

Smart Lighting for Buildings

Lighting plays an important role in our lives. It creates atmosphere, makes you feel safe and even boosts your well-being and productivity. But what actually is smart lighting? Anybody that knows the answer, recognises the possibilities. Because smart lighting means much more than just making your light energy-efficient.

According to Wikipedia "Smart lighting is a lighting technology designed for energy efficiency". This is indeed an important aspect. The lights only turn on when needed. However, in 2018 the definition deserves an extension.

Smart lighting is energy-efficient LED lighting with light control adjusted to the user's needs and the applicable regulations. Smart Lighting is an autonomous system that provides a network infrastructure and data to connect with (web-based) management systems. Truly smart lighting offers the following functionalities:

Light Control

You can take control of your lighting through all kinds of settings and manual and automatic control options. For example you can:

- Set new LED luminaires at a suitable light level, for example 80%.
- Schedule with a timer for day/night changeover.
- Use daylight harvesting with a light sensor.
- Use motion/presence detection with a PIR or radar sensor.
- Use switches and dimmers for manual operation, for example for scenes or overrule functions.
- Ensure you are compliant and reduce costs on testing emergency lighting by using automated self-testing, which is part of your smart lighting deployment.

Network

The components of the lighting installation are interconnected by a network. For this a wireless network protocol is used. The shift from wired to wireless solutions will continue in the coming years. It will no longer be necessary to design and construct a wired infrastructure and you have maximum flexibility when it comes to modifying the installation. With the arrival of quality certifications for cyber security, the safety aspect is also guaranteed.



Data for Management

With smart lighting, ICT has entered lighting. The network offers the possibility to supply data on the health of the lighting, status of lamps and sensors, energy consumption, burning hours, the use of spaces and much more. A (web-based) Light Management or Building Management System uses this data to optimize the light control system and improve (maintenance) processes. A smart building starts with smart lighting.

Optimal Results

By switching the lighting automatically, dimming flexibly and remote monitoring, your lighting installation performs optimally and lasts much longer. Wireless light control is an easy-to-use solution contributing up to 80% in energy savings and CO2 reduction and it improves the functionality of your building.



