
# DEOS AG Case Study

OPENapp DALI and OPENdynamics in Office Buildings


## DEOS AG Headquarters, Rheine (DE)

DEOS Gebäudeautomation GmbH lent a hand at its home location in Rheine and equipped the new DEOS AG Headquarters with a big range of DEOS' own products.

Since 1967 DEOS AG has developed and manufactured intelligent and comprehensive digital energy optimizing systems for highly energy-efficient building automation – made in Germany.

## The new DEOS Headquarters
Top Reference of Innovative Building Automation

As a developer and manufacturer of innovative building technology it was not only a wish of DEOS AG but also an obligation to build the new headquarters as one of the most intelligent and energy-efficient buildings in Europe. The current building IQ of 143 of maximally 150 points demonstrates clearly the performance and the knowhow of DEOS AG.

Within only 18 months the head office has been planned, built and equipped with state-of-the-art building automation systems. Since the late summer 2014 the more than 100 employees at the Rheine location, partner, customers and visitors can see in a real environment stretching across 2,500 sqm what hardware and software innovations DEOS AG has on offer. The new DEOS headquarters also represents the current stage of development and the increasing potential of building automation.

„Who else if not us is obligated to build one of the most energy-efficient buildings in Europe?", **Stefan Plüth**, CEO of DEOS AG

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The new DEOS headquarters is equipped with more than 500 multicolored LED lights, which were specially developed for DEOS. The DEOS software application OPEN*app* DALI controls these lights. Every light is set so that the temperature range of the light adjusts to the human biorhythm throughout the day. This technology – also known as HCL – visibly promotes the power of concentration of the employees. The intelligence of the building also appears in the lighting control by means of motion sensors. That is why switches cannot be found in the building.

In addition to light, a comfortable and agreeable room climate in the offices and conference rooms is also essential. This is achieved by OPEN*dynamics*, the intelligent DEOS control system for ventilation. Due to the principle of diffusion instead of ventilation and the installed Fuzzy logic, OPEN*dynamics* always keeps temperature, humidity and air volume flow in balance and therefore reaches a perfect room climate. OPENdynamics also has the function of a cost control system and shows the current costs for the air conditioning of all rooms and zones in real time.

The innovative character of the new building is also reflected by the special building shape and the exterior design. The white aluminum external front is covered with titanium dioxide which, in combination with the UV radiation of the sun and the humidity, contributes to the automatic cleaning of the front. Furthermore, the façade with its surface of 1,494sqm destroys the daily smog of six cars.

The DEOS AG headquarters does not only impress by state-of-the-art technology, also the unique outer design helps to ensure that one of Europe's most advanced buildings has been created in Rheine.

### Technical Data

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| Started: | March 2013 |
| Finished: | August 2014 |
| Function: | Office building and training center |
| Applicat.: | Ventilation, light, cooling, heating |
| DEOS software: | OPENdynamics, OPENapp DALI, OPENweb, OPENview |

### Our System Partner

DEOS Gebäudeautomation GmbH (DG) is a subsidiary of DEOS AG and installs building automation systems. In addition, DG supports the DEOS System Partners with complex projects and tests and develops new products and processes.

### Our Product

The software application OPENapp DALI is an all-around efficient and intelligent solution for small and medium-sized light management projects. OPENapp DALI offers intuitive operability and a fully graphic configuration so that programming skills are not longer necessary.

DEOS AG develops and manufactures intelligent and comprehensive Digital Energy Optimizing Systems for highly energy-efficient building automation.

DEOS AG | Birkenallee 76 | 48432 Rheine | Tel.: +49 597191133-0 | info@deos-ag.com | www.deos-ag.com