

# SMART HOME AND BUILDING SOLUTIONS



## INTRODUCTION



Remote Control



Heating



Household Appliances



Audio/Video/ Multimedia



Security



Blinds & Shutters



Metering



Energy Management



Lighting

More convenience, more safety, higher energy savings: The demand for building management systems is continuously increasing.

Whether in a single-family house or in an office complex, the demand for comfort and versatility in the management of e.g. air-conditioning, lighting and access control systems is growing.

At the same time, the efficient use of energy is becoming increasingly important. More convenience and safety coupled with lower energy consumption can however only be achieved by intelligent control and monitoring of all products involved.

This however implies more wiring, running from the sensors and actuators to the control and monitoring centres. Such a mass of wiring in turn means higher design and installation effort, increased fire risk and soaring costs.

#### The Answer: KNX

In order to transfer control data to all building management components, a system is required that does away with the problems of isolated devices by ensuring that all components communicate via one common language: in short, a system such as the manufacturer and application domains independent KNX Bus. This system is based upon more than 29 years of experience in the market. Via the KNX medium (twisted pair, radio frequency, power line or IP/Ethernet-WIFI), to which all bus devices are connected, they are able to exchange information. Bus devices can either be sensors or actuators needed for the control of building management equipment such as: lighting, blinds/shutters, security systems, energy management, heating, ventilation and air-conditioning systems, signalling and monitoring systems, interfaces to service and building control systems, remote control, metering, audio/video control, white goods, etc. All these functions can be controlled, monitored and signalled via

a uniform system without the need for extra control centres.



# MEANING OF THE KNX SLOGAN

#### Smart home and building solutions.

A benefit in every type of building: From the office complex to the average household. Whatever the kind of building is, KNX opens up complete new opportunities for building control systems while keeping the costs at a manageable level. KNX can provide solutions that could only be realized with considerable effort with conventional installation techniques. Via a single touch panel, all applications in the home or building can be controlled. From heating, ventilation and access control to the remote control of all household appliances – KNX allows completely new ways of increasing comfort, safety and energy savings in a home or building.

#### Global.

References all over the world: the world of home and building control "speaks" KNX. Several million successful KNX installations can be found not only all over Europe but also in Asia and North and South America – a proof of just how attractive the KNX approach is. Over 490 KNX member companies worldwide offer almost 8,000 KNX certified product groups in their catalogues, from different application domains. KNX is moreover approved as an International Standard (ISO/IEC 14543-3) as well as a European Standard (CENELEC EN 50090 and EN ISO 22510) and Chinese Standard (GB/T 20965). KNX is therefore future proof. KNX products made by different manufacturers can be combined – the KNX trademark logo guarantees their interworking and interoperability. KNX is therefore the worldwide Standard for control in both commercial and residential buildings.

#### Secure.

KNX provides the possiblity to secure its communication through authentication and/or encryption, based on the internationally standardised AES128 algorithms.

#### Connected.

Since over 10 years, KNX installations can be seamlessly coupled to IP networks through the KNXnet/IP protocol. Hundreds of solutions already exist in the market to make this possible: through the KNX IoT project, KNX hopes to further standardize these solutions.

Smart home and building solutions.
Global. Secure. Connected.

## BENEFIT FROM KNX

#### A future proof technology

The smart home and building market is constantly changing and technology is improving fast. However, the latest technologies, such as internet of things, are already part of our current software. We don't wait for new ideas, we come up with them. The KNX technology is a reference in home and building control. Any automation solution you're using today will have our innovation at its core. By using KNX you will always be one step ahead of your competitors.

#### The benefits of KNX

- √ A future proof technology
- ✓ Endless flexibility and personalization
- ✓ A safe and secure system
- √ Timesaving and easy installation
- ✓ An integrated and future proof solution
- ✓ An international community

#### Endless flexibility and personalisation

We all know that clients have high demands in the kind of products they want to use for their smart home or building. With KNX you can now say 'yes' to their requests. To any request. Endless flexibility and personalisation in the setup of your automation project is no longer a dream. It's real. It's KNX. You can let a broad range of devices communicate with each other, even if they are from different manufacturers. KNX can even be integrated together with other automation systems

In that way, the choice which products you want to use is yours or your clients. No limits, only possibilities. KNX is your all-in-one solution for every automation challenge.





#### A safe and secure system

Security is a hot topic and the safety demands for control systems are increasing. At KNX we're committed at being compliant with the highest security requirements in the market. We value safety very highly because we know you care. Because your client cares.

With KNX you can be rest assured of a secure installation process, so that both you and your client don't have to worry about that. No extra effort or system from the professional is needed. KNX Secure is integrated in our existing software. Security was never that easy.



#### Timesaving and easy installation

KNX wants to make your professional life easier. Our software stands for simplicity. There's only one tool for commissioning with an easy to use interface. This will save you valuable time that you can use for the things that really thrive your business.

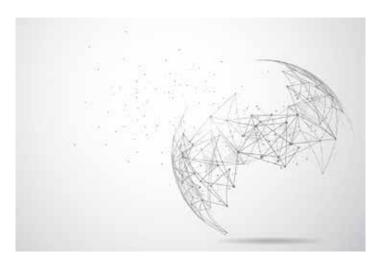
Moreover, your client can take control of his own smart home or office. Our newest software, ETS Inside, allows your client to make small modifications himself on his tablet or smartphone. A time-saver for both of you.

#### An integrated solution

KNX has a 29 years of experience in building automation. You can work with different products from different manufacturers. KNX can even be coupled to other systems and is independent from any hard- or software technology.

Moreover, our technology can be used in both new as well as existing buildings. A KNX installation can be easily extended and adapted to new needs, with little time and financial investment. KNX can be implemented in both small-size family houses as well as large buildings.





#### An international community

With KNX you don't stand on your own. You become part of a big community of system integrators, member companies, training centres... We will help you to improve your business. You can get in touch with installers like yourself not only to discuss about the use of our technology but also about sales and how to market yourself to attract more clients. They all face the same problems as you do and by exchanging experiences everybody wins.

### SOFTWARE

ETS (Engineering Tool Software) is the only software for the design, startup and operation of KNX systems that is manufacturer independent and compatible with all KNX products. Alongside ETS, KNX Association offers additional tools for installers and developers for the universal application of KNX. For KNX installers, ETS Apps are offered, which allow to extend the functionality of the ETS program. For developers these are the Falcon Library and the EITT Analysis and Simulation tools. You can find all the KNX tools at:

https://www.knx.org/knx-en/for-professionals/software/



#### ETS®

# Project planning, Design and Commissioning of KNX Installations, Manufacturer and Product Independent

ETS is a completely new generation of smart automation software. ETS stands for Engineering Tool Software. It's a manufacturer independent configuration software tool to design and configure intelligent home and building control installations with the KNX system. ETS is a software, which runs on Windows® platform based computers.

One ETS5 Professional allows composing solutions for all application areas for which KNX certified products are available. In that way, using ETS5 Professional empowers your business – not only technologically, but above all commercially.



#### ETS Inside

# All the benefits of the successful KNX standard in a mobile application, easy to understand and allowing your customers to configure the installation themselves.

ETS Inside is the entry level version of your trusted ETS Professional that runs on any existing or new KNX installation. Configure settings from your – or your customer's – tablet or smartphone. Perfect for small and medium installations. ETS Inside offers the next step in home automation in a stable and secure way.



#### ETS Apps

#### Extensions to the functionality of the ETS Software tailored to the specific needs of KNX system integrators

ETS5 Professional is sufficient for users wishing to install and configure KNX systems. However, users may want additional functionalities when applying KNX. With the ETS Apps you can now realize more creative ideas to give your automation project that extra spark.

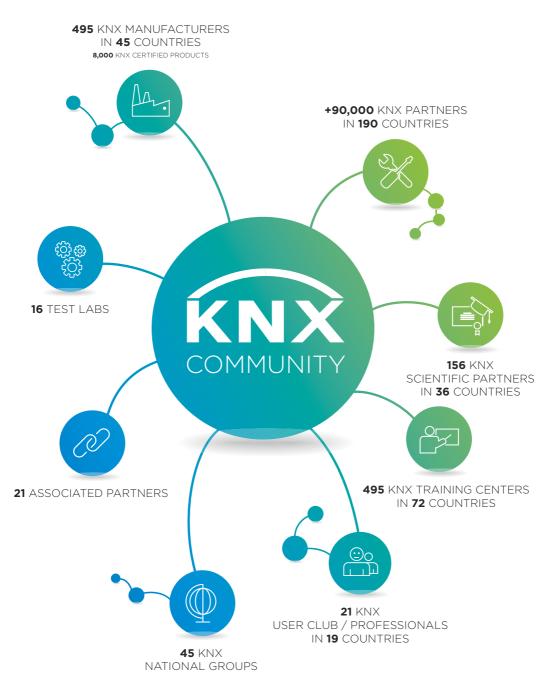
And the best of all is that you don't have to worry about compatibility. The ETS Apps offer limitless options but are still compatible with the entire KNX system. Owners of ETS wishing additional possibilities only need to download, install and license the apps to enjoy the extras.

#### Which software package is the best for me?

ETS Inside ETS Lite ETS Professional

You want to create your first project with KNX but you don't know which software package you need? A comparison of ETS Inside, ETS Lite and ETS Professional will help you choose which software answers your needs best. Visit for more info

# BE PART OF AN INTERNATIONAL COMMUNITY



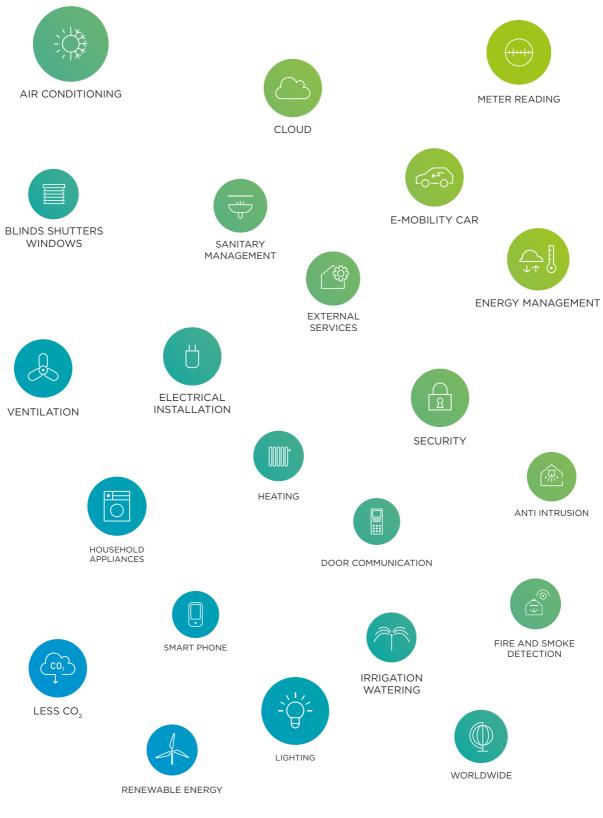
#### WITH KNX YOU DON'T STAND ON YOUR OWN.

We are a global organization with more than 29 years of experience and a broad network of people who have embraced our technology. By joining our community you become part of an international family of installers, manufacturers, training centres, scientific partners...



# **APPLICATIONS**

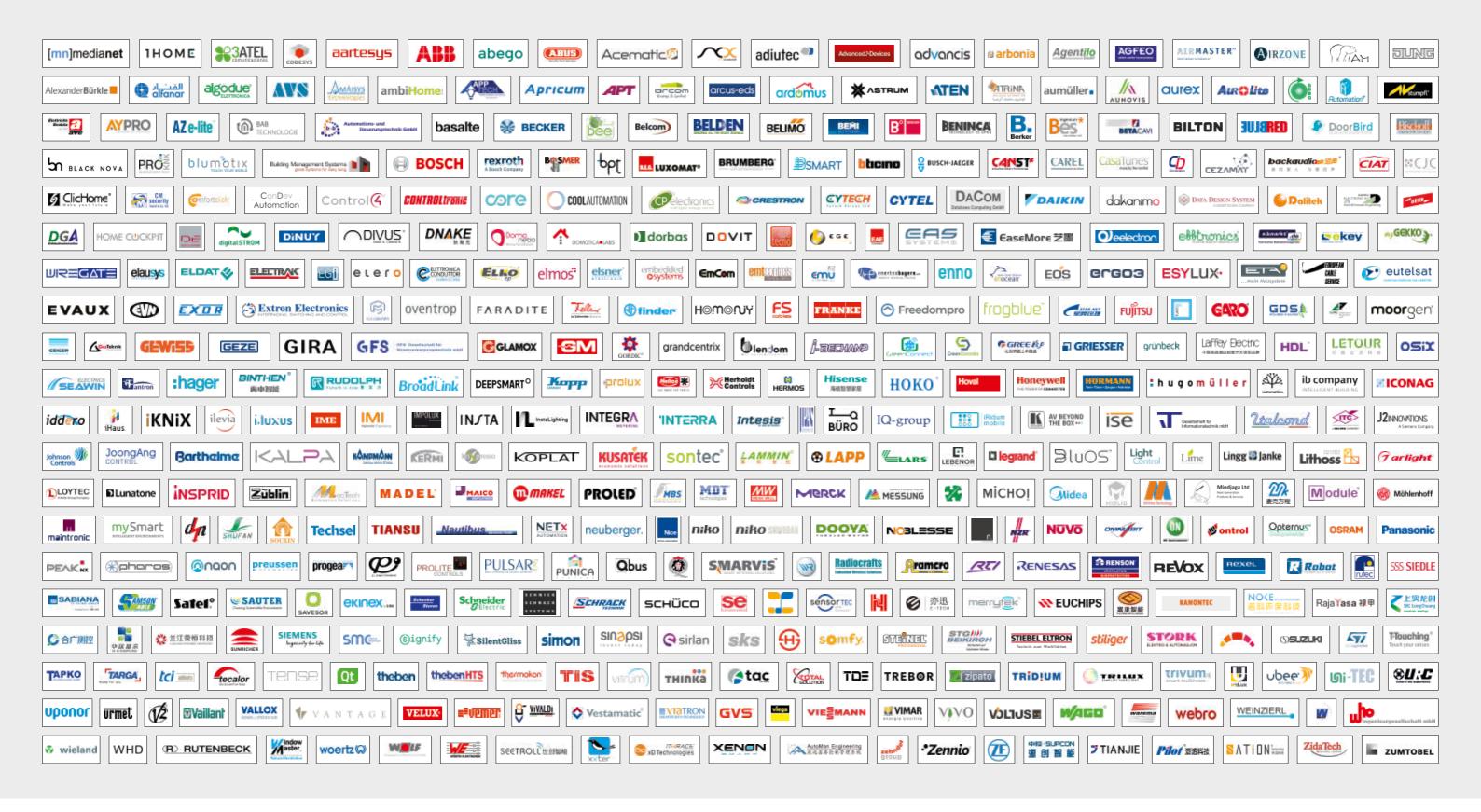
KNX can be used for all possible functions/applications in home and building control











KNX MEMBERS | 495 Manufacturers from 45 Countries



