Integrated room automation solutions for comfortable and energy-efficient operation based on the globally standardized KNX® protocol and the open Metasys® system architecture.

Overview

With room automation based on KNX®, Johnson Controls relies on a universal and sustainable solution for integrated building automation with Metasys®.

Extensive implementation options are available for office buildings, schools, universities, hotels and apartment buildings. The room automation solution from Johnson Controls can be planned and commissioned with the manufacturer-independent engineering software ETS®. The expansion of an existing solution and joint operation with products from other market participants are also possible at any time without any problems.
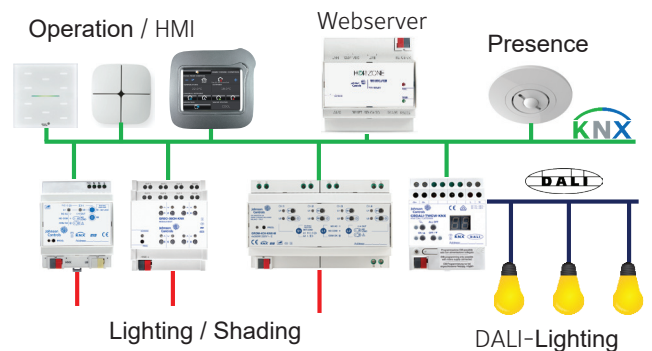
▶ Open platform for versatile applications

▶ Investment security through standardized and future-oriented technology

▶ Can be expanded at any time and combined with existing KNX® installations

▶ Can be fully integrated into the Metasys® building automation system

Innovative solutions for many applications

▶ Situation-dependent lighting and shading, also available with DALI actuators.

▶ Demand-controlled room climate with inclusion of temperature, humidity, air quality, and presence

▶ Reliable access control and presence detection

▶ Modern and intuitive operating concepts

Room Automation with System

The Johnson Controls components for room automation combine up-to-date design, efficient construction with extensive functions in each device. They can be flexibly combined with each other and can also be used as a stand-alone solution to implement sophisticated room automation solutions.
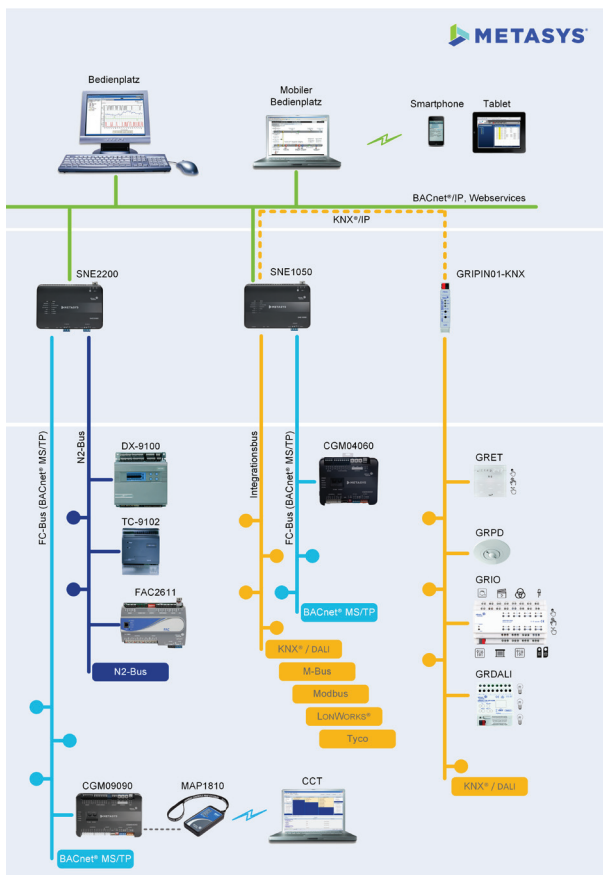

Components for room automation

Extensive possibilities

A large number of different I/O interfaces and internal sensors are available per device, coupled with an extensive number of communication a comprehensive number of communication objects and connection options.

Additionally applicable and freely configurable software functions offer maximum flexibility for the realization of complex tasks.

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Powerful integration with Metasys®

A KNX-IP based solution on automation level is available for seamless connection in Metasys®. With it, KNX® group addresses can be mapped bidirectionally to Metasys® data points..

Network topology of integrated room automation in Metasys®.

Via the Metasys® network, the automation stations can independently access all KNX® information and integrate it into their application programs:

- Setpoint specification for room control
- Overlapping switching functions for lighting and shading
- Presence detection for demand-controlled air conditioning
- Mapping of KNX® addresses to BACnet™ objects
- Detection of limit value violations
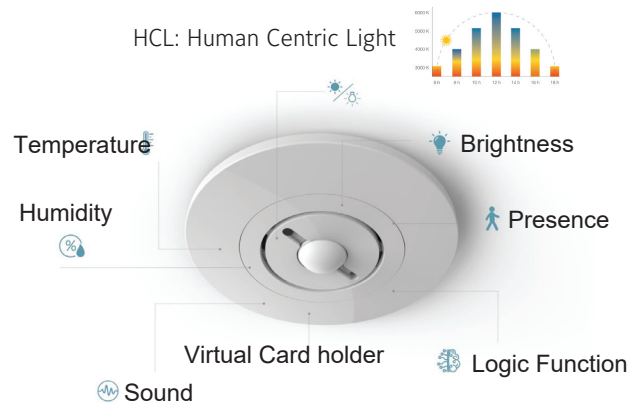- Trend display of measured variables

DALI-Gateway

With the KNX® DALI gateway, the integration of a wide variety of lighting systems into room automation is quick and easy.

The gateway offers extensive configuration options for each DALI channel and integrated DALI commissioning support in the device. The gateway is fully integrated into the ETS® engineering software.

MultiSensor - Presence detection with level

The KNX® MultiSensor is a high-quality all-round device that can be used for many tasks thanks to built-in sensors for light, temperature, humidity, presence and noise.

- Presence detection with setpoint specification
- Illuminance detection and brightness control
- Adjustment of illumination color tone (HCL)
- Virtual card holder function for access control
- Complete room control including all HVAC functions

Thanks to a wide detection range and the possibility of expanding with additional detection units, even angled rooms can be optimally detected.

Modular room operating concept

The capacitive operating elements with high-quality glass surfaces provide a changeable and visually appealing design that makes it easy to implement individual and project-specific operating concepts.

Multifunctional controls with application-specific icons

Integrierte Zutrittskontrolle

Thanks to programmable RFID transponders, a user-friendly access control system is available that is suitable for hotels and apartment buildings and can also be used in the education and administration sector.

The registration devices communicate directly via KNX® so that they can also activate automation functions for the respective room.

This makes a decisive contribution to increasing energy efficiency, as energy can be saved when the person is absent.

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