – adjusting the power level.

**Motion sensor mode** – adjusting the power level in active and inactive state.

**Light sensor mode** – measuring the luminance to achieve the desired level of light intensity.

## ENERGY SAVING, CONTROL OVER LIGHTING

The most important task of any industrial lighting installation is to ensure an appropriate level of lighting that meets the needs of the plant. True energy efficiency requires full management and control over resources, including defining work of each luminaire: What is its level of brightness and determining how long it is to be switched on a given day, at a given time. Any decision to operation of luminaires has a measurable impact on energy consumption.

The SkyLight system gives the facility staff the opportunity to set the lighting operation so that the lights work only in places where it is needed and only when needed. This leads to a reduction in energy consumption and costs related thereto, and extension of luminaires usage time.



Sky Light system home page - current information on: energy consumption, saving, power consumption

## ACCESS TO IMPORTANT INFORMATION

SkyLight collects important information about operation of the system and provides up to date information on key parameters: power consumption, energy consumption, movement of employees and lighting modes. With easy access to this information, facility managers can quickly verify the data and if necessary modify them to ensure optimal energy consumption.

## FEATURES AND ADVANTAGES OF THE SYSTEM

**Maximum energy efficiency** – SkyLight gives **savings of up to 90%** in energy consumption in industrial applications, as it enables precise control of where, when and how much light is needed in the building and adjusts operation of luminaires this to situation.

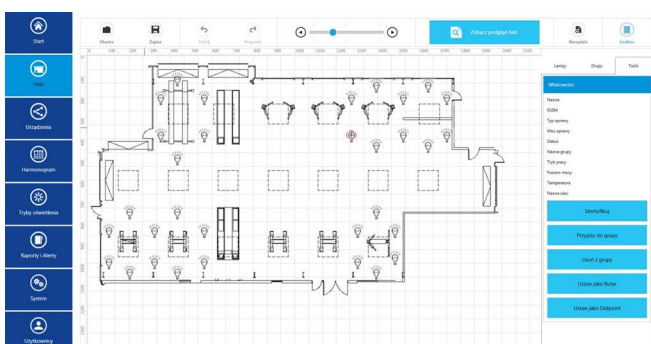
**Control** – easy management of „intelligent“ LED luminaires, both individually and collectively, setting and modifying lighting levels, schedules, times of operation (switching off delay), etc.

**Schedules** - SkyLight allows users to manage schedules, set the appropriate mode of operation for luminaires and groups for the best optimization of performance.

Flexible programming of schedules means quick adding and removing items of the schedule, creating temporary schedules that allow changes in lighting as necessary, in the event of unexpected events, e.g. an unplanned delivery, etc.



SkyLight lighting system work schedule



Industrial hall - an interactive site plan

**Interactive site plan** – SkyLight presents key data to the users with a graphical view:

where the share of natural lighting is the biggest

- ▶ what it is the daily and weekly peak of activity
- ▶ what is the temperature of luminaires
- ▶ what is the impact of upgrading the lighting on your
- ▶ monthly energy costs

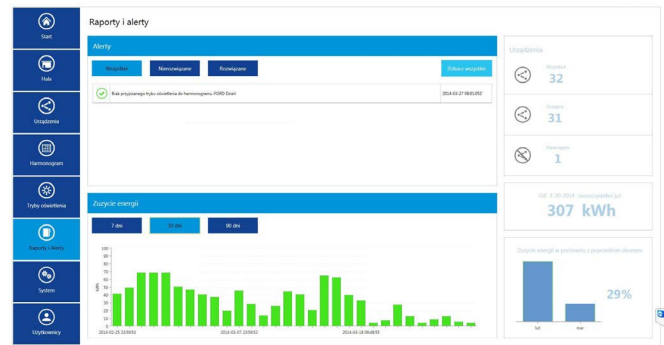
This allows the user to quickly and efficiently evaluate the costs of energy, motion sensors operation and the mode in which the luminaires operate.



# SkyLight LED Lighting management system

**Reporting** – SkyLight provides information about energy consumption and the mode in which the luminaires operate. The system on a current basis gives information about the list of lamps in a given location, status of the lamp (level of brightness, switched on/off), statement of the lamp configuration - schedules, response to sensors and external signals (modes and switching points) and alarms i.e. high temperature of lamps, lamp failures, failures of radio communications.

The system sends this information on a current basis, giving a signal on functioning and / or technical problems of the installation - thus allows to avoid high costs of monitoring infrastructure and repairs. The report also shows graphically the obtained savings, current power consumption and usage in different time periods. On interactive map of the facility SkyLight shows operation and performance of individual luminaires such as the percent of dimming, heat sink temperature, name in the system, status. On the start screen instantaneous power consumption is shown in real time, energy consumption during daily, 7-day, 30-day and 90-day periods.



SkyLight reports and alerts



**User-friendly** – SkyLight graphical interface allows easy changes in the settings. SkyLight system operation can be performed using the touch screen.

**Securing access** – SkyLight allows access to the program on three levels. The first level of administrator, which is characterized by full access to all functions, second level of user, allows access to functions with the exception of radio network configuration options and the third level of observer without the possibility of carrying out any changes.



**1<sup>st</sup> Prize** Best Product LIGHT 2015 Fair  
Award for the lighting management system in industrial facilities SkyLight



**1<sup>st</sup> Award** of the Polish Chamber of Civil Engineers 2015.  
Award for the lighting management system in industrial facilities SkyLight



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