



The system components

All the devices for a KNX installation are connected together by a bus, thus allowing them to exchange data. The function of the individual bus devices is determined by their project planning, which can be changed and adapted at any time.



A KNX system is modular and flexible

System devices and components

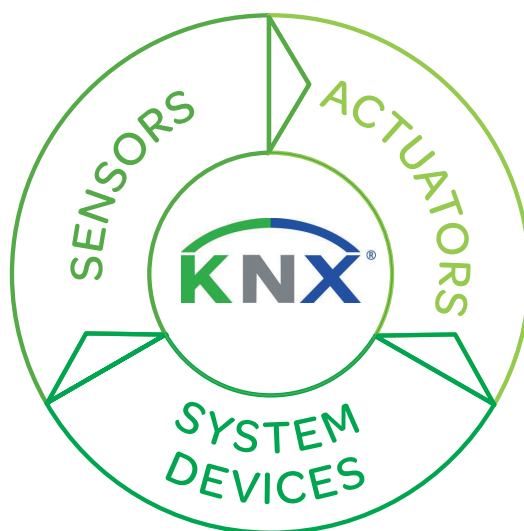
They are needed for the fundamental functioning of the system. They consist of power supply units for generating bus voltage, couplers for connecting bus segments and interfaces for connecting programming devices.

Sensors

These are the starting point for every action, because they gather information and send it on the bus as a data telegram. This can be information about room temperatures, movements, wind measurements or manually input instructions.

Actuators

They receive data which are then converted into actions. This can include controlling blinds, dimming lights or controlling heating and air conditioning systems.





System devices (selection)



Power supply unit



KNX logic module



USB interface
REG-K



Line coupler



IP Router



Wiser for KNX

Sensors (selection)



KNX push-button



Movement detector



Room temperature
control unit



Binary input



Anemometer

Actuators (selection)



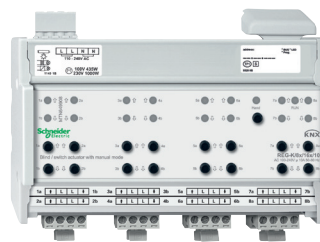
Switch actuator



Dimming actuator



Heating actuator



Blind actuator



KNX DALI-Gateway

Energy Efficiency with KNX and U.motion

Energy saving is not just a matter of conviction but is also a cost factor that puts money in your customers' pockets. U.motion offers the optimum basis for energy efficiency and can be expanded with additional components as required.



Energy Saving just by visualising consumption

Comprehensive energy management

Schneider Electric – leading supplier of energy management solutions – offers a large scope of energy solutions which can be perfectly combined with U.motion. And all of this is from a single source, so compatibility is assured.

LifeSpace Management is a comprehensive solution that you can adapt to each customer's individual situation.

Measuring and visualising – the first step to savings

Energy efficiency starts with the clear visualisation of all energy consumption values. Studies have shown that simply visualising energy consumption values prompts users to change their behaviour – with a potential saving of up to 10%!



U.motion Touch 10
Visualisation of Energy Consumption

Saving and evaluating energy data

The energy data can be measured and recorded, and then displayed as graphs. The longer the time frame of energy recording, the more precisely a building can be evaluated in terms of energy.

Devices with a high energy consumption can easily be identified, and their consumption can be immediately optimised via U.motion. Energy management with U.motion pays off – for you and for your customers.

Improvement starts with a decision about what to measure

The trump card of LifeSpace Management with U.motion is flexibility. For each requirement, Schneider Electric offers solutions for achieving individual energy efficiency concepts and energy

saving scenarios. The combination of switch actuators with current detection or KNX Energy Meter plus individually set switching times helps your customers to save energy.

Monitoring with high accuracy

The KNX Energy Meter provides energy measuring with class 1 accuracy for single and groups of devices. It measures total and period energy as well as instant power and provides 8 different alarm thresholds. When consumption exceeds preset limit, commands for switching or dimming can be sent or KNX scenes can be activated. The commands can be provided with adjustable delays if needed. Alarms can be sent to U.motion as well in case of current power, e.g. if server cooling falls below preset limits.



KNX and Modbus: an intelligent combination

The KNX Metering Gateway combines the expertise of the Modbus open standard with KNX intelligent building control. Measured values of up to 10 meters with a Modbus interface and connected SIM modules for recording gas and water consumption via impulse can be integrated into the KNX Energy Management, thus enabling comprehensive analysis of consumption.



Application Example

