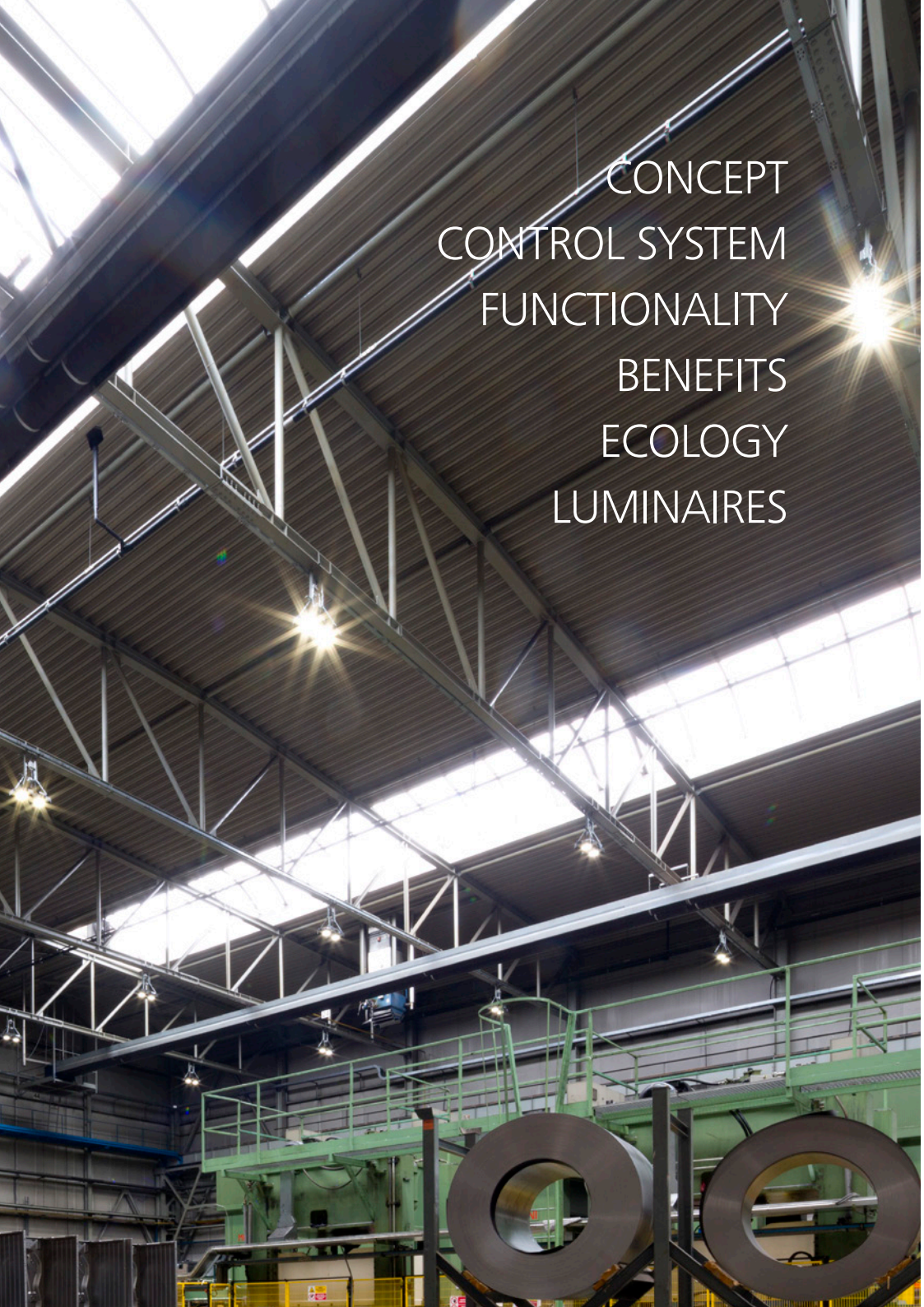
OMS

INDUSTRY LIGHTING SOLUTION

SUSTAINABLE FACTORY & WAREHOUSE



SUSTAINABLE
FACTORY & WAREHOUSE
INDUSTRY LIGHTING SOLUTION

Health & Safety should have a top priority at all workplaces. The right light level helps to reduce the number of injuries, while good CRI and lighting uniformity increase visual comfort and in following also the productivity of people.

On the other hand, industry accounts for a considerable portion of all consumed energy. To make a change, modern industrial lighting needs to be efficient, using smart control systems ineffective lighting designs, and implementing technologies that consume a minimal amount of energy. Choose a tailor-made solution with a responsive lighting system and automated data collection.

Make your business in the industry safer and **more sustainable with OMS.**

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> Increase performance and safety, improve efficiency

CONCEPT

100%
EXPERTISE

LED TECHNOLOGY

Utilizing LED technology in industry lighting means improved light distribution, good visual acuity, color consistency, and optical control with less power consumption, less waste, and less time and costs for maintenance.

REAL-TIME SYSTEM MONITORING

Central monitoring systems (CMS) help in improving safety by showing alerts and notifications in real-time as well as letting users know when a luminaire or light source is nearing the end of its life, which means any lighting issues can be resolved very quickly, or even before they happen. It also supports real-time system monitoring including luminaire, group, and system power consumption, and even device temperatures.

PERFORMANCE AND SAFETY

The bright light that feels natural and aids concentration and wakefulness not only improves safety but also raises worker performance. Other ergonomic lighting parameters also play a role in better performance, including good color rendition that enhances visuality and optimized lighting uniformity and brightness distribution that reduces visual fatigue.

SAVE ENERGY

Achieve considerable energy savings through installing presence detectors and harvesting daylight. A luminous flux level of 10% is used constantly for safety reasons for spaces without any detected movement, which next to less consumption also prolongs the lifespan of the light sources. At the same time, for the maximum usage of daylight, light intensity is kept at the optimal level by the daylight sensors.

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Eliminate the waste of lighting in areas without activities

CONTROL SYSTEM

100% INDEPENDENT

MOVEMENT DETECTION

In industrial objects, especially in certain warehouse areas, there are spaces without permanent use. With control based on movement sensing the waste of lighting these unused areas can be eliminated easily. Make use of pre-designated functions such as creating zones, and time schedules, or setting up delay for dimming.

LIGHT INTENSITY

The effectiveness of lighting management based on light intensity sensing is determined by the availability of daylight and the illumination rate of the given space. The illumination rate depends on the geographical position, window, and skylight size and orientation.

COMBINED CONTROL

If the situation allows, we recommend the combination of both motion detection and light intensity control. This combined control will provide higher savings than one alone. The table clearly shows that the highest savings can be made in corridors with a low frequency of activities combined with a high level of available daylight. In such cases up to 80 % can be saved on operating costs and the lifespan of LED is increased.

INPUT SIGNALS

Input-type transducers or sensors, produce a voltage or signal output response that is proportional to the change in the quantity that they are measuring (the stimulus). The type or amount of the output signal depends upon the type of sensor being used (temperature, pressure, sound, speed, position, etc.)

CONTROL BY RADIO FREQUENCY

To apply control with an RF system a small antenna is implemented in each luminaire through which data is transmitted in a mesh network topology. Data can be transmitted from different luminaires simultaneously. No additional cabling for control is needed.

RELAY UNITS

They are used for controlling switched loads such as blinds, non-dimmable luminaires, and various non-lighting devices.

types of control	combined control system								
intensity									
manufacture	38	53	60	35	51	58	31	48	56
warehouses	43	59	80	40	58	65	35	54	60

occasional movement
normal movement
greater movement

low light intensity
medium light intensity
high light intensity

ENERGY SAVING
26-50%
51-80%

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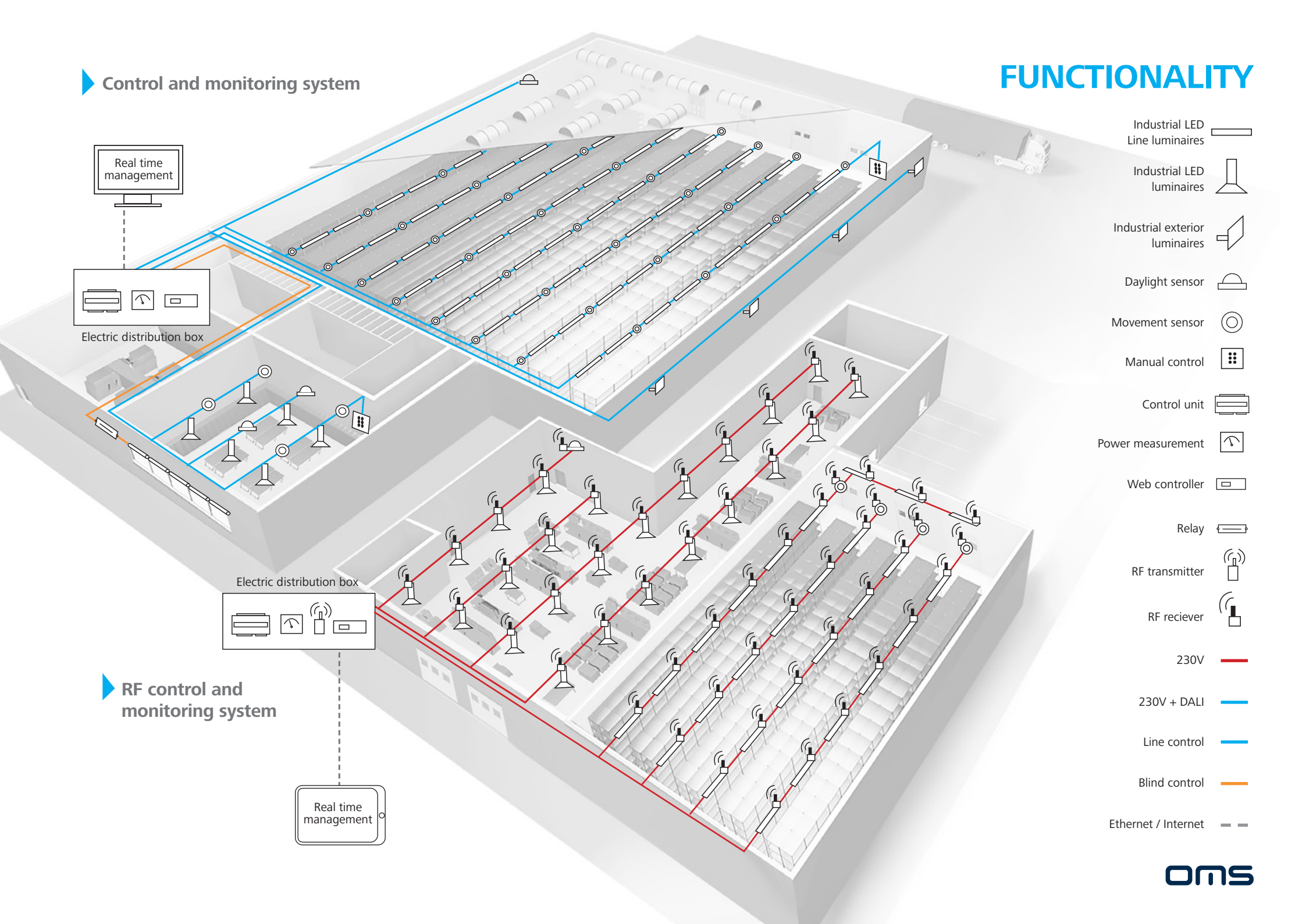
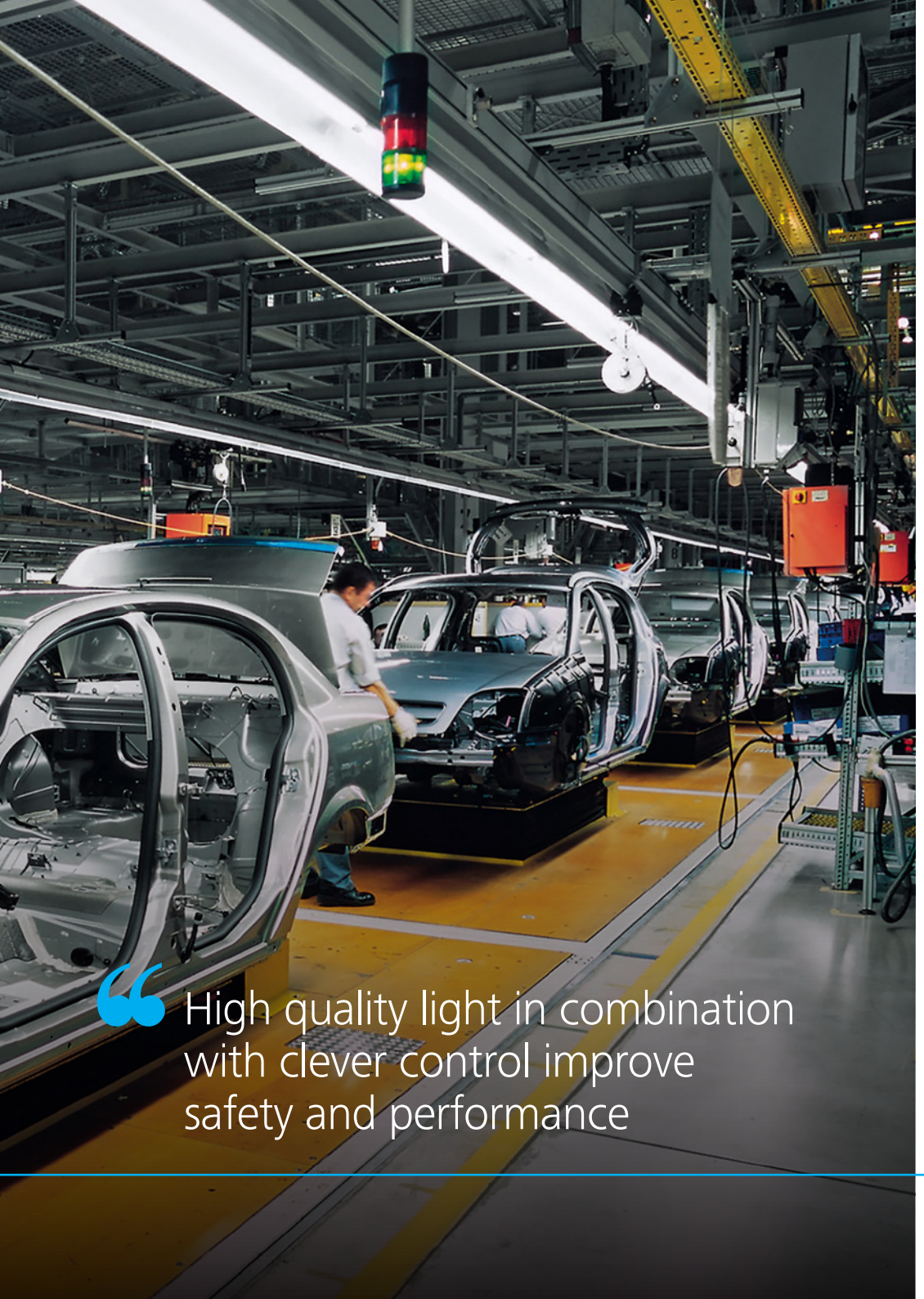

Control and monitoring system
Real time management
Electric distribution box
Electric distribution box
RF control and monitoring system
Real time management
FUNCTIONALITY
Industrial LED Line luminaires
Industrial LED luminaires
Industrial exterior luminaires
Daylight sensor
Movement sensor
Manual control
Control unit
Power measurement
Web controller
Relay
RF transmitter
RF reciever
230V
230V + DALI
Line control
Blind control
Ethernet / Internet



> High quality light in combination with clever control improve safety and performance

BENEFITS

NOTIFICATIONS AND REPORTS

The system provides notifications in case of power failure in a distribution box, communication error, and luminaire failure. Notifications are shown within the system and are sent to users via SMS or email.
The web-based solution offers a wide range of reporting options as well that can be selected according to time or event.

PROGRAMMES

The solution allows for the use of predefined lighting scenes, setting up schedules for the groups of luminaires, and transparent graphic demonstration of the planned switching.

INDEPENDENCE AND SAFETY

Using a separate server that is delivered with the system makes it an independent solution with maximum safety for existing IT networks

100%
EFFICIENCY

FURTHER BENEFITS:

- Access the system from a computer, tablet, or smartphone
- Detailed overview of all information about each luminaire, current settings and measurements
- Automated data collection reduces maintenance costs
- User-friendly remote and local the control provides great autonomy
- Assessment of energy-saving reports

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> Lower CO_2 emissions while making impressive savings in your energy bill

ECOLOGY

Ecology and ecological solutions respecting the fragile equilibrium of the environment are important topics that have become key values across the whole industrial spectrum during the last decades. The manufacturers of the luminaires and light sources are no exception in this area.

Together with awareness of the limited character of the energy sources that cause the permanent increase of their prices, taking into account the ratio of the luminaire or light source effectiveness and the energy consumed the trend is coming to the foreground.

Also in this line of business, the demands on the efficient utilization of energy, the recyclability, and the long life of the products constantly rise. In the area of manufacturing the luminaires and the light sources, the effectiveness of the light sources, the effectiveness of the luminaires and their impact on the environment are more and more emphasized. These are categories that, besides the ecological approach, contain a substantial potential for energy savings and in this way also reduce operating costs. For the developers and architects of industrial buildings and production halls, just this factor is the source of the strongest motivation when designing light systems. Categories that are relevant from the point of view of ecology are the latest lamp technology, system efficacy of luminaire, dangerous material content, thermal output of a lamp, and finally – product lifetime and maintenance costs.

WE UNDERSTAND...

E > 350 lux
Constant Light Colour
$U_o > 0,3$
Very low ripple current: <= 3% at 100hz
No shadow + no yellow
task area
vertical uniformity
No shadow + no yellow
Soft cut-off
E > 750 lux
B2L ready
vertical uniformity
3-stepMacAdam
color rendering index
color rendering index
E > 350 lux
B2L ready
uniformity
lighting uniformity
task area
$U_o > 0,6$

LUMINAIRES

PRESTIGE LS II

PRESTIGE LSP II

PRESTIGE ONE

PRESTIGE N II

EMERGENCY 2930

EMERGENCY 2600

PLAST H LED

TDO III ECO LED

EMERGENCY 2900

EMERGENCY 2910

SOREN

PRESTIGE

EMERGENCY 2990

EMERGENCY 3100

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