

## GENERAL DESCRIPTION

Natural light is one of the most important elements in architecture, helping to transform spaces and save energy.

Schröder designed the “LED controlled by nature” solution to maximise ambient lighting so that artificial light plays a supporting role in achieving the required lighting level at all times, thus minimising energy consumption.

The “LED controlled by nature” solution combines the latest generation LED luminaires, luminosity sensors and a control management system.

This flexible and intelligent solution takes full advantage of LED technology so that the initial investment is recovered very quickly. Thanks to the very long life of LEDs, energy and maintenance savings will continue beyond this period.

## APPLICATIONS

The Schröder ‘LED controlled by nature’ solution is ideally suited to various indoor environments such as sporting venues, train stations, shopping centres, art galleries and industrial buildings where the well-being and safety of people is essential.

## KEY FEATURES

- Tailor-made solution for specific needs of area to be lit
- Reduces energy consumption and CO<sub>2</sub> emissions
- Easy installation and commissioning
- Integration into local IT network
- 5 year warranty

## HOW IT WORKS

The pioneering “LED controlled by nature” solution aims to maximise daylight while balancing artificial light to ensure safety and comfort. It combines the latest generation LED luminaires, luminosity sensors and a control management system.

It proposes a tailor-made solution for each environment by analysing the specific lighting needs.

The analysis will divide the area to be lit into specific zones to determine where and how many luminaires and sensors should be installed.

Each sensor controls a group of luminaires to maintain a uniform lighting level throughout the area. The sensors permanently measure the lux levels of the ambient lighting and communicate them (via a 0-10V signal) to the control system.

In turn, the control system balances the amount of daylight and artificial light to achieve the agreed levels of lux defined for each zone by adapting the lighting levels of the luminaires (via the DALI protocol) to compensate for the lack of natural light.

The lighting levels are gradually adapted so that people barely notice the light changes, mimicking natural changes in daylight.

The Schröder “LED controlled by nature” solution connects to the IT network to enable the facility manager to manually change the lighting scenarios and monitor the lighting system.

This innovative system offers further benefits that simply saving energy. It improves comfort for customers, reduces maintenance costs and imparts greater flexibility for the use of a defined space.

## LED CONTROLLED BY NATURE



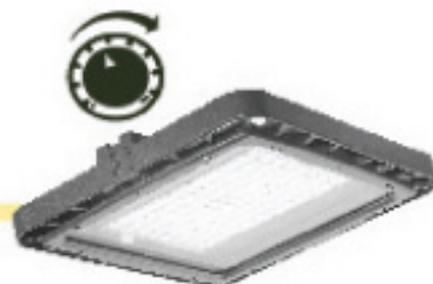
LUMINOSITY  
SENSOR

0-10V  
SIGNAL



CONTROL  
SYSTEM

DALI  
COMMAND



LUMINAIRE