B.E.G. LUXOMAT® net

KNX – intelligent building automation using sensors from B.E.G.

Effective energy saving in buildings

KNX sensors from B.E.G. are specially developed for the creation of economical solutions for building automation. This means energy saving potential is used effectively and the building's running costs are substantially reduced. Depending on application type, different sensors may be used, e.g. the PD4 with a large detection area, the design-oriented PD11 occupancy detectors (with a visible surface height of only 0.85mm) or the PICO, the smallest KNX occupancy detector in the world.

Sensors

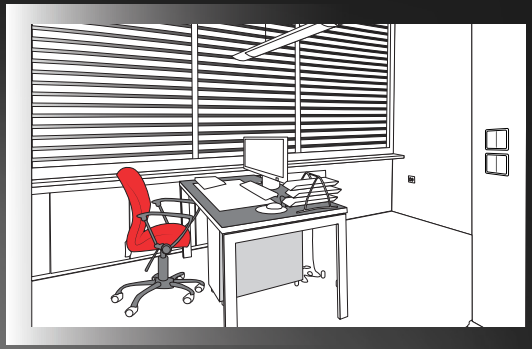
Depending on version, B.E.G. KNX occupancy detectors switch or regulate up to 3 lighting zones. This means not only is energy saved, but also uniform lighting is achieved when daylight falls from one side. Therefore energy is only consumed where required with occupancy detection. As well as lighting control, all B.E.G. KNX occupancy detectors can control other building functions such as heating, ventilation and cooling by time and/or occupancy. The DX series of KNX occupancy detectors with integrated temperature sensor can easily be incorporated into practically all heating systems for room-specific temperature regulation. To carry out more complex functions, the DX versions of the B.E.G. KNX occupancy detectors have an integrated logic module. This means that logical and time-related dependencies can be programmed directly using the ETS software.

Actuators

Using the new B.E.G. KNX switch actuators, all connected loads can be controlled automatically via the KNX bus system or manually by switches. For example, this can be used for on-demand switching of ventilation and for switching of sockets or DALI ballasts to reduce standby consumption. The KNX SA8-230/16/EM/KNX REG switch actuator also captures and monitors current and energy consumption, which can be represented in a visualisation. Adjustable threshold values mean that faults in the installation can be detected and logged accordingly. To minimise standby consumption, the sockets can be switched off, e.g. at night.

PD11: the flattest occupancy detector only has a visible surface height of less than 1mm and with its flat lens, it blends in with the ceiling level.

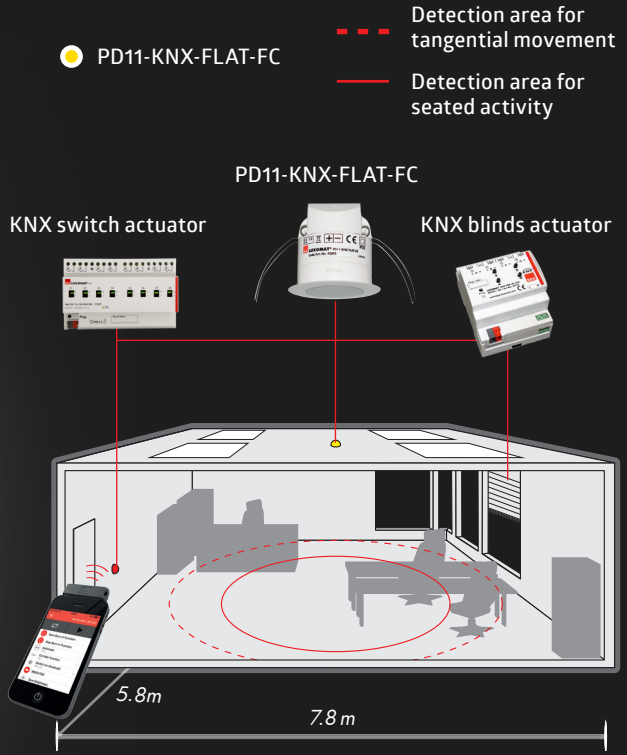
Office with PD11-KNX-FLAT-FC (planning example)



PICO: the smallest KNX sensor in the world with a diameter of only 32mm can be integrated into the ceiling almost invisibly.

Highlights

- Regulation and switching of LED lighting depending on occupancy
- Control of blinds
- Room temperature measurement for heating
- Manual intervention possible (using IR remote control or KNX push button)



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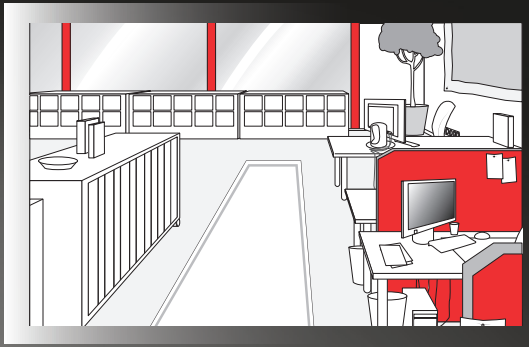
Push-button interface
The entirely newly-developed 4-way flush-mounting push-button interface offers completely new options for the connection of conventional pushbutton switches. Four channels can be programmed as inputs or outputs as required.
Many additional functions are available, which are freely programmable per channel via the ETS software. This means that standard functions such as switching or dimming, as well as more complex functions such as scene control, can be assigned.

Occupancy detectors
Using the remote control specially developed for end customers, functions can be controlled easily via infrared. Installed master units can be supplemented with slave sensors as required to easily extend the detection area. Logical allocation takes place simply via the ETS software. New requirements from a change in use of the room can easily be accommodated by changes in the programming.

For more complex lighting conditions, brightness values from different sensors can be set as reference points at different times of the day.
DALI lighting groups can be controlled and configured via the DALI/KNX Gateway. The webserver built in to the B.E.G. DALI/KNX Gateway makes it convenient to define lighting groups or make them larger or smaller via smartphone or any WLAN-capable device via the web interface.

Open-plan office with PD2N-KNX-FC (application example)



Open-plan offices with many workstations have to be set up flexibly for changes of use. Lighting of the whole floor should be managed efficiently and the assignment of scenarios should be flexible.

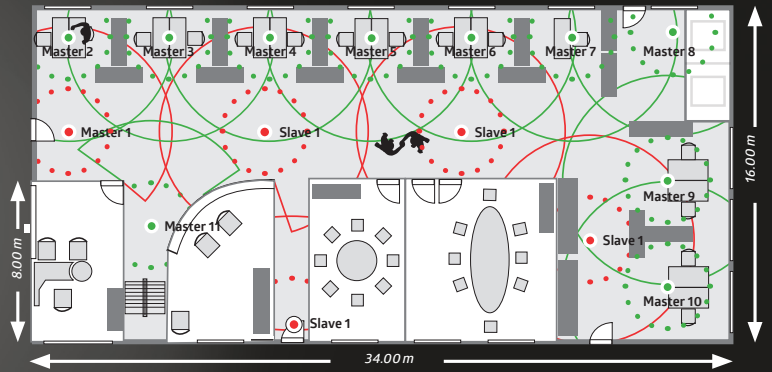
Group 1

Group 2 - 11

Detection area for seated activity

Detection area for tangential movement

PD2N-KNX



New software

The new B.E.G. Generation 6 KNX detectors have been completely revised to meet individual requirements: the new hardware enables a much smaller mounting depth, which makes installation considerably easier, particularly in restricted installation spaces, e.g. suspended ceilings. In addition, the sensors include models and variants with integrated noise sensors, temperature sensors and, for the Indoor 140-L wall switch, LEDs for orientation and night light function, as well as a 2-way push-button interface.

KNX sensors from B.E.G. have a range of functionality unique in the market. A variety of new functions such as separate control of individual movement sensors, integrated offset regulation for balancing different brightness levels within one room and the fully-featured integrated logic module for complex connectivity offer you an extensive range of functionality and a secure investment in the future.

BA – Basic – Economic solution for simple requirements

ST – Standard – comprehensive solution for common requirements

DX – Deluxe – premium solution for demanding applications

New hardware

Highlights*

- Internal and external light sensors
- End-customer remote control
- External optional BLE-IR-Adapter
- Sensor sensitivity individually adjustable
- Setting and reading of parameters via bidirectional smartphone app
- Direction detection
- Temperature sensor

*version-dependent

External optional BLE-IR-Adapter
for exact light measurement, e.g. on a desk. The external BLE-IR-Adapter communicates with the KNX occupancy detector via an infrared interface

End-customer remote control
with five buttons, freely configurable (e.g. switching, dimming, blinds, scenes)

Two light sensors
the detector has an internal light sensor (covers wide areas) and an external light sensor (localised); see software

Noise sensor
detects noises above a threshold which is individually adjustable, enables reactivation of the lighting by sound detection

KNX
Amazing product variety
“

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