

JOURNAL

The New ETS5

KNX RF

Energy Harvesting

KNX secure

KNX in New Zealand

Euroskills 2014

KNX Awards Projects













www.knx.org

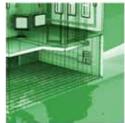
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The worldwide STANDARD for home and building control















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New licenses	Price	Restrictions
ETS5 Professional	1000,00 €	
ETS5 Supplementary	150,00 €	For Notebooks, max. 2 licenses, only together with ETS5 Professional
ETS5 Lite	200,00 €	max. 20 products
ETS Apps	see KNX Online Shop	
Upgrade licenses		
ETS4 Pro > ETS5 Pro	350,00 €	
ETS4 Supplementary > ETS5 Supplementary	110,00 €	
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Editorial



Heinz Lux, CEO KNX Association

ETS the fifth

In a study in 1964, IBM came to the conclusion that only six proper computers would be needed worldwide. This assessment has turned out to be incorrect. Correct is that today it is possible to handle the information of any practical process in digital form. It is also correct that the price/performance ratio of hardware and software is subject to a constant cost degression and that information can be concentrated in smaller and smaller volumes. As a result we have today an unimaginable number of computers and a vast range of application options for hardware and software.

So it was a question of time when we at KNX would integrate this development into the ETS. With the new ETS5 it is now possible to process ALL media, without exception. In addition to the wired media, such as bus bars, Powerline and Ethernet/IP it is now possible to parameterise and operate radio and RF with the new ETS - and it is just as easy. And further more: owing to changes in the IT system environment the installation setup is changing and the processing speed is increasing considerably. The new ETS works with a technology without database, which therefore accelerates data import and export. For better handling and more flexible project organisation we have introduced the Dongle - which can be used to work with several computers at the same time - and with the 64-bit application we achieve the full power and utilisation of all system resources. It is possible to operate ETS5, 4 and 3 in parallel on the same computer. Man is a being that processes information. But beyond that he is also in a position to generate information. But how we can derive an understanding and come to action from the flood of information that surrounds us constantly also depends on our method of handling information and of using it for our purposes.

ETS5 is here – a slim and flexible instrument that enables us to make intelligent use of intelligent building services.

Nevertheless, the expert and his knowledge and abilities will always remain the key to the success of the system's function.

The computer scientist Joseph Weizenbaum once called this "Computer power and human reason".

Clearly, he didn't know ETS5 then.

Editorial

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Largest increase in number of KNX members and biggest sale of ETS licenses since foundation of the association

KNX is the most commonly used bus technology

Unabatedly, KNX continues its road to success and underlines its leading role as the worldwide STAND-ARD for home and building control (ISO/IEC 14543). The number of members increased with 100 new manufacturers from 34 countries in the last two years - this is more than ever in the association's history, established back in 1990. For the first time, manufacturers from Latin America joined the KNX Association. On top of that, the number of ETS licenses used in the market more than tripled compared to the years before. The turnover of KNX members in some countries increased with up to 60 per cent. According to polls conducted in nine European countries, KNX is by far the most used bus technology with a market share of 75%. In more than 125 countries around the world, KNX is used.

Strong community

The increase in the number of KNX members is far above average. In just only 24 months, 100 new members from 34 countries joined the KNX Association. To the already existing KNX nations, seven new were added: Australia, India, South Korea, Japan, Taiwan and Canada. Thanks to these new partners, KNX was able to extend its application portfolio with energy management, smart metering and smart grid.

ETS continues to be popular software

In the last 24 months, the amount of sold ETS licenses tripled compared to the years before. ETS is in the mean while sold in 125 countries worldwide. The strongest market development was reported by partner companies in Italy, UK, Spain as well as China and India. Also numerous training centres showed great interest in including the KNX bus technology in their

basic training. The licenses offered especially for students and trainees continue to be very popular. A recordbreaking number of on average 2000 persons monthly register for the KNX eCampus online training.

Manufacturers profit from this positive trend

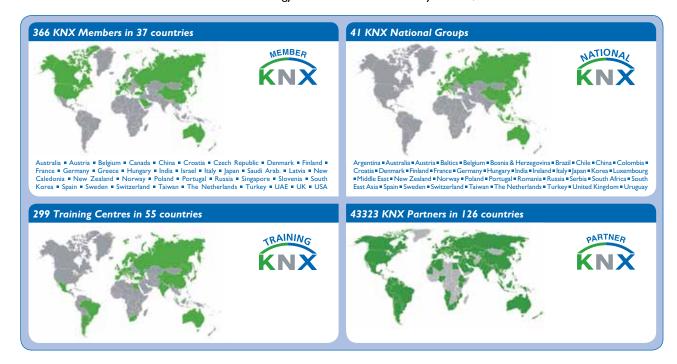
In the before-said markets, the KNX turnover figures of member companies have increased with more than 60 per cent compared to the year before. The international (ISO/IEC), the European (CEN, CENELEC), the North-American (ANSI, ASHRAE) as well as the Chinese standard (GB/T 20965) helps convince investors worldwide about KNX.

Positive Trend confirmed by research study

The above-mentioned facts and figures confirm the results of a European research carried out by BSRIA, according to which KNX is the most popular protocol in most European markets. KNX contributes to the technical standardization in the industry. According to estimates of BSRIA, the share of KNX based solutions exceeded 75% in the year 2013. The market share of KNX increased in the last three years with on average three per cent annually. These figures reflect the increasing importance of KNX in Europe. Even in the UK, where compared to continental Europe the market is dominated by specialized solutions, the KNX market share increased and amounted to one third at the end of 2013.

The future development under control

With confidence, KNX enters a new year in its success story: a new battery less wireless transmission medium and a still improved ETS5 are the cornerstones for future KNX successes.



Secure KNX

Interview with Hans-Joachim Langels, Leader of KNX Task Force IP



Hans-Joachim Langels is Head of Product Management Building and Lighting Control, System and Room Automation, Control Products and Systems, Siemens AG, Industry Sector, Building Technologies Division.

He led the KNX Task Force IP, which defined the security extensions to the KNX protocol.

Editorial KNX Journal:

Already twenty years ago, when the basic structure of bus systems (EIB or KNX) were created, the expert group "Security" invested a lot of time and thought into the security of bus systems. How has this high technical standard adapted to the new changed conditions?

Hans-Joachim Langels:

Twenty years ago it was sufficient to protect the transmission of information via the EIB/KNX bus system against interferences and influences of electrical and electro-magnetic type. Regarding closed media (twisted pair - TP), the assumption was that limited physical access to the bus system as well as measures taken in line couplers were sufficient to limit or completely exclude manipulations by third party. Regarding open media like the transmission over power line (PL), measures like band filters and the assignment of devices to domains were applied to achieve separation of individual bus systems in different dwelling units.

Regarding radio frequency (RF) transmission, the design ensures that transmission between devices connected to each other is securely taking place even if there are disturbances by other radio transmitters.

These measures still make sense but have to be updated to accommodate new technical conditions. Especially, with the pervasive proliferation of the Internet Protocol (IP) as universal communication medium, which has also found its way into building control technology, additional challenges regarding security have emerged.

On the one hand, the option has to exist to protect the transmitted information on every medium (KNX TP, PL, RF, IP) against willful changes or recording and repetition by unauthorized third parties

On the other hand, access from outside via the Internet to a KNX bus system has to be secured such that the configuration of bus devices can only be changed by an authorized user and that during operation only information is exchanged between bus devices that are verifiable part of the bus system.

Accordingly, there are two steps for securing the bus transmission:

- Secure Application Layer (S-AL)
- Secure IP

Both use security mechanisms, which are designed for the secure transmission

of data between electrical meters and electrical power utilities.

Editorial KNX Journal:

Increasingly, bus systems are used in conjunction with the Internet and on the other hand with legally to be protected personal data and the special requirements of data security (e.g. for meter reading). What does KNX offer, what can it do better or more than other systems?

Hans-Joachim Langels:

KNX provides a two staged concept for securing the transmission of information. When data is locally sent via KNX only the application data is secured. This simple extension of the bus protocol allows introduction of applications that must be secured into existing systems without changing or replacing system components. Secured and unsecured applications can be used mixed in parallel in the same bus system. Thus the investment into the KNX bus technology is protected. This consistent extension of the KNX protocol applies to KNX TP, KNX RF, KNX PL and KNX IP. Until now, if data were to be sent via the Internet, the connection between the sender network and the receiver network had to be secured by e.g. a VPN connection. Yet, this does not ensure that the sender is authorized to configure a specific bus system or exchange data with the system.

For this purpose the complete bus telegram is secured for communication via the Internet. For it the KNXnet/IP protocol is extended such that the transmitted data are completely encrypted. New KNXnet/IP interfaces are going to support this extension of the protocol. Again, this extension is consistent with the protocol used to date and can be deployed in existing systems with minimal effort.

The extensions for secured information transmission are design such that previous investments are retained and that the known KNX system in a simple fashion fulfills the increased requirements for security in building controls.

Editorial KNX Journal:

How is adherence with the good security standards of KNX secured

- in training and education
- in test of a system
- in daily practice and environment
- in extension of systems?

Hans-Joachim Langels:

Adherence to the good security standards of KNX is secured by installers and KNX system integrators already becoming acquainted with the necessary measures during training and applying these measures in daily practice. When the system is handed over and by frequent inspection during operation, the system function and the desired security level can be ensured. The new security functions, especially the access via the Internet, can be introduced into existing systems by using interfaces with the new KNX security mechanisms.

KNX at Euroskills 2014

KNX is Basic Technology at International Competitions

The popularity of conventional installation methods not using bus technology is set to decline in the near future. For this reason, it is very important that apprentices and those at the beginning of their careers are familiarised with bus technology and building control right from the start. KNX, as the only provider of a globally-standardised bus technology, is therefore broud to announce that the European WorldSkills competition will be based on the KNX technology.

The home and building control of the future will require highly-trained professional people. The KNX bus technology presents an excellent opportunity for companies to provide young professionals with good prospects after their apprenticeship is finished, and thus bind them to the company.

Following the general trend in home and building technology, the organisation of World-Skills has decided to base its



competition on KNX. The venue for this world premiere was ExCel, in London, back in 2011. Since then, the KNX technology played an important role in many international competitions, such as Euroskills Competition 2014. The next WorldSkills competition based on KNX will be held in the form of the WorldSkills ASEAN Competition Hanoi, 23. – 28.10.2014.

"The youth of today is open to change: we are obliged to give them the opportunity in the future to get involved in the exciting sector of electrotechnology and KNX. We hope that all the participants enjoy the competition and wish them every success with KNX" said the organisers of EuroSkills 2014 in Lille.

KNX Association, its members as well as training centers and KNX partners have invested a great deal to ensure that the young generation's knowledge on KNX has improved. New KNX Training centers have been set up in many new countries, reaching a total of 300 KNX Training centers in 54 countries!

Already today many contest-



Save the Date – EuroSkills from 2–4 October 2014 in Lille, France.

About EuroSkills

After organising the national finals for the 40th Skills Olympiad in 2009, the Nord-Pas de Calais Regional Council was granted the organisation of EuroSkills in Lille. From 2–4 October 2014, some 500 young people from all over Europe will compete in the biggest European competition on manual, technical and technological skills: EuroSkills, organised for the first time in France!

ants and experts of World-Skills are listed as one of the 40,000 certified KNX Partners.

Contact:

www.euroskills2014.org



Winner of the WorldSkills 2011



Competition area



Country Profile KNX New Zealand

Challenges for the Engineers in the Crountry



KNX New Zealand was formed in 2012 by ABB, Siemens, Ulrich Frerk (now its President) and a handful of other enlightened KNX engineers. Its aim is to promote KNX as an open protocol to the New Zealand building trade. There are a few projects that have been completed with KNX over the last few years in both the commercial and residential sectors in New Zealand, but KNX is still in its infancy in the country.

The advantage of KNX, with so much choice in products, and the solidity of knowing KNX will be present well into the future, should be a message that is simple to understand. The benefits are clear, so now engineers in New Zealand need to be encouraged to work outside of their comfort zone and challenge themselves to look at something new.

Opportunities for KNX in New Zealand

Whilst there has been a market for lighting control in New Zealand for some years, recently, through regulation, and economic good-sense, environmental control has become more in demand. This provides a great opportunity for KNX in the country, as this technology is unique in being able to deliver solutions across one open platform.

Furthermore, because New Zealand and Australia have very close commercial and legislative ties, as KNX begins its ascent in Australia, New Zealand will inevitably follow. In many respects, Australia will be the test bed for KNX in the region, where there



The new Rotorua Police Station incorporates KNX technology.



The National Group takes every opportunity to promote KNX in New Zealand, as exemplified by its President, Ulrich Frerk.

are a few dominant locally-designed systems.

KNX New Zealand expects to see rapid growth in KNX use as local engineers and practitioners are suddenly made aware of the significant advantages of a nonproprietary system. The ease of configuration of a multidisciplined project including, for example, lights, HVAC, energy metering and shading, with the unified backbone of KNX, will open the eyes of many integrators who have been stuck for such a solution. One of the Group's main priorities is to work closely with the national electrical organisation, ECANZ (Electrical Contractors Association of New Zealand). Its training arm, ETCO, will open a KNX training centre and be pushing for the standardisation of KNX in New Zealand.

Membership

KNX New Zealand has 8 members so far, with the growth in membership coming from new KNX Partners as they are trained, and from manufacturers as the potential of New Zealand becomes apparent. The Group is also aiming to sign up more Associate Members such as CEDIA, EMANZ, etc., and organise more cross-association activities and trade shows.

KNX and ECANZ are working together in New Zealand to promote the move towards compatible platforms across the electrical industry



Those who join enjoy a number of benefits, such as promotion on the website, technical support, networking opportunities, lead generation from trade shows, and gatherings of individuals with the same business interests. Partners also have the chance to have their projects nominated for the annual KNX Awards and be recognised worldwide – an opportunity that is unique to KNX and its Partners.

On the website, prospective members can see who is currently involved in terms of manufacturers, suppliers, engineers, etc., and they can also see who to contact for training.

Since KNX is currently only represented well in certain regions of New Zealand, there are opportunities for integrators, engineers and installers to be the first KNX Certified Partner in their respective regions. KNX New Zealand are a friendly bunch, and anyone interested is warmly encouraged to come and join the Group!

Website: www.knxnz.org Contact: info@knxnz.org



Winners of KNX Award 2014

10th Award Ceremony reflects the international character of KNX

International - Europe

Risk Control GmbH / BR-Tech GmbH / Gottwald GmbH (Austria) with "Economy University Vienna"



International - Asia

Total Automation (UAE) with "Concourse A – Dubai International Airport"



International - Africa, America, Australia

AMC German Technology / KNXin (South Africa) with "House Doepler"



Publicity

Vecolux bvba (Belgium) with "Plus Energy House – Passief-live"



Winners and Nominees in front of 1500 guests from 80 countries at the KNX Award in Frankfurt, the 1st of April 2014.



Special

Smart Building Design GmbH (Switzerland) with "Energy self-sufficient Finca los Miticos near Santa Margalida Mallorca"



Energy Efficiency

Emes Electromechanical Ind.&Trd. Co. Ltd. (Turkey) with "GAMA Headquarter"



Young

Electro-mechanical Engineering Craftmanship School (Croatia) with "KNX model – Energy Efficiency"



Links: http://www.knx.org/knx-en/knx-awards/2014/index.php

People's Choice

Smart Building Design GmbH (Switzerland) with "Energy self-sufficient Finca los Miticos near Santa Margalida Mallorca"



http://www.youtube.com/knxAssociation



You'll find the projects of the winners honored with a KNX Award during light+building 2014, illustrated in detail on the following pages.







Employees work in comfort at headquarters of Turkish corporation

KNX reduces energy and water use

Winner KNX Award 2014 Category Energy Efficiency



GAMA is a Turkish corporation that implements industrial and public-sector construction and engineering projects, including power stations, oil refineries, pipelines, bridges, hospitals, hotels and residential complexes, in a range of countries. Like the structures it builds for its clients, GAMA's own new headquarters in Ankara is also a very striking building. The new building complex, which includes a skyscraper and 20,000 m² of office space, was constructed according to "green building" principles. Completed in 2012, it was the first building in its category in Turkey to earn LEED EB GOLD environmental certification. It is fitted with KNX technology, which substantially reduces its consumption of energy and non-potable water. Its KNX installation, the work of system integrator Emes Electromechanical Ind & Trd. Co Ltd, was the winner of the 2014 KNX Energy Efficiency Award.

Air conditioning and heating

Air conditioning systems can be very necessary in the Turkish capital in the summertime. The heating and air conditioning system in the new GAMA headquarters creates a pleasant working environment for employees, without placing an excessive burden on the refrigeration units. KNX fan coil controllers adapt the room temperature according to the current requirements, and can be set to one of two modes: Comfort and Night. In winter the heating is controlled in a similar way to the air conditioning system in summer, to ensure that heating energy is used as efficiently as possible. In meeting and conference rooms, KNX CO,





Night-time lighting at the GAMA headquarters. KNX controls the lights according to user requirements and on the basis of a timer.

and humidity sensors are used to maintain a high air quality. The lighting system in the new headquarters comprises some 3,000 DALI-controlled lights that are automatically switched on and off and dimmed as necessary, via a KNX interface. The maximum lighting level is configured at 85 % for saving energy. Brightness and scene controllers additionally ensure that the lighting level is consistent and always appropriate to the situation. Presence and motion sensors in toilets, common areas and car parks keep the amount of energy expended on lighting to a minimum. At twilight and during the night, an astronomical timer activates a variety of lighting scenes for aesthetic and security reasons.

Optimising consumption

In the new headquarters, KNX is also used for monitoring purposes. Alarm signals from fire and intrusion detection systems can be used to trigger suitable lighting scenes, for example panic lighting. Technical faults are dealt with via a KNX visualisation, or can be forwarded to mobile receivers if required. When the emergency power supply

kicks in, KNX automatically dims those lights necessary for safety and security purposes, and switches off any non-critical systems. To keep technical staff up to date on energy flows, KNX gathers data from energy, water and gas meters for analysis purposes. The KNX system is visualised via the NetX BMS Server 2.0, while the connection to the KNX network is provided by KNX IP routers. CCTV, access control and gate control systems are integrated into the installation via interfaces, so can all be controlled from a central point. The key benefit of the KNX installation at GAMA headquarters is its superb energy efficiency. In the year following the optimisation of the energy applications in the new complex, electricity use fell by 20 %, gas use by 27 %, and water consumption by 31.5 %. According to a survey, employees appreciate the more appropriate lighting, pleasant working environment, and consistently high air quality in the new offices. The technical staff benefit too, thanks to the convenient visualisation system for the new KNX installation.

Benefits of KNX for this project

- Automated system reduces consumption of electricity, gas and water
- Lighting enhances security, comfort and convenience
- Heating and air conditioning systems are automatically controlled for individual rooms
- High air quality thanks to KNX CO₂ and humidity sensors
- Visualisation
- Rapid detection of technical faults
- Systems can be controlled and operated from a central point
- Operation via touch screen and smartphone
- Smart metering for optimised energy flows
- Lights and blackout equipment are linked for audiovisual presentations

Technical highlights

- Several systems working together to optimise energy efficiency
- Demand side management measures are initiated when emergency power supply is activated
- All functions reliably available thanks to rapid fault detection

Companies involved

Client: GAMA Holding www.gama.com.tr

Planning and system integration:

Emes Elektromechanical Ind & Trd. Co Ltd, Mr Orhan İçli, Mr Türker Öztürk, Ankara www.emesltd.com

Project type: Office building

Building services/ system components:

- Lighting
- Heating, ventilation and air conditioning
- Technical monitoring
- Energy management
- Audiovisual equipment
- Visualisation
- Interfaces to other systems

Size of installation: Number of KNX devices: 1,405

Selected KNX components:

- Siemens: KNX/DALI gateways
- Schneider: Bus push buttonsWoertz: Fan coil controllers
- Theben: Presence detectors,
- CO₂ and humidity sensors
- Zennio: Klic DD gateways



Off-grid finca on Majorca uses KNX technology

Enables easy monitoring of energy and water use

Winner KNX Award 2014 Category Special and People's Choice



Who doesn't sometimes dream of escaping to a private hideaway far away from it all? The owners of Finca Los Miticos in Serra Son Fullos on the sun-drenched island of Majorca can do just that. Although the finca is not connected to a public electricity or water supply, thanks to KNX building automation it is just as safe and comfortable as any other modern home. KNX manages not only lighting, solar control functions and energy efficiency in the building, but also the property's own electricity and water supplies.

The company responsible for the KNX installation at Finca Los Miticos - Smart Building Design GmbH from Jonen in Switzerland - was the recipient of not just one but two KNX awards this year: the Special Award, and the brand new People's Choice Award, in which the company received 16.5 % of the total votes. The finca has 450 m² of floor space and stands on a 1.5-hectare plot of land. It has a generously-sized living and dining area, a modern kitchen, four bedrooms, three bathrooms, and a 60 m² swimming pool.

Diverse benefits

When night starts to fall over Serra Son Fullos, numerous LED lamps inside and outside the finca create an inviting mood. The lights are controlled with KNX/DALI components. KNX/RGB controllers are used for the lights in the living room.

The KNX installation not only creates comfort and convenience for users, but is energysaving as well. For example, presence and motion sensors on paths, in the hallway, etc. make sure that the lights in



Finca Los Miticos on Majorca is a superb testimony to the versatility of KNX

those areas are only switched on when necessary. There are push buttons in the hall and bedrooms that allow all lights to be switched off from a central point.

The shutters, which are also controlled by KNX, can be operated in some cases in groups using a bus push button, or centrally via the visualisation.

KNX controls and regulates both the room temperatures in the finca, and the amount of heat generated by the property's own solar heating system and oil burner. The ventilation system is controlled on the basis of data from KNX indoor air quality sensors.

The finca's own electricity supply would not work reliably without the help of KNX-based automatic control. KNX monitors both the photovoltaic system and the current charge level of the backup battery. For statistical purposes, energy-use data are



stored in a database every 15 minutes and, when the backup battery gets too low (i.e. the charge level falls below 52 %), the backup generator is activated and starts topping up the battery. To minimise energy consumption, where necessary the kitchen appliances are switched off to reduce the load on the network.

Notification when water is running low

It is important that the level of the water in the rain and well water cisterns is constantly monitored. This is done by sensors that measure the water levels and send the results to the visualisation. Even the horses that sometimes visit the finca can be sure of a reliable supply of water in their drinking trough: if, on a dry summer's day, it looks like the water in the trough is going to run out, KNX notifies the owner that a delivery of non-potable water is needed. To protect against burglaries, the finca is equipped with KNX presence and motion sensors capable of triggering an alarm. For added security it is also fitted with CCTV and a VoIP video intercom system. An important feature from the point of view of building users is the visualisation of a

Benefits of KNX for this project

- · Monitors the solar panels, backup battery system, cisterns, oil tank and building technology
- · Controls the emergency power supply
- Demand side management
- Controls LED technology
- Controls ventilation and solar control equipment
- Intrusion detection
- Fire detection
- · Visualisation and mobile operation via iPhone or iPad

Technical highlights

- KNX manages the property's own energy and water supplies
- · Warning message is transmitted if water is running low in horses' drinking trough
- Visualisation of electricity use including statistics to enable further optimisation

Companies involved

KNX system integrator: Smart Building Design GmbH, Peter Sperlich,

Jonen, Switzerland, www.smart-building-design.ch

Project type:

Detached house

Building services/ system components:

- Lighting
- Solar control
- Alarm systems
- Technical monitoring Energy management
- Visualisation
- Interfaces

Size of installation:

Number of KNX devices: 120

central server, which is connected to the KNX installation, intercom and IP cameras via an IP network. The data produced are processed and optimised for display in mobile browsers. This enables the user to receive error messages or notifications that critical values have been exceeded, via an iPhone or iPad serving as a mobile control panel. In this way KNX gives the occupants a reliable overview of the state of the building services in the finca.



Get away for weekend and find out what life is like in a cutting-edge smart home

Winner KNX Award 2014 Category **Publicity**

Passive house lets holidaymakers experience energy-efficient KNX automation for themselves

The weather in the beautiful Ardennes region of Belgium ranges from wild blizzards in winter to sweltering sun in the summer. But that need not bother visitors to "Passive Live", a detached house located almost 700 metres above sea level. Built according to the "passive house" standard and automated with KNX technology, it is always wonderfully comfortable: cosy and warm in winter, and shady and cool in summer. Despite its atmospheric lighting and convenient building services, its energy costs are negligible. The house produces more energy than it consumes.

At weekends this prototype house is available to let for anyone looking for inspiration for their own building projects. On weekdays it is used for demonstration and testing purposes by participating companies working in the fields of design consultancy, architecture, planning, installation and system integration. Impressed by the concept and functionality of the project, the jury selected it as the winner of the 2014 KNX Publicity Award.

Informative

Despite KNX's strong track record, house builders still often have reservations about using the technology. A visit to "Passive Live" will soon reassure them of its benefits. Guests at the house are constantly surprised by just how user-friendly KNX is. The building is controlled completely automatically without the occupants necessarily being aware of it. However, if they wish they can be kept permanently updated on their energy use, the amount of solar power the house is producing, the air quality,



Guests at this holiday house in the Belgian Ardennes will find plenty of inspiration here for their own 'smart' building projects.

water consumption, etc., in order to assess their own user behaviour.

Functional

The house is fitted with stateof-the-art thermal insulation materials, plus sustainable technologies such as a heat pump, heat recovery, and rainwater treatment system. KNX manages a large number of applications for enhancing comfort, convenience, safety, security and energy efficiency. For example, the LED lights in the house can be switched on and off and dimmed individually or all together from a central point. Various scenes are selectable, for example "Arriving" (depending on the dawn sensor the "arriving in the evening scene" or "arriving at daytime scene" will be activated), "Check out (activates also the presence simulation)", "Exit", etc. The solar shading element on the main window is also automatically controlled in response to data from a GPS weather station. In passageways, toilets and side rooms, the lights are switched on and off by motion sensors and door contacts, thus saving energy. The heating system is also automated. A high air quality is automatically maintained by the house's ventilation control system, which is linked to presence, CO2, VOC and humidity sensors. And if the rainwater in the tank ever runs out, a KNX control unit completely automatically switches over to mains water.

Intuitive

The touch screens in the entrance hall and living room are astonishingly easy to use, even without any special training. Functions can be easily called up just by touching a button on the screen, and interpreting the symbols is simple. The touch screens also display operating statuses and weather and other data. This house is a perfect example of what's possible with "Internet Of Things". Via a KNX/ IP gateway and a VPN tunnel this house is permanently connected with "Cloudcake" for remote programming and for showing all KNX data in the form of diagrams and dashboards. As well private as public dashboards are available. This allows the owner and system integration company to make correct analysis and small changes (via ETS) on the installation without having to go on site. They can even operate the building's features from their smartphone over the same VPN tunnel via AyControl. Where neces-

Benefits of KNX for this project

- Decentralised system incorporating a wide range of applica-
- · KNX integrates all building services
- · Automated system for maximum energy efficiency
- Noticeably improved comfort for occupants
- · Increased safety and security
- Operating concepts are easy to grasp
- Technical monitoring
- Information on energy use
- · Mobile operation via smartphone

Technical highlights

- · Decentralised design with no server: just actuators and sensors transmitting logic commands and data *System can be operated and data accessed remotely from a mobile device via a secure VPN Tunnel
- Real-time monitoring of energy use via state-of-the-art "Cloudcake" platform
- Use of "Internet Of Things"

Companies involved Client: TT byba

Architect: A33.be

Planner: passive-live.be

Electrical installer and KNX system integrator:

Vecoluxand Red Technics www.redtechnics.be

Project type:

Passive / Holiday / Detached house

Building services/ system components:

- Lighting
- Solar control
- Heating
- Ventilation
- Photovoltaic system
- Rainwater treatment
- Technical monitoring
- Energy management
- Interfaces to other systems

Size of installation:

Number of KNX devices: 38

sary, interfaces are used for connecting certain building services, for example M-Bus for the heat meters, SO pulse measurement for the solar power and water meters, and a $0-10\,\mathrm{V}$ interface for the ventilation system.



An education in energy efficiency

Vocational schools in Zagreb cooperate on EU-funded KNX training project

Winner KNX Award 2014 Category Young Award



If just learning how to use KNX is this much fun, what must it be like to actually work with it?! Since 2013, students at the Electromechanical (Trade) and Engineering School in Zagreb (Croatia), have had the opportunity to attend fascinating basic and advanced courses in building automation. These progressive programmes of study are the fruit of an EU-funded joint project of the Electro-mechanical Engineering Craftmanship School, two other vocational schools, and KNX National Group Croatia, entitled "KNX Model - Energy Efficiency". The project included designing and building special practice panels, compiling manuals, training teaching staff, and fitting out classrooms. Thanks to this project, the vocational schools can now offer trainees and students content on modern building automation systems. As well as improving graduates' career prospects, the new courses also meet a widespread need for properly trained specialists in the area of energy-efficient building automation. This impressive educational project was the deserving winner of the 2014 KNX Young Award.

Filling a gap in the market

Thanks to the project, two vocational schools now boast practice panels of the kind found in all KNX training centres, featuring components for lighting control, solar control, heating control and household appliances, all of which can be operated from a central point. A third school received demonstration panels for use in theory lessons. Because building automation



Students studying for the special KNX module. Training consists of both theoretical and bractical modules.



In the practical lessons, students work with specially-made training panels.



On hand to talk to the public at Energy Week in Zagreb city centre.

is still far from widespread in Croatia, the new training centres are attracting an exceptionally large amount of interest. Between the completion of the project and early 2014

Benefits of KNX for this project

- ASharing knowledge in the area of building automation
- Raising awareness of the issue of energy efficiency

Institution involved

Elektrostrojarska obrtnička škola, Zagreb, www.esos.hr Darko Josip Zrinjan

Technical assistance:

HFC Group www.hfcgrupa.com

Cost:

approx. 170,000 euros

the end of 2013, more than 2,000 trainees from Zagreb's technical vocational schools attended basic KNX training (basic KNX module) in the city. A further 100 students attended advanced training in the form of the "special KNX module". But before any students could enrol on the basic course, 35 teaching staff first needed to be trained up. Six trainers are now also qualified to examine students for the KNX certificate.

Spreading the word

In January 2013, 14 trainers and six students took their enthusiasm for cutting-edge KNX technology a step further by going on a field trip together to the Integrated Systems Europe (ISE) exhibition in Amsterdam. Here they acquired a wealth of new information about their profession. Teachers and students also spread the word about KNX to the public in Zagreb during the city's "Energy Week": they manned a stand dedicated to the project in the city centre, and explained to interested passers-by what contribution qualified specialists can make to the field of building automation.



Residential home in Cape Town

KNX enhances comfort and promotes green living in a stunning location on Table Mountain

Winner KNX Award 2014 Category International Africa, America, Australia



This new home, perched on the slopes of Table Mountain overlooking Cape Town in South Africa, not only enjoys superb views across "Table Bay" and the city centre, but is also a visual treat in its own right. The architecture is contemporary, distinctive and transparent. The house is made up of two building sections with a total of four floors, topped with an asymmetrical roof providing protection against the blazing sun. Built using sustainable construction methods and intelligent insulation, insulated windows, solar heating, photovoltaics, underfloor heating, a heat pump system, radiant cooling, use of rain/well water and subsequent recycling, it can justly be called a "green building". The building services in this highly sophisticated home are controlled by KNX. The project, designed and executed by a partnership between the system integrator Jesús Arias from Ávila, Spain, and AMC German Technology from Cape Town, South Africa, was the recipient of this year's "International - Africa, America and Australia" KNX award.

The house's lighting, blinds and HVAC, alarm, technical monitoring and audiovisual systems are controlled by a total of 185 KNX devices. The lighting system was designed with a firm focus on convenience and efficiency: in the living area, scenes can be called up at the push of a button to create lighting moods tailored to a given situation. The lighting control system includes DALI lights connected via a KNX gateway, LED technology, low voltage lights, and even ornamental fibre optic luminaires integrated into the main deck of the house. The window surfaces, most of which extend all



The stylish residential home on the slopes of Table Mountain overlooking Cape Town. Its KNX installation was the recipient of this year's Africa, America and Australia award.

the way from the floor to the ceiling, are protected by a total of 96 shutters that users can control individually, in groups or for a whole facade. For optimal glare protection, the curtains can also be precisely positioned manually. And the shutters are also opened and closed automatically by a solar tracking system controlled by a weather station. The building's heating and air conditioning systems are likewise in line with the latest environmental standards. KNX activates the valves and circulation pump in such a way as to meet occupants' heating and air conditioning needs as energy-efficiently as possible. In addition to room temperature control, the system also changes the operating mode according to a weekly timer programme. The timer can be manually overridden at any time.

Energy management

KNX smart meters constantly measure and document the house's mains electricity use, solar power production, battery charge level, and water consumption, including the level of the well water. That way, the occupants always know how much power and water they are using. The house employs an energy management system to keep

it reliably supplied with energy and water. In case of a power failure, the house draws energy from its solar backup batteries. If the charge level of these batteries falls below 50 %, the users are notified of this fact via the system visualisation. The demand side management system can then be used to switch off any power consumers that are not strictly necessary. A special function of KNX in this property is the protection it provides against mould. It does this with the help of humidity sensors integrated in the building's automatic ventilation system. The sensors constantly measure the dew point and are able to shut down the radiant cooling system to prevent condensation or moisture formation. To give users peace of mind that the recycled water they are using is always of a high quality, a KNX pH/ORP sensor measures the water quality and displays it on the visualisation.

Remote access

The central operating unit of the KNX installation is a Gira Control touch screen that blends stylishly into its surroundings. The visualisation itself is based on the Gira HomeServer. Occupants can also check and control functions - including the Revox

Benefits of KNX for this project

- · KNX integrates all building services
- Flexible: can be adapted to accommodate alternative uses
- Energy management
- · Controls HVAC system, promotes efficiency & convenience
- · Lighting management
- Automated solar shading system
- Central visualisation
- Household appliances also part of the KNX installation

Technical highlights

- KNX monitors the mains power and the house's own solar power supply; option of reducing the load on the network during battery operation
- KNX measures energy consumption and production, battery charge level, and level of water in well
- Installation can be monitored and controlled on the move from an iPad, and remotely via

Companies involved

Architects:

JBA, Cape Town www.jba-achitects.com

Planner:

DDC, Mike Dumaresq www.ddcconstrction.co.za

KNX system integrator:

KNXin, Jesus Arias Garcia, www.knxin.com - in collaboration with AMC German Technology, www.amcgerman.co.za

Project type: Detached house

Building services/ system components:

- Lighting
- Solar shading
- HVAC
- Technical monitoring
- Energy management
- Demand side management
- Photovoltaic system
- Water supply
- Audiovisual equipment
- Interfaces

Size of installation:

Number of KNX devices: 185

Multiroom System and the IP camera installed on the roof from an iPad. Thanks to a VPN server and Gira QuadClient, the KNX installation can additionally be accessed remotely.



A super terminal for "super jumbos"

Already tried-and-tested at other airports, KNX technology is now in use at Dubai International Airport as well

Winner KNX Award 2014 Category International Asia



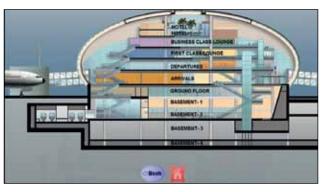
In Dubai in the United Arab Emirates, extreme buildings are the norm. The new concourse at Dubai International Airport is no exception, and looks set to break some records. "Concourse A" features 24 gates, plus supermarkets, offices, lounges, restaurants and luxury hotels, and is the first airport in the world to offer "multi-level boarding" for the Airbus A380 - the aircraft known as the "super jumbo". Multi-level boarding means that first and business class passengers can reach their seats directly from their respective lounges.

KNX technology is already used in numerous airports around the world, so it was the obvious choice for the internationally-active company that planned this KNX installation. Thanks to its demandbased control system, the lighting system alone - which consists of 140,000 lighting points illuminating a total area of $528,000 \text{ m}^2$ - reduces the concourse's energy consumption by between 30 and 40 % compared to a conventional installation. This large project, made up of more than 7,000 KNX devices, won this year's "International - Asia" award.

Energy-efficient

The KNX system controls and regulates the lighting on the basis of parameters such as motion, brightness, timer settings, manual push buttons, and logic operations. A particular highlight of the lighting control system is the way in which it is automatically controlled by the flight schedules, meaning that the lighting in the departure lounges and at the gates is only switched on full when it is really needed.

In the concourse's hotels and spa areas, KNX creates



From the visualisation homepage it is easy to select individual levels and areas for monitoring and operation purposes.

pleasant lighting moods by offering scenes appropriate to a variety of situations. In the meeting rooms in the office areas of the concourse, special scenes can be called up using an audiovisual touch panel, in order to operate the lights and blinds simultaneously during talks. The blinds are operated either automatically, e.g. depending on whether there are people present and how bright it is, or manually. In this way they can be positioned optimally to prevent glare while ensuring that maximum daylight enters the building.

Technology controlled according to flight schedules

The KNX installation in the concourse is monitored and controlled via a visualisation. This is designed to allow simple navigation from the homepage to individual levels and on to specific areas, to enable technical staff to check the installation and intervene where necessary. The visualisation also includes special pages for lighting control, flight schedules, and energy management. The system can be accessed from a number of different locations, via PC's or touch panels. Consumption

data from actuators fitted with ammeters are fed to the visualisation system, which displays the data in the form of statistics and charts that can be used to assess the energyefficiency of the installation. Via interfaces the server is integrated with the audiovisual system, SCADA system, flight schedules, building management system, fire detection system, remote monitoring system, etc.

Luxurious lighting effects

The system integrator, "Total Automation" from Dubai, cites a "high degree of reliability" as its reason for choosing this decentralised system, explaining that dependability is "an absolute must in airports". According to "Total Automation", the particular benefits of KNX for this project lay in the increased energy efficiency, practical, safe lighting, luxurious lighting effects, and the convenience of being able to control lights and blinds via the audiovisual equipment. The company praised especially the system's flexibility and its "seamless integration" of different sub-systems with one another, which enabled it to satisfy "extremely complex requirements".

Benefits of KNX for this project

- · Meets the tough demands of airports for a high degree of reliability
- Energy-efficient control
- · Control concept can be used to create luxurious lighting effects in hotels and lounges
- · Permits integration of other
- · Can be monitored from a central point via visualisation
- Redundant control system
- Documentation of energy data
- · Flexible: easily modified and optimised

Technical highlights

- User-friendly visualisation
- KNX control system is linked to the flight schedule to allow lights to be turned on and off as actually needed
- Scenes for lighting and blind functions can be operated via audiovisual controls
- · Energy consumption is monitored with the help of switching actuators fitted with am-

Companies involved

Client: Dubai Civil Aviation

Architect and electrical consultant: Dar Al Handasah, Dubai

KNX system integrator:

Total Automation, Dubai www.tacdubai.com

Project type:

Airport

Hotels and catering

Building services/ system components:

- Lighting
- Solar control
- Energy management
- Audiovisual equipment
- Visualisation
- Interfaces

Size of installation:

Number of KNX devices: 7,390

Selected KNX components: Schneider: KNX/DALI gate-ways, KNX multi-sensors, presence detectors, sensors, actua-

Altenburger: Dimming actuators Arcus: Touch pad Intesis: KNX gateways



Striking new campus for business university in Vienna

Vienna University of Economics and Business uses KNX to underpin its eco-friendly building concept

Winner KNX Award 2014 Category International Europe



At the new campus of Vienna University of Economics and Business, a range of unusual architectural styles bring together functional cuboids, futuristic trapezia, curved lines and contrasting surfaces to create a new, exciting atmosphere. Designed by six different star architects, together the campus buildings reflect what modern academia is all about: internationality, innovation, and diversity. Although they are so different, the buildings were all constructed according to the same "green building" concept, and KNX plays a key role in this.

Light and solar control

On a campus spanning an area of ten hectares with 25,000 students, 90 lecture theatres and seminar rooms, almost 4,000 rooms in total, and a whole series of catering facilities, a supermarket, a sports centre, transport routes, washrooms, etc., energyefficient lighting alone can save a huge amount of energy. In the offices, the lights are controlled according to whether there are people in the room, and how bright it is outside. The corridors and the staircases are fitted with motion sensors to ensure efficient electricity use.

Event-based lighting scenes can be created for use during events. KNX motion sensors and timers help to ensure that lighting is used efficiently outside as well.

On glass facades on the campus, the solar control equipment also needs to have an energy-saving effect. Here KNX controls the shading equipment depending on the amount of sunlight incident on the facade. On winter's nights, the venetian and pleated blinds are closed to



Different architectural styles on the outside, but just one KNX-based concept on the inside – the new campus of Vienna University of Economics and Business.

provide additional insulation in order to cut heating costs. In summer, on the other hand, the blinds are opened in the evenings to take advantage of the cool evening air outside the window. KNX also automates the drive mechanisms for roof lights on the campus.

Safety, security and technical monitoring

KNX is also ideal for performing technical monitoring functions. It detects messages about power failures, faults, operating statuses and overvoltages, and alerts from the central emergency lighting control unit, forwards them to the visualisation, and archives them for monitoring purposes.

To facilitate safety and security management, interfaces provide connections to e.g. the fire detection system and the central alarm management control unit. This enables alarm functions to be set up for the lighting and solar control systems, for example all blinds can be programmed to open if there is a fire.

KNX can be used to programme safety lighting to switch off again following a power failure. To operate the KNX installation while on the move, system integrators and facilities engineers have the option of logging in to the

system over the university's Wi-Fi network.

Carefully-coordinated system topology

Gira FacilityServer was used for the visualisation of the installation, in which it is presented in the form of floor plans. Depending on their user authorisations, technicians and porters may have access to all functions, or only certain areas. The system can be operated from any computer workstation with an internet browser, and central functions can even be controlled from an iPad.

The installation consists of an impressive 13,500 bus devices overall. The KNX system for the entire new campus was installed by three electrical installation companies. This was only possible thanks to seamless cooperation between the system integrators, who successfully commissioned the KNX installation after just six months.

The topology of the KNX installation at the new university campus was a particular masterstroke. Because the project was so large, it was broken down into eight subprojects based on area and line couplers. The eight subprojects are connected with one another over the university's local area network.

Benefits of KNX for this project

- Large installation
- Energy-efficient control systems
- Systems can be controlled and operated from a central point
- Visualisation
- Mobile operation via iPad
- Remote maintenance
- Event-based lighting scenes

Technical highlights

- Large installation divided up into eight sub-projects
- Individual Group Address areas for each project for visualisation purposes
- Safety and security management

Companies involved

Client: Vienna University of Economics and Business

Architects:

- BUSarchitektur, Vienna
- Zaha Hadid Architecture, Hamburg
- NO.MAD, Madrid
- Estudio Carme Pinos, Barcelona;
- CRAB Studio, London
- Hitoshi Abe, Sendai

Planner: Vasko & Partner Ingenieure GmbH, Vienna

KNX system integrators:

- Risk Control GmbH,
 Zwentendorf, Austria,
 www.risk-control.de
- Gottwald Gmbh, Melk,
- Austria, www.gottwald.at BR-Tech GmbH,
- BR-Tech GmbH,
 Waidhofen/Ybbs, Austria,
 www.br-tech.at

Building services/

system components:

Lighting
 Solar control
 Alarm management
 Monitoring
 Audiovisual equipment
 Visualisation
 Interfaces

Size of installation: Number of KNX devices:

Selected KNX components:

- Visualisation: Gira FacilityServer
- Control panels: Jung LS-design sensors
- DIN rail-mounted devices: Jung actuators, sensors, binary inputs, etc.
- Motion sensors:
- Jung presence detectors
- Central safety/security control unit: Schlaps & Partner
- Audiovisual equipment: Crestron Gateway

KNX RF: Energy Harvesting in system mode

Energy Harvesting can be described as "operation without any auxiliary energy". Instead of generating auxiliary energy through an integrated energy source or adding it via an external energy supply, energy that is available in the surrounding environment or that is acting on the system is converted. Therefore an Energy Harvester generally speaking is an energy converter.

The commercial use of this idea isn't new. Already more than 80 years ago light meters requiring no auxiliary energy were produced. A selenium cell created electric energy proportional to the irradiated light quantity, which displayed the luminance level on a dial instrument.

The modern approach is the KNX RF energy harvesting wireless switch module.

Figure I shows a pre-production module which is currently being developed for serial production in cooperation with manufacturers of KNX light switches. It is based on the established 55 mm pitch with further adjustments e.g. for the Swiss standard. The KNX RF



Figure 1 – The energy harvesting wireless switch module for KNX RF

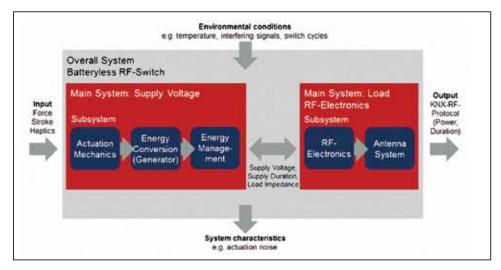


Figure 2 – Structure of the KNX RF energy harvesting wireless switch module

wireless switch module based on an energy harvester transforms the mechanical input energy of the actuation into electrical energy, which then transmits for example switching information to a wireless receiver via RF electronics. The advantages of the system are that the switch module can be placed anywhere without the need for any wires. Over its whole life cycle it will fulfill its function completely maintenance free and without any need to replace a battery.

System structure

Figure 2 shows the structure of the system:

- Input variables: Actuating force and actuating travel
- Output variables: RF signal with respective transmission power and transmission duration
- Environmental conditions: Temperature range, interference signals, cycles of operation, etc.
- Secondary qualities of the system: e.g. operation noise

The wireless switch module can be divided into two main systems with five subsystems:

- Supply voltage system consisting of the following subsystems:
 - Actuation mechanics
- Energy conversion (mechanical/electric)
- Energy management
- Consumer load consisting of the following subsystems:
 - RF electronics
 - Antenna system

Operation

Through suitable deflections the operating mechanism is transferring the actuation of the switch into the required force, path and direction of the energy converter. The inductive energy converter consists of an electromagnetic generator which changes the

magnetic flux in the coils by a sudden movement of a magnet thus creating an electric impulse through the actuation of the wireless switch module. The electrical energy is then temporarily stored by the energy management unit and then converted into a predefined supply voltage by a voltage converter unit. This supply voltage powers the KNX RF electronics of the consumer device which sends the KNX radio protocol with all user data via the antenna system to a KNX receiver.

The challenge is to design all subsystems in a way that the introduced mechanical energy is sufficient to send the KNX radio protocol with the required performance.

Energetic minimum requirements of a KNX RF protocol:

Requirement	Minumum requirement	Target performance
Radiated output power	-3 dBm	0 – 3 dBm
Transmission time radio protocol	17,3 ms	ca. 20 ms
Amount of user data	6 Bit	6 Bit + 2 Byte
Temperature range	Up to 45°C	Up to 55°C
Switching cycles	≥ 150.000	≥ 200.000

Technical data	
Actuation force	< 8 N
Switching travel	< 4 mm
Switching noise	Discreet
Installation space	55 mm pitch wall-mounting
Design parts (rocker and frame)	Customer specific adaption by OEM
KNX RF-Standard	2.0 Ready S-Mode
Radio bands	868 MHz EU, optional 915 MHz USA
Threshold value (short/long actuation)	Adjustable 200 – 400 ms

To meet these requirements highly efficient basic modules are necessary. The energy generator, the short-term energy storage unit, the energy management unit, the RF module, as well as the antenna system all need to be designed to achieve the maximum degree

of efficiency and be perfectly matched to one another.

Switching comfort like with Twisted Pair

The KNX RF energy harvesting wireless switch module offers several switching functions which can be configured depending on the operating concept. Hence the following functions are possible with KNX energy harvesting: Keying, switching, dimming, roller shutter, blinds and scenes.

Always bidirectional – via radio to the ETS without gateway

In addition to the basic requirements, the KNX radio protocol also needs to meet the requirements of S-mode to be able to be fully professionally used as a KNX component. Through the complete integration of KNX RF into the ETS5, the energy harvesting wireless switch module can be fully configured via the ETS5 and be embedded into the

KNX network with bidirectional RF communication like every other KNX component. There is no requirement for an additional gateway. Radio communication is possible via every KNX RF receiver (RF switching actuator, line couplers, media coupler, or push button sensors with integrated KNX RF receiver) within the radio reach.

Serial production by manufacturers of light switches will start in the second half of 2015.
For further information please

visit: www.cherryswitches.com/ener-

www.cherryswitches.com/energy-harvesting or send an Email to: info@cherryswitches.com.



ETS5: one tool for ALL media

Embedded | Smart | Wireless



Shanghai, Sydney, Buenos Aires, Los Angeles, London, Berlin - all over the world, building control engineers use the product and manufacturer-independent **Engineering Tool Software** to increase the energy efficiency of buildings. This standardised tool is currently available in 17 languages and can be used for the installation of more than 7,000 KNX certified devices from 366 different manufacturers. In order to satisfy the latest technical, economic and global demands, the KNX Association has now completely redesigned its **Engineering Tool Software** (ETS) and added numerous functions. For example, for the first time in version 5, ETS allows quick and simple integration of wireless KNX components. Moreover, the database management was considerably simplified, and its new dongle allows greater flexibility in handling projects.

The new ETS5 is the KNX Association's answer to the demand for greater userfriendliness, more powerful technology, and bigger cost savings. The popularity of applications based on bus technology has increased many times over. KNX installations are now more extensive, and functions in commercial as well as intelligent residential buildings have become more diverse. KNX solutions should be able to handle major current challenges such as the need to make buildings as energyefficient as possible. Electricians and system integrators who design, parameterise and oversee KNX systems need to display more and more technical and money-saving expertise. The new version of the tool



Its top improvements include:

- Integration of KNX radio frequency (KNX RF) components from different manufacturers
- USB dongle for easier handling with 4 GB of storage for user data
- No database, hence faster data imports and exports
- Improved user interface with more room for key functions
- For increased performance, usage as a 64-bit application
- Parallel usage of ETS5 and the older versions ETS4 and ETS3 on the same computer

RF). Wireless solutions were





offers numerous features for the convenient, cost-effective integration of KNX systems.

Wireless components now easier to integrate

With the new ETS5 it is now possible for the first time to work with ALL media without exception: not just wired media (TP, Powerline and Ethernet/ IP) as before, but now also wireless radio frequency (KNX

always possible with KNX, but previously they could only be integrated into the KNX system using manufacturer-specific tools. With ETS5, KNX RF devices from different manufacturers can now communicate with the programming tool in a uniform way. Hence, it is therefore possible to use ETS to parameterise and set up KNX RF devices in exactly the same way as KNX TP, PL and IP devices. This is among other things thanks to the newly specified TP/RF Media Coupler. Thus, ETS5 allows KNX professionals to automate existing buildings with even more competence than before.



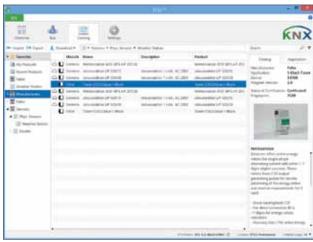
ETS5 test workshop

Faster importing and exporting

Numerous improvements have also been made to the IT system environment, simplifying installation and making ETS work faster. One key change in this respect in ETS5 is the absence of a database. In the new version of the tool, the



ETS5 start screen, improved overview with new designed and optimized view



ETS5 product data file, additional manufacturer information within Online Catalog make product selection easier

database that was previously needed for import and export is no longer necessary. ETS5 accesses folders containing imported products and projects directly, streamlining workflows and so improving project handling performance. This speeds up the import and export of the data.

Storing the latest project data in a dongle

ETS5 uses a licence dongle that enables it to be used on different computers. This allows projects to be worked on in a very flexible way. A new kind of USB dongle is being launched at the same time as ETS5 that is smaller than the previous dongles, no longer requires a driver and contains an extra 4 GB of storage for user data. This will simplify handling and speed up workflows. One particularly convenient feature is that the user can store his current project directly on the dongle. These project data are then directly available the next time the dongle is used, even if that is on another computer. Because dongle licences are generally more popular than computer-specific (host ID-specific) licences, ETS5 no longer supports the computer-specific variety.

More room for images and documents

Users will appreciate the positive changes to the new user interface. The frames are narrower and the work areas larger, giving it a contemporary look similar to that of Windows 8. Its clarity will make work more intuitive for the user and facilitate the rapid parameterisation of KNX projects. For example, the quick-access, database and projects tab have been removed from the start menu, as this has been judged to be of lesser importance. The selection panels where the user can call up projects or read KNX news and other information, on the other hand, are now more prominent, taking up more space than before. Also the building view has been tidied up. Existing Group Addresses can now be linked directly within a single window. Also more space has been given to the Online Catalog. The larger format allows not just product information, but also complementary images, operating instructions and documents to be displayed more clearly in the new ETS.

64-bit technology makes big projects small

Like ETS4, ETS5 naturally supports the latest Microsoft operating systems such as Windows 7 and 8, and even the latest Server 2012 versions. What is completely new in ETS5 is that it no longer runs only in 32-bit mode, but it can also function as a 64-bit application.

This means it offers full 64-bit power using all available system resources, plus increased speed and more efficient project handling. This is particularly beneficial in case of large projects, provided that the installed system components are also 64-bit-enabled.

Multiple installations no problem

Realistically, someone licensing ETS5 is not immediately going to convert all of his projects to the new version. So when working on projects it may be convenient to have the old ETS installed as well. ETS5 can be installed on a computer together with the previous versions, ETS4 and/or ETS3. All three versions function independently of one another, which is particularly useful for electricians who want to continue working on old projects with their old ETS.

And all kinds of other benefits

Obviously, electricians and system integrators are interested in being able to work on ETS projects in a quick, simple and reliable way. ETS5 has been improved in numerous ways to help them achieve this.

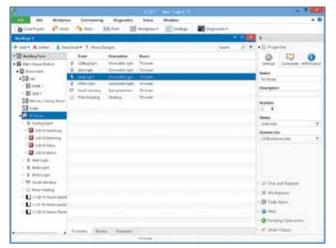
Here are just a few examples:

 Because ETS5 does not use a database anymore, KNX products that have been

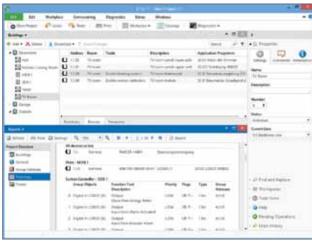








ETS5 building view, buildings, devices and Group Addresses, all at a look for optimized workflows



ETS5 workplace, embedded functions (here reports) improves the overview an make work easier to do

imported into the software once immediately become available for use in each new project. With the old ETS2/3/4, products needed to be imported again and again for each database. This is no longer necessary, which saves considerable amounts of time.

- ETS5 supports long frame format, which substantially reduces the time to download the corresponding components.
- Thanks to the use of dynamic folders, users can configure views according to their individual requirements.

With this very commonlyused function, from ETS5 onwards it will be possible to filter on the basis of Group Objects. The parameter change function and the overview of devices that have been selected several times – both already supported in ETS4 – have been improved once again: identical parameters now also display their true value. This gives users a quicker overview of changes simultaneously performed on a large number of devices.

Complete interoperability

ETS5 comes in three different versions:

- ETS5 Demo, the free version for mini-projects
- ETS5 Lite, the version for small and medium-sized projects
- ETS5 Professional, for projects of all sizes

Existing ETS Apps can still be used with ETS5. Naturally it is possible to import projects created in ETS4, ETS3 and ETS2 into ETS5.

Conclusion

The new ETS5 considerably lowers the entry barriers into the world of KNX. It is more than just a new version of the world's most successful bus system for buildings; it is also a state-of-the-art tool available in the system integrator's own language that he can use to enhance his success in selling home and building control solutions.

Highlights at a glance:

- Designed to meet the new, tougher requirements placed on building automation solutions
- Integration of KNX radio frequency (KNX RF) components from a wide range of different manufacturers
- USB dongle for easier handling with 4 GB of storage for user data
- No database, hence faster data imports and exports
- Improved user interface with more room for key functions
- Even more performance when used as a 64-bit application
- ETS5 and the older versions ETS4 and ETS3 can be installed together on the same computer



First Impressions of ETS5 at the KNX Training Conference in Lisbon



Delegates from KNX training centres worldwide attended an introduction to ETS5 at the ATEC training academy in Lisbon.

The KNX Training Conference, at which ETS5 was introduced to representatives from KNX training centres around the world, was organised by KNX Association and held on 8-9 May at the ATEC training academy in Lisbon. More than 50 delegates came to learn and share their thoughts about the new ETS5.

ETS5 is not due for release until October 2014, but at the conference delegates were given an introduction to the new software, and

the chance to test it. So far, ETS5 has been tested on most Windows versions and virtual boxes. The new layout seems clearer and more intuitive, with all functions accessible from the top menu bar. Major improvements have been made to the settings, especially in terms of the organisation of shortcuts and online libraries. The Communication feature has been completely removed from the settings and is now a permanent option in the bottom menu.

The most important improvements are, however, possibly

those relating to how projects are saved and how SQL libraries are used. One key change in this respect is the absence of a database. This speeds up the import and export of data, and means there will be no more compatibility issues between the backup and the new version of SQL, as now only the project needs to be saved, which contains all essential information. This will not only reduce the time it takes to save work, but will also minimise the number of report pages that users need to print for their customer manual.

Conclusion

ETS5 is clearer and more intuitive, and will enable projects to be programmed more quickly. Numerous improvements have been made to the IT system environment, simplifying installation and making ETS work faster. ETS5 is a major advancement, and a big step forward in terms of making project data future-proof, like KNX bus installations and components already are. The new version promises to be to the building automation world what Chanel No. 5 is to the world of glamour!



Delegates get hands-on with the beta version of ETS5.



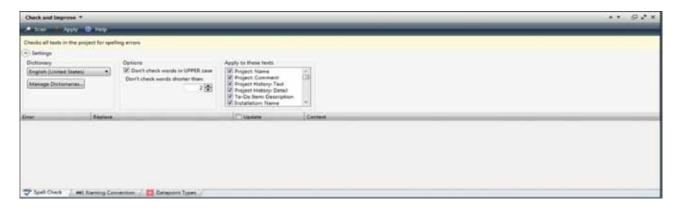
New ETS Apps

You can find all ETS Apps at www.knx.org \rightarrow Software \rightarrow ETS Apps \rightarrow Features



IT GmbH

ETS App Check and Improve



"Check and Improve" helps you ensure and improve the formal quality of your ETS projects.

The spell checking can verify all input made by the user, the compliance to a name schema for group addresses can be checked and missing data point types of group objects can be added via an external database if necessary. Without much effort, the project get more clearly arranged, better maintainable and will be the perfect base for documentation and further use, e.g. for a visualization project. Our visualization software Elvis creates with Elvis Express a runtime project without any additional work directly out of the project file.

Contact: www.it-gmbh.de/check-and-improve.html



IT GmbH

Project Data Exchange

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Open ETS | exchange of preconfigured KNX solutions A few weeks ago the new version of the ETS App Project Data Exchange is released in the KNX online shop. The App is now also able to import preconfigured device combinations into the ETS

and supports the data flow between planner and system integrator in both ways – import and export. The new version follows the open ETS idea consequently. The app uses the open XML format to enable project data exchange between an addi-

tional software tool (e. g. a planning tool like DDS-CAD/Data Design System) and the ETS or the import and export from project data. Preconfigured device solutions can be handed over from the manufacturer to the customer in an elegant way. And if a project

is available in the corresponding XML format, the project data can be read into the ETS comfortably. The needed data structure to use the app is published in the manual of the new version of the app.

Contact: www.it-gmbh.de/pde

New Members







Acrel Co.,Ltd is one of the most famous Chinese manufacturers of electric measurement and control equipment. They specialist in R&D, production and sale of intelligent power distribution devices/ systems and have developed many product series in this field. Because of the increasing worldwide energy consumption, Acrel is aiming at products that can reduce energy consumption.

Acrel made a detailed market analysis and joined the KNX Road Show in China last year. Acrel chose KNX because of its good performance in energy savings. At present Acrel is investigating the KNX protocol and preparing for there first development of first KNX devices.

Contact: www.acrel.cn





AMC Datensysteme GmbH was founded in 1999 and specialises in the development of human-machine interface (HMI) software systems for monitoring, controlling and visualisation of technical processes in industrial and building automation. This includes the connection between the software underlying automation systems for the efficient acquisition, processing and visualisation of process data in scalable, secure and highly available distributed systems, as well as the

development of software for a user-friendly and ergonomic control of machines and devices. This includes in particular the development of building management systems and building control systems based on KNX. The company conducts research and development in these areas and is therefore able to create innovative, technically advanced and high-engineered solutions.

Contact: www.amc-ds.de





Architecture Numérique is a study and integration office based in Paris, France. It develops hard- and software products that answer the needs of the intelligent and communicating building market. As a study office Architecture Numérique defines and recommends the most suitable KNX solutions in home and commercial

markets. As a system integrator it supplies the entire hardware and software stack for KNX and IP markets. As a KNX Member, the company will focus on energy management systems, data concentration and local & remote control software.

Contact: www.architecturenumerique.com

TAIWAN
Aurex Industries, Inc.



Founded in 1987, Aurex Industries Inc. located in Taipei, Taiwan, has been dedicated to furnishing the best quality PIR presence/ motion detectors to their clients worldwide for the past two decades. Thanks to their senior sales and well-experienced R&D experts, Aurex has successfully completed numerous projects fulfilling clients' needs in every aspect. Aurex has received a lot of positive feedback and attained a splendid

market reputation till today. The company will continue to focus on the development of energy-efficient and green products and are proud of their leading position. Furthermore, it strives to make living convenient and enjoyable by combining their design with the KNX home and building control system.

Contact: www.aurex.com.tw

Belcom Cables Ltd.



Belcom Cables are suppliers of high quality top performance cables. Over the last 20 years they have developed expertise in many major industry sectors, in some they have led the way in cable development. Their range of industrial electronic cables from Field bus networks to industrial electronics is second to none. This philosophy in itself ensures the reliability and future proofing of the industrial network and qualifies that each individual supplier's component works smoothly within the network. Belcom is

pleased to be associated with a number of organisations, not least KNX Association developing the FieldLink range of Field Bus cables to meet the latest performance requirements of each network for the widest range of operating environments to suit any industry. Belcom stock the standard KNX cable in PVC or LSZH in bulk lengths ready to cut to your requirements on a next day basis.

Contact: www.belcom.co.uk





Callom GmbH and the product line Residium stand for more than 10 years of experience in the areas of security consulting, encryption and network security. Their hardware and software specialists developed a novelty: Home Security Yard. Residium is the solution for design-oriented security technology. The product line consists of several components. The singular, closed system allows only certified and safe applications. Sensitive information, such as

the authentication data or who enters the building is stored on the Residium server. It encodes the entire interaction between the components. In addition to HD video transmission, doors are opened comfortably with the Residium Control Panels and the feeding of multiple cameras with Residium can be integrated into an existing KNX/EIB infrastructure thanks to the KNX interface.

Contact: www.callom.com



dakanimo GmbH



Founded in 2014, dakanimo GmbH develops high-end design objects in the KNX technology field for smart homes. The portfolio is addressing people, who demand the highest standards for their environment's design without giving up any functionality. Developed and produced in Germany, the products stand for the belief that a high standard of aesthetics and performance

guarantees maximum quality. They integrate an intuitive usability into the homes of their customers. dakanimo brings joy to luxury enthusiasts, individualists, trendsetters and design enthusiasts, because the products of dakanimo GmbH will make any customers' life more enjoyable, safer and easier.

Contact: www.dakanimo.com

SPAIN
Dinitel 2000 S.A.



Dinitel 2000, S.A., was created in 1993 by a joint initiative of the Tekniker Foundation, a leading industrial R&D centre, and a group of companies active in the construction sector. Its main aim is to provide high quality products with an innovative design as well as to offer full support throughout the whole process of installation and main-

tenance. For this purpose Dinitel has set up an extremely active commercial network designed to provide the necessary technical support to its customers. Nowadays Dinitel is working to design and sell KNX related products.

Contact: www.domotica-vivimat.com



Domofox is a company that has been active in the field of home and building automation with KNX and Crestron for over 10 years and has installed many systems of varying degrees of complexity. Always a step ahead, Domofox is testing new technologies to implement in existing KNX and Crestron systems in order to be able to offer the latest technologies to its customers: KNX systems with Crestron supervision for residential buildings, hotels, shopping malls, hospitals. Always at

the cutting-edge, step by step the company has won over the Italian market by providing its customers excellent management results, easier maintainable installations and energy savings. Domofox has cooperated with companies of other sectors, thereby expanding its knowledge on the most sensitive issues of the last years, such as energy savings and alternative energy sources.

Contact: www.domofox.it

CHINA Etman electric (shanghai) Co.,Ltd.



Established in 1986, Etman is a leading provider of electrical and cabling connectivity products used in intelligent buildings, data communication and telecommunication networks. The company designs, develops, manufactures and sells copper and fiber optic cabling, connectivity, management and systems solutions. Etman directly offers a broad range of products itself as well as through distributors, installers and technical partners. Etman has been pub-

licly listed at the Oslo stock exchange since 2007. Etman is committed to protecting the environment. In the past decades, Etman developed various products in lighting control, thermal control and home appliance control. These innovative products not only realized energy savings, but also brought a delighted experience to customers.

Contact: www.etman.se.com

GERMANY
Franke Aquarotter GmbH



Franke Aquarotter combines innovative water management systems, the latest technologies and top quality fittings of stainless steel and mineral granite for sanitary rooms to provide individual solutions in the commercial sector. The ECC2 function controller and its two expansion modules make the water management system "AQUA 3000 open" even more efficient. The entire drinking water system in the building can now be controlled and monitored by mobile, including GLT connection options.

The aim is the best possible drinking water hygiene at each sampling point in the building. ECC2 in an Ethernet-CAN coupler, the power supply system and a web server are integrated. This simplifies the operation of the entire system in all popular browser types. Through a standard RJ45 interface, the A3000 open system can communicate with the existing building control via the KNX IP medium.

Contact: www.franke.de



Fujian Star-net Evideo Information System Co., Ltd.



Fujian Star-net Evideo Information System Co., Ltd. has been active in research on video communication products and has provided solutions since 1998. The company, which is a subsidiary of Star-net, employs 700 people of which 70% are technicians. As markets it covers the whole China region and Southeast Asia. The company is a leading integrated supplier of video communication systems. Over the years, Star-net Evideo Information System Co., Ltd has followed the operation philosophy of "scientific in-

novation and integrated application". Based on the persistence of independent research and industry application, the company has been devoted to the research and production of audio and video technology, human-computer interaction techniques and chip design technology. Nowadays, the company is ranked as the first in the audio/video industry market.

Contact: www.evideostb.com



Guangzhou SeaWin Electrical Technologies Co., Ltd.



After having gained more than 5 years of experience in system integration for buildings and meeting halls, Seawin started the company called Guangzhou Handnow Electronics & Technologies Co., Ltd. in 2006 for the operation of audio & video equipment and control systems in China. In 2012, it began doing R&D on a lighting control system, resulting in its own Etron-net control bus/devices for a smart lighting system. The company now wants to enter the Building Automation and IBMS (Intelligent Building Management Systems) market. Knowing

KNX is the worldwide standard for home and building control, in 2014, it decided to join the KNX Association to develop KNX products and ETS Apps. To do so, it founded the Guangzhou SeaWin electrical technologies Co., Ltd., which will concentrate on lighting control, shutter control, heating, ventilation, air conditioning, energy management, etc. and share its products with customers all over the world.

Contact: www.seawin5.com





Home2net GmbH was founded in Worth an der Donau, Germany, in 2012. The company develops personalised and generic hardware solutions for the smart building technology sector with a focus on Cloud services for remote access and infrastructure control. With its own Cloud, home2net helps its customers to unleash the unprecedented possibilities of the smart building technology. It offers solutions to control actuators and sensors from a web interface, already demonstrated at various exhibitions, like

embedded World or SPS IPC Drives. A Soft-SPS solution is in the final phase of development. Based on its Web@ctrl device, home2net created a protocol converter that routes serial data through TCP/IP and is needed for a specific customer application. Home2net will continue the development of its Web@ctrl product by adding KNX interface functionality.

Contact: www.home2net.com



IDGS started three years ago as an engineering bureau specialised in domotics (home and building control). It has evolved into a design & build company for smart home installations. On top of that, it also developed a drawing software application (DomoCad). This software automatically

generates an electronically correct installation scheme based on a location map, manufacturer independent. The company intends to develop an interface between their Domocad software and ETS.

Contact: www.idgs.be

Josef Barthelme GmbH & Co. KG



Josef Barthelme GmbH & Co KG is based on a traditional and solid foundation. With its two main product lines, LED Solutions and general lighting, it not only enjoys an excellent reputation but its customers also benefit from many years of professional and comprehensive experience. Thanks to their

innovations, flexibility and technical services Barthelme is the number one supplier and consultant for national and international clients in both markets.

Contact: www.barthelme.de

AUSTRIA
Kremmel & Schneider
GmbH



Sontec has been involved in the field of building technology and KNX since 1999. As an integrator numerous large and small projects with KNX were implemented. The ever increasing demand for specific special solutions has given them the motivation to set-up their own development department – in which they design and implement both hardware and software solutions. With the in-house control and visualisation system

"Visu2" required standard automation functions can be extended in many projects. By joining as a KNX Member and gaining access to appropriate vendor tools and specifications they will now expand their services in the field KNX and thus guarantee their customers expertise to the "last bit".

Contact: www.sontec.at





Founded in 1958, LG Electronics is a globally recognised brand leader providing comprehensive lighting solutions to efficiently, effectively, and environmentally support a wide array of lighting requirements. Through LED lighting, LG Electronics continues to enrich lives by offering products that create a more comfortable, enjoyable, and sustainable atmosphere—in the home, office, store, or facility. As a trusted manufacturer, LG

Electronics is dedicated to the delivery of quality products and the service that goes with being a global leader in innovation. As an integrated solution, LG Electronics provides LED lighting products, including fixture, lamps, and controls targeted at commercial and residential applications.

Contact: www.lg.com





M2I Corporation is a professional developer, manufacturer and global seller of advanced human to machine HMI (Human Machine Interfaces) industrial touch screen controllers. Through over 20 agents in the domestic South Korean market and more than 20 dealers overseas, M2I Corporation develops and supports various solutions in the industrial field. Moreover, M2I Corporation has ODM (Original Design Manufacturer) supply contracts with major global

companies. Because of outstanding quality, it has been awarded with the titles 'MAIN BIZ', 'INNOBIZ', and 'Great Work Place' by the Korean government. Its goal is to be a global leading company by 2020. The simple and safe products of M2I Corporation with differentiated service will contribute to improvement and development of the worldwide industrial agenda.

Contact: www.m2i.co.kr/eng





NexKon, an Italian manufacturing company in terms of design products, capital and ideas, was founded with the following goals: on the one hand providing reliable and 100% Italian components, on the other hand a structure that can shed light on the many requirements characterising the world of KNX today. These requirements include the choice of the components to use, their functionality and the final programming. The combination of twenty years expertise

in the BUS systems management and the presence of high level technical expertise in the Italian territory, allows NexKon to fulfill any requests wanting a single supplier. The knowledge and expertise that only the manufacturer himself can have about his products, guarantees the correct resolution of all issues that KNX users may face.

Contact: www.nexkon.it



nxtControl GmbH, a company from Bad Vöslau in Austria, is developing and marketing software for the automation of buildings, machines and processes. The product portfolio consists of an object-oriented engineering tool (integrating the engineering of control logic, HMI/SCADA, I/O connection, test, simulation and documentation)

and runtime systems for distributed control hardware and for visualisation clients. The product portfolio will be extended by control hardware and other components for building automation that will be KNX-compatible.

Contact: www.nxtcontrol.com





Pulsar Engineering is a company dedicated to development of hard- and software applications with the aim to enhance the level of integration in home and building automation. Pulsar has been devoted to providing innovation in the field of system supervision for over 10 years and is now developing the ThinKnx system, a powerful multi-protocol platform building automation through any

common portable smart device, permitting management of KNX, heating and cooling systems, security, audio/video, and every element of the home/building. ThinKnx is also a powerful logic module and gateway between devices and several automation bus solutions (Modbus, KNX).

Contact: www.pulsareng.it





Since its establishment in 1990, every year of SATEL's activity has been devoted to market $ing\,new\,products\,intended\,for\,the\,protection$ of people and property. Alarm systems, access control systems, fire signaling systems as well as equipment intended for companies dealing with monitoring these systems is part of Satel's core business. The many awards granted for outstanding achievements in the field of manufacturing equipment for property protection emphasize the appreciation for quality and functionality of SATEL products. The use of manufacturing technologies and meticulous control of all manufactured equipment, as well as compliance with the ISO 9001:2000 prove the reliability of Satel's solutions. Its mission is to provide individual and institutional clients a feeling of safety and increased standards of people and property protection.

Contact: www.satel.pl





SCS Cable is a professional wire and cable sourcing company located in Shanghai, China. The company has been in business for 10 years now since its foundation in 2003. SCS has aligned its fine company with the most reliable manufactures in the industry. SCS now plans to supply its wires and cables labelled with the KNX trademark, mainly for those cables that are used in building construction.

Contact: www.scscable.com

POLAND UNI-TEC Dorian Klimczyk



Uni-Tec was founded in 2004 in Myslowice. The main activity of the company is the design, testing, manufacturing and installation of specialized electronic systems/circuits, thereby taking into account all individual customer needs and suggestions. The services range from simple electronic circuits to highly advanced system solutions. The company mainly offers controllers for central heating burners, wireless drivers for roller blinds, GPS tracking devices for car fleet, controllers of petrol stations monitoring fuel intake. UNI-TEC is preparing solutions for building automation control, temperature control, ventilation, lighting and increasing safety. KNX application is seen as a perfect solution that will allow the company to expand its offer in the industry.

Contact: www.uni-tec.pl





The company Wolf GmbH is a competence brand for energy saving systems to the leading and most innovative providers of heating, air-conditioning, ventilation and solar technology systems. The heating devices communicate in Wolf-Regelungssystem (WRS) via internal eBus and will in the future also be able to be integrated in the world of KNX.

Contact: www.wolf-heiztechnik.de





Zidatech is a family business in Hägendorf with over 25 years of experience in the communication and building automation. They are a leading manufacturer of modern house wiring and intelligent KNX systems in residential construction. Zidatech is a manufacturer of KNX sensors and maintain products of the manufacturers

IPAS and Jung in Switzerland. At the same time Zidatech offers KNX workshops and training sessions for the electrical industry in Switzerland at its easy-going training centre at Hägendorf. It is important that the majority of this added value is realised for and in Switzerland.

Contact: www.zidatech.ch



New KNX Products

ABB-Stotz-Kontakt GmbH

ABB i-bus® KNX Blower Actuators



The new ABB i-bus® KNX Blower Actuators are modular installation devices with 4- and 6-module widths for installation in a distribution board. Connection to KNX is established via the front bus connection terminal. The devices require no auxiliary voltage. The FCL/S 1.6.1.1 I-fold actuator controls a single-phase fan with up to three fan speeds via a step or changeover control. The FCL/S 2.6.1.1 2-fold actuator can control two independent fans. The outputs on the 2-fold actuator that are not used for the fan can be used to switch electrical loads.

Contact: www.abb.com



ABB-Stotz-Kontakt GmbH

New generation of ABB i-bus® KNX Power Supplies



KNX power supplies generate and monitor the KNX system voltage. Three versions are available: for bus loads of 160, 320 and 640 mA. Each version has integrated choke and wide range inputs for supply voltages from 85 to 265 V AC at 50/60 Hz. Connection to the bus is performed via bus terminals. All other connections are made reliably and quickly via combination head screws. The bus line is decoupled from the power supply by an integrated choke. The voltage output is short-circuit and overload protected. The two-color LED indicates device output status. The devices are available in MDRC housing with four modules width.

Contact: www.abb.com



ABB S.P.A.

I rocker switch - I module



The I rocker switch - I module is a flushmounted device for the ABB Mylos KNX Building Automation system. The rocker switch can be configured to realise the following functions: on/off sensor; on/off sensor - dimmer; shutter sensor; I bit and 8 bit scene control; forced operation/value. For the switching function (ON/OFF) the rocker can be configured with two separate communication objects for the upper and lower part, doubling the number of channels and in this way optimizing the installation. The new device is very compact and allows installing it in 3-module rectangular boxes, next to the 2-module devices of the Mylos KNX range, ensuring great aesthetic results and flexible and modular installation.

Contact: www.abb.it/knx



Arcus-EDS GmbH

Decentralized ventilation control Lunos-Control-4





In cooperation with their partner Lunos (www.lunos.de) a control unit for decentralized ventilation units with heat recovery e² and ego was developed. With this unit the individual room ventilation fits seamlessly into the KNX grid. Up to four fans are controlled by one unit that fits into a standard flush-mounted socket, the fan control operates on low voltage 24-32 V supplied from the yellow and white wire pair. Heat recovery rates of up to 90 %, waiving building-wide piping, no additional wiring, low power consumption of 1.5 W in normal operation mode and low operating noise are the main characteristics of this innovative system.

Contact: www.arcus-eds.com



Arcus-EDS GmbH

KNX-Choke



Arcus-EDS introduces a new choke for the KNX-Bus. With a nominal current of 1600 mA it can supply power to installations with high power demands at an affordable price. The choke is short-circuit proved up to 3 A continuous current, it consumes two slots on the DIN-rail and has a push button to reset the bus.

Contact: www.arcus-eds.com



b.a.b.-technologie GmbH

BAB DUODMX GATEWAY SR



It is already known that the DUODMX GATEWAY has two independently configurable DMX interfaces, each with 512 channels. The SR ("Send/Receive") versions are new and facilitate not only the DMX Master mode, but also the DMX Slave mode. The gateway transmits DMX packages in master mode and receives them in slave mode. In this way the DUO DMX GATE-WAY serves not only as a uni-directional gateway between KNX and DMX, but also sends the DMX values on request as an acknowledgement to KNX. The standalone version is also new: independent of a building control system, DMX devices are therefore addressed directly using a smartphone app.

Contact: www.bab-tec.de

b.a.b.-technologie GmbH

BAB KNXEASY



The old KNXeasy is obsolete – now the future beckons for the new KNXEASY. The KNXEASY converts KNX telegrams into ASCII code and vice versa. This enables third-party applications to be integrated extremely easily. KNXEASY sends its data not only via TCP but also via UDP. Thanks to the use of ETS4 project data, the identifiers and data types can simply be assigned to the ASCII commands. In addition, the KNXEASY is the programming interface for ETS which means, for example, that it saves the USB interface.

Contact: www.bab-tec.de

basalte byba

New menu structure for Basalte's Deseo



Deseo, Basalte's room controller, now has a new and simple horizontal menu structure for rooms with less functionalities. In this way, it is sufficient to touch Deseo on the left or right side to scroll through all functions. Deseo has the same dimensions as a normal switch and an integrated display, which can control all home automation functions in one room. With one single touch all light circuits, sun blinds and the central music system can be controlled. Besides, several scenes can be activated and on top of that the heating, air-conditioning and ventilation can be controlled by the internal thermostat.

Contact: www.basalte.be

basalte byba

A3, the new Asano module



Basalte extends its Asano multi-room audio system with the new A3 module. This module allows you to integrate thirdparty amplifiers like surround receivers in the Asano concept. It is also possible to integrate active speakers, like those of Bang & Olufsen. With A3 you can connect up to three zones and two local sources. If a source is connected to one of the inputs, this source immediately becomes a source for all the other zones of the Asano system. Asano uses uncompressed 24 bit audio over Ethernet to transport audio between the various zones. Like the whole Asano family, A3 is completely configured and controlled with KNX.

Contact: www.basalte.be

BEG Brück Electronic GmbH

KNX room sensor box



With the KNX-RSB, cabling now only has to be laid as far as the room ceiling. Measuring just 180×162×45 mm (LxWxH), the box has GST-18 connections for KNX, DALI and 230 V, and connections for two switches. Using the KNX connection, the KNX-RSB can be connected to a wider KNX system and a KNX occupancy detector can be plugged in. Integrated into the box is a KNX/DALI Gateway – up to 45 DALI electronic ballasts can be linked.

Each of the two switch interfaces can have two switches directly connected. KNX-RSB means that installers can save up to 30 % of total costs through quicker installation and ready-integrated units.

Contact: www.beg-luxomat.com

BEG Brück Electronic GmbH

PD2-KNX-FC Version 5.0



B.E.G.'s KNX occupancy detectors with application 5.0 are now provided with the light channel and three further channels can be freely programmed. Using the KNX remote control, set values and lag times can be readjusted and the ETS programming mode can be activated. The most considerable improvements, however, concern the light regulating channel. For example, with the new application you can activate a lot of special functions, i. e. the corridor function, or a lot of activate or deactivate LEDs. For an optimal use of lamps, the individual burn-in time indicated by the manufacturer can be freely adjusted. Therefore, the application 5.0 offers everything for an optimal lighting control.

Contact: www.beg-luxomat.com

Bleu Comm' Azur EURL

"KNX-logview and scheduler"



"Logview and scheduler" is a Synology® NAS drive plugin, that communicates directly with the Apple® and Android® visualisation controller proServ. No more export of group addresses, learning of additional editors or handling separate visualisation projects. The whole configuration is done in ETS with a standard product database. Indicate the value that you want to be logged or label the data point that should be switched by a freely configurable timer. Logview allows the csv export and mailing of the saved data. An e-mail alert can be sent by any KNX event. The built-in VPN server permits a secure connection from anywhere in the world.

Contact: www.knxware.com



"KNX2SONOS"



"KNX2SONOS" is a smart IP extension based on a Raspberry PI, which communicates directly with the Apple® and Android® visualisation controller proServ. The complete configuration is done within the ETS product database. The device allows the control of up to five SONOS zones with the following functionality:

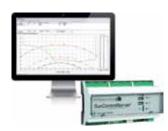
- Play/Stop/Next/Previous
- · Volume control relative and absolute
- · Selection of Radio station
- Feedback of actual Title/Artist/Album as 14 Byte character strings...
- General OFF or ON function for grouped and ungrouped zones

Turn on the music as you turn on the lights!

Contact: www.knxware.com

BMS – Building Management System

KNX SunControlServer



With the SunControlServer BMS offers a central unit for automation of sun protection with maximum functionality. With the basic version already 50 sectors can be controlled. By fast communication via KNX-net/IP the SCS can also be used as a central unit for very big and complex projects. Different shading strategies and many automatic functions – and this individually for each sector – are a matter of course. Sun protection automation with maximum comfort functions like horizon limitation and dynamic wind monitoring is implemented as well.

Contact: www.bms-solutions.de/scs

BMS – Building Management System

KNX SCS-Client



The SCS-client is the self-generating visualisation interface for the SunControlServer by BMS. After configuring the SunControlServer via the built in SCS-manager all the necessary data for the control and monitoring interface are available for the SCS-client. Thus the end user can see the main system states, operate the system and perform adjustments (e.g. change limit values) in a breath – and this via web access at any time.

Contact: www.bms-solutions.de/scs

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Mitho PLUS KNX



The new Mitho Plus KNX terminal allows controlling a KNX system and bpt video entry systems from the internal receiver. It is possible to connect entry panels from the bpt's XI 2-wire system to the terminal and access the different video entry system functions, including interaction with the KNX System. The main screen allows controlling the KNX home automation devices. By navigating through the "Rooms" menu, it is possible to select the commands of the devices in the selected room. Manufactured with a 7" 16/9 touchscreen, it is available in black or white. Dimensions (LxHxD): $208 \times 108 \times 31$ mm.

Contact: www.bpt.it

hnt

Mitho HA KNX



The new Mitho Plus KNX terminal allows controlling a system made up of KNX devices. From the main screen you can control KNX home automation devices. By navigating through the "Rooms" menu, for example, you can select the functions of the devices in each selected room managed by the terminal (control of rolling shutters and Venetian blinds, on/off and RGB lighting, temperature regulation, ON/OFF actuators, etc.). Manufactured with a 7" 16/9 touch-screen, the device can be wall-mounted or installed on a table, using the correct support. It is available in black or white. Dimensions (LxHxD): 163x106x31.5 mm.

Contact: www.bpt.it

dakanimo GmbH

KNX switch "kamereon"



The Hamburg manufacturer "dakanimo" proudly introduces their switch "kamereon". "kamereon" operates intuitively, similarly to a Smartphone. The device has six capacitive areas: five soft-keys (one on each corner and one in the center) and a dial. The edge of all corner soft-keys, the center softkey and the dial are outlined by individually adjustable RGB-LEDs. The switch delivers both an audible and a palpable feedback with a buzz sound and vibrating. "kamereon" is available in "Piano Black Lacquer" and "Mountain Peak White". The switch has a sleek and clean design.

Contact: www.dakanimo.com



KNX design with DDS-CAD



DDS-CAD provides a professional package for intelligent MEP design and system integration. So far, it is the only tool that provides an interface to the ETS App "Project data exchange". Complete KNX projects from DDS-CAD can be imported into ETS by using the app. Via drag & drop function, the KNX components are assigned to manufacturer product templates and physical addresses can be easily appointed thanks to available topologies. After parameterisation, the ETS data can be transferred back to DDS-CAD where they are automatically mapped to the project. All physical addresses of the KNX components are directly visible in DDS-CAD. The result: A significant time saving and optimal design.

Contact: www.dds-cad.com

Datec Electronic AG

KNX/DALI Actuator 8 Channels



The Datec KNX/DALI actuator I x 8 channels for controlling and monitoring up to eight independent DALI ballasts, has now also been designed with a new housing for flush mounting. Transforming KNX bus signals into DALI signals allows the electrical installation to be easy, and thanks to its new housing for flush mounting the actuator can be installed locally in existing wall boxes. The DALI Power supply is integrated in the device and requires no external power supply. The KNX bus voltage is sufficient. This enables to add the DALI functionality even in existing apartments / hotel rooms without having to install new cable ducts.

Contact: www.datec.ch

Datec Electronic AG

Binary Input 8x / 8 Status LEDs



The Datec Binary Input $8 \times / 8$ Status LEDs is a flush mounted device commonly used in offices, hotel rooms, apartments and much more. The device can interface eight potential-free contacts to control lighting, shading or other equipment. Up to seven of the potential-free contacts can be used to connect temperature sensors, to measure various temperatures (local temp., outside temp., inlet air, ...). The device can also drive eight status LEDs. Each LED can be set to display the status of the corresponding binary input, or to display the value of a separate communication object.

Contact: www.datec.ch

Dialogic Systems

HomeCockpit Excelsior 2.0: with KNX-compatible videophone



Even more performance: the current version of the powerful multi-touch panel PC with quad core processor, 8 GB RAM and 128 GB SSD now also features a new videophone. This will monitor all cameras, door openers and entrance lights of the building and is able to send KNX commands. Thanks to sophisticated software, it is for example possible to "talk" to a door and keep all other areas in view. Templates are preconfigured for the most common cameras. Another highlight is the navigation bar which can be adjusted to suit your personal needs and can be operated in parallel with KNX visualisation systems. Everything is possible!

Contact: www.home-cockpit.de/en/excelsior

Dialogic Systems

HomeCockpit Major 3.0: with adjustable navigation bar



One step further: the latest generation of this versatile multi-touch panel PC with dual core processor, 4 GB RAM and 64 GB SSD now also has a navigation bar which you can adjust to suit your needs. It always remains in the foreground and can be operated in parallel with KNX visualisation systems. Particularly practical: all the buttons can be adjusted to the look of any system in terms of shape, colour, font and size. The new videophone is another highlight and can be used to send any KNX commands as well as control and monitor all connected cameras, door openers and entrance lights in the building. Complete flexibility!

Contact: www.home-cockpit.de/en/major

DIVUS GmbH

Energy management module



The energy management of DIVUS OP-TIMA can display and record the energy consumption of a building. The individual consumers are displayed in the form of a battery whose charge reflects the current power demand. The recorded data is displayed as desired for daily, weekly, monthly or yearly consumption in a graph. The integrated load control allows you to turn various loads on and off depending on the total energy consumption of all loads together (e.g. when the washing machine is turned on, the heating is temporarily switched off during the whole wash cycle).

Contact: www.divus.eu

eelectron SpA

BO12A01KNX – UNIVERSAL MODULE 12 OUT



The BO12A01KNX DIN RAIL 12 Output Module is a KNX DIN rail mounted device useful for interfacing commands or loads for all kinds of applications. The device's twelve outputs can be configured as follows: each output can be configured independently for generic load control; outputs can be configured in pairs for the management of roller shutters and blinds (up to six channels). The device has one status LED for each channel to indicate the state of the corresponding output and also one push button for each channel for manual control.

Contact: www.eelectron.com

eelectron SpA

IC00R01KNX - RaspBerry Pl® - KNX Interface



The IC00R01KNX RaspBerry PI® KNX Interface is the best solution to connect a Raspberry application to the world of home and building automation. This easy to use on-board is intended as a gateway equipped with a simple serial protocol to receive and send telegrams on the KNX Bus. The on board micro-controller includes the KNX Stack required to interact with the KNX Bus. The IC00R01KNX is designed to exactly fit in the Raspberry GPIO connector.

Contact: www.eelectron.com

Elsner Elektronik GmbH

Multi-function 230 V series track-mounted actuators



With their multi-function outputs, the KNX S1-B2 and KNX S2-B4 actuators can be used flexibly, e.g. for shading, ventilation or lighting control. Either one drive (up/down) or two switched devices (on/off) can be connected to each output. There is an internal automatic shading control – locks and scenes can also be set. Current measurements enable running times and thus drive positions to be determined. The KNX S1-B2 has a single output and two binary inputs, the KNX S2-B6 two outputs and six inputs. The larger KNX S4-B10 model accordingly has four outputs and ten inputs.

Contact: www.elsner-elektronik.de



Corlo Touch KNX WL display with W-LAN communication



The Corlo Touch KNX WL display provides individual room control of temperature, sun shielding, ventilation and lighting via KNX. This high quality device with real glass touch screen offers intelligent and practical functions ranging from its alarm clock through to logic gates, and all the way to inputs for temperature sensors and buttons. The brilliant screen displays both a setting menu and ten display pages with control elements. The integrated W-LAN connection also enables the display of network content, e.g. images from an IP camera, visualisations and websites. You can also use a smartphone to control the building systems over the network.

Contact: www.elsner-elektronik.de

EMT Controls

RealPresence+® Occupancy / Vacany / Presence Sensor



EMT Controls' brand new product Real Presence+® overcomes many deficiencies and disadvantages of conventional presence detectors with its patented state-of-the-art technology and remedial approach. Intrinsic uniqueness of this product is the result of EMT Controls' ability to fulfill requirements in hotel room automation, its innovative engineering and exceptional MEMS based technology. RealPresence+® works in harmony with door magnetic sensors, PIR sensors and it converts the data of its matrix based thermal tracking sensor into presence information.

Contact: www.emtcontrols.com/products

EMT Controls

HCMI57 KNX-HVAC



The HCMI57 KNX HVAC is an interface that allows direct and native communication with Daikin VRV, Mitsubishi Electric VRF, LG-Beko (PI485)'s air conditioning systems to KNX as well as any RS232 or USB based devices like home PCs, embedded PCs or home automation controllers. It is an ideal solution for emerging single outdoor - multiple indoor unit applications such as office buildings, hospitals, schools, villas etc. This product has superior functionality compared to the HCM107-KNX-AC-IR as it is able to directly communicate to the air-conditioner bus, allowing two-way communication which also enables retrieval of diagnostic data.

Contact: www.emtcontrols.com/products





The power supply unit KNXPowerSupply960 (6MW) with integrated choke supplies the bus with a stabilised DC voltage of 30 V DC, providing a current of 960 mA. The voltage input 85 – 265 V AC (50/60 Hz) allows worldwide operation. In addition, the integrated display shows actual and maximum values for voltage, current and power. These measurements can be sent to the bus via group objects. The internally measured case temperature can also be sent to the bus. The product comes with a "USB Garage", which represents a repository for customer-specific project data on an included USB Stick.

Contact: www.enertex.de

Exor International S.p.A.

DomiOP eBIS507



The EXOR International eBIS507 is an advanced KNX HMI device combining top performance with an outstanding design. Easy to use, it is the ideal choice for all demanding HMI applications in building automation. The eBIS507 features a 7" widescreen TFT display with 800 x 480 pixel (WXGA) resolution. The two built-in dual 100 Mb Ethernet interfaces with switch function enhance the communication capability. JMobile, Exor International's software platform for real-time monitoring offers an innovative and efficient solution for the new requirements in home automation. In addition to the possibility of connecting to KNX TP networks, JMobile comes with the support of the BACnet network (MST/TP and IP).

Contact: www.exorint.net

FEEL s.r.l.

KNX touch switch



The new KNX touch switch offers innovative technology combined with the highest quality and efficiency. The KNX touch switches are available as 2-fold, 4-fold and 6-fold in six different models: steel antifingerprint, white, black, gold, mirror and timeless. The color of the LEDs can be chosen in white or blue. The thickness is only 1.2 mm. Customisation is possible by laser engraving for optimal solutions in hotels, commercial and residential buildings.

Contact: www.feel-italy.it

Gewiss SpA

KNX dimming actuator for LEDs



The new four channel KNX dimming actuators for Vdc LEDs are available in two versions: CVD (constant voltage control) for controlling single colour or RGB[W] LED strips; CCD (constant current control) for controlling power LEDs (single colour or RGB[W]). The actuators offer ON/OFF switching, staircase function, relative and absolute dimming, scene control, colour sequences (e.g. strobe, rainbow) and logic functions. They are equipped with a status LED, a push button per channel and a fault LED (overheating, polarity inversion). A relay is available to switch on/off the Vdc power supply of the controlled LEDs. In DIN rail mounting enclosure, the dimmers are both available as S-Mode or E-Mode version.

Contact: www.gewiss.com

Gira Giersiepen GmbH & Co. KG

Gira KNX energy meter Comfort



The Gira KNX energy meter Comfort does more than just record electrical measured values. It also serves as the central component for comprehensive energy management in residential, commercial, or industrial properties. In doing so, the device acts as the central, higher-level measuring point for the entire household. It can also be employed as an intermediate or sub-meter. In connection with the Gira HomeServer/FacilityServer, the Gira KNX energy meter Comfort allows the recorded data to be displayed, saved, evaluated, or processed.

Contact: www.gira.com

Gira Giersiepen GmbH & Co. KG

Gira KNX logic module



Switching on lights in a time-delayed sequence, calling up certain light scenes using a push button, controlling room temperature or setting other logical functions; with the Gira logic module, single-family houses and properties of a similar size with a KNX system can be easily equipped with a series of automised comfort functions. Using the intuitive Gira Project Assistant allows projects to be parameterised conveniently in just a few steps and easily modified at any time per drag & drop.

Contact: www.gira.com

Guangzhou Hedong Electronic Co., Ltd (HDL)

Timer Master/Slave 4CH Controller (M/TM04.1)



The HDL KNX Timer product series is fully compliant with European safety standards and the KNX protocol. A high performance EMC filter is embedded, fulfilling European EMC regulations. This timer controller has an embedded RTC, can manage real time and can be used as master timer and slave timer. It has the following functions: year routine, month routine, week routine, day routine and special day. In this way it is possible to set the time to switch lights, control curtains. etc.

Contact: www.hdlchina.com

Guangzhou Hedong Electronic Co., Ltd (HDL)

Switch Channel Expansion Actuator series



The HDL KNX product series "Switch channel expansion Actuators" is fully compliant with European safety standards and the KNX protocol. The M/R16.16.1 and M/R16.10.1 are switch channel expansion actuators with 16 channels in total. M/R16.16.1 uses 50 A magnetic latching relays to switch loads, AC/DC loads up to 16 A per channel. M/R16.10.1 uses 16 A magnetic latching relays to switch loads, AC/DC loads up to 10 A per channel. Each output channel has the following functions: state response, state recovery, time function, scene, threshold, curtain, logic, heating actuator.

Contact: www.hdlchina.com

Hager Vertriebsgesellschaft mbH & Co. KG

New KNX dimmers for RGB LEDs



Hager is expanding its KNX solutions range and now offers two new KNX dimmers for colour and brightness control of RGB LED strips. The voltage and current controlled versions of the bus-enabled 3-channel dimmer are both suitable for controlling RGB LEDs, as well as for individual control of three single-colour LEDs. A bus coupling unit and RGB colour mixer are integrated in the mounting box or applications; programming is carried out via ETS. The supply voltage is either 12/24 V selectable or a fixed 24 V. In addition to the dimming and switching functions, 60 scenes can be called up.

Contact: www.hager.de

Home System Consulting S.p.A. HSYCO Support for VoiceOver



The HSYCO user interface supports Apple's VoiceOver for both OS X and iOS devices. VoiceOver gives you full control of the HSYCO interface with no need to see the screen. On iOS devices like iPhone, iPad and iPod touch, you will be able to check the status of your KNX devices by simply hovering over the interface with your finger and listening to the spoken feedback. You will also get a spoken confirmation when you press a control object to send a command. On the developer's side, because the HSYCO user interface is entirely defined with simple text files and a language similar to HTML, visually impaired people with some technical skills will be able to create and modify their interface using their preferred text editing tools.

Contact: www.homesystemsconsulting.com

Home System Consulting S.p.A. HSYCO 3.3.1



The HSYCO 3.3. I introduces significant improvements in the KNX driver, enhancing the performance and command feedback handling. The high availability framework now supports the handover of an IP address that is assigned to the active server, so that Web clients are automatically reconnected to the slave server if the master fails. Two new graphic skins are on offer, called bright and charcoal. Both skins feature a polished, modern graphic look of pages background and individual objects. Bright offers a clear tone interface, while charcoal has a darkgray textured motif.

Contact: www.homesystemsconsulting.com

home2net GmbH

KNX stormsensor



This digital weather station is using the latest Franklin sensor technology to detect upcoming thunderstorms early. It precisely senses temperature, barometric pressure and variance of electric fields caused by stroke of lightning. By using this device thunderstorms and lightning can be forecast with a higher accuracy by means of strength and geographical progression and within a significant shorter period of notice, too. The weatherproof Class IP 54 housing allows easy mounting on outside walls. Typical applications are thunderstorm warnings and automatic closing of doors, windows, blinds and awnings when storms are approaching.

Contact: www.home2net.com

home2net GmbH web@ctrl for KNX



The highly integrated access router enables KNX bus devices and peripherals to safely connect to cloud services without a need for gateways or tedious network configuration. This enables simple data exchange as well as easy linking of cloud data and services with sensors and control logic in buildings or machines. Powerful cloud servers can easily facilitate visualisation and many other useful services which can not be performed with the given resources of traditional controllers. Configuration and data management can be efficiently performed centrally and for many devices in parallel. Operation and programming of the target platforms can be easily performed using any HTMLcapable browser.

Contact: www.home2net.com

Ingenium SL

ETHBUS-KNX: Web server



The ETHBUS-KNX, which has Wi-Fi connectivity in addition to a direct Ethernet port and KNX connector, permits to control a KNX installation using iOS, Android or Samsung Smart TV devices remotely through the Ingenium server or a PC connected to the internet with any type of web browser. It is also possible to control the installation in local mode. The control applications are completely free. The device requests a password to access the installation control and displays the status of the installed devices with icons on color 3D drawings or photographs. It supports up to 100 control pages and up to 100 scenes, allowing users to control and manage their installation.

Contact: www.ingeniumsl.com

Ingenium SL

DALIK: KNX-DALI gateway



The DALIK gateway is a device used as a control interface between DALI protocol lights and KNX devices. It allows to control up to 64 DALI lights or 16 DALI groups and includes an integrated power supply for the connected DALI devices. It is possible to control configured DALI lights or groups through other KNX devices like touch panels, push buttons, etc. For each DALI light, this gateway offers the most common functions such as dimming, switching, setting brightness values, light scenes and also feedbacks of DALI errors. Extra functionalities in case of DALI emergencies: status check and alarms, battery percentage, functional tests, etc. As DALI addressing and commissioning functions: offline and online modes.

Contact: www.ingeniumsl.com

Intesis Software S.L

New IntesisBox® KNX – Midea Commercial and VRF gateways



Intesis introduces its new gateways IntesisBox MD-AC-KNX-16/64 and MD-AC-KNX-IB for integrating Midea Commercial and VRF air-conditioning into a KNX system. The gateways have direct connection to KNX TP. MD-AC-KNX-16/64 is available in two versions, one controlling up to 16 indoor units and another one up to 64, both allowing control and monitoring of every single indoor unit separately. On the other hand, MD-AC-KNX-IB can control up to one indoor unit per gateway. These new IntesisBox gateways have their own ETS database and can be easily programmed without the need of using any other software.

Contact: www.intesis.com

Intesis Software S.L

New IntesisBox® KNX - LG MultiV and Commercial gateway



Intesis introduces the new IntesisBox LG-RC-KNX-ligateway for LG air conditioning MultiV and Commercial lines. This gateway features four binary inputs as a new and important hardware improvement. These binary inputs have the possibility to be parameterised and configured in several ways through ETS. The IntesisBox LG-RC-KNX-Ii has full control of the LG AC indoor units, and has new extended functionality, including the separation of the control and status objects, the use of KNX standard datapoints, and the possibility to perform several actions depending on the occupancy of a defined area, or the status of a window contact.

Contact: www.intesis.com

iRidium Mobile Ltd.

iRidium for KNX V2.2



iRidium for KNX V2.2 is flexible software built especially to control the KNX system. With the iRidium App installed on a tablet or smart phone with iOS, Android, OS X or Windows 7/8 users can control lighting, climate, curtains, security systems, Intercom, Audio/Video equipment, Media Servers and any other equipment through TCP/IP, RS232, IR. Users can control it all from an individually designed interface. Full data import from ETS3, 4 to the iRidium GUI Editor provides easy & fast setup of communication with the KNX system. With the new 2.2 version users can control Internet radio from the iRidium App; integrators can make use of HTTPS support and protect their intellectual property by encrypting the .irpz file.

Contact: www.iridiummobile.net

iSimplex

The new "face" of iSimplex



iSimplex has got a new "face", Intel NUC. With this change iSimplex became more reliable, smaller and better looking. Following the brand's policy, the product fully supports KNX. Automation and Media are always interlinked in the Server. iSimplex provides an easy and customisable web interface, accessible from any device, anywhere in the world. The newest feature is the logic function module, allowing for integrators to program complex logic, adapting the system to their needs. iSimplex works every day to improve its product in order to fit in any solution. iSimplex, everything naturally connected.

Contact: www.isimplex.com

Albrecht Jung GmbH & Co. KG

KNX Room Temperature Controller F 50



The Room temperature controller combines the functions of a temperature unit and a push-button sensor in one KNX device. All typical room temperature functions as heating/cooling, selection of operation mode or ste-point adjustment are integrated. The status indication takes place via colour LEDs. The functions of the well-known universal push-button sensors can be operated. Therefore the device can be integrated as a single-room temperature controller or alternatively the push-buttons operate room functions and the temperature control takes place in the background. It can also be connected to the extension module for a flexible extension of its functions.

Contact: www.jung.de/en

Albrecht Jung GmbH & Co. KG

KNX Multiroom amplifier



The new KNX Multiroom amplifier with web radio and integrated MP3 player: the 19" rack routes the stereo sound to four or eight loudspeaker outputs from four sources. One source is the internal web radio/MP3 player. The other sources are connected via the four low-frequency inputs (Cinch) for playback devices such as hi-fi systems. The web radio enables storing and selecting 16 radio channels. The MP3 player receives the music files from an exchangeable SD card placed inside the card reader slot. Music data can be transmitted on the card at any time by FTP. Radio station change, song title selection and other convenient functions are triggered with KNX sensors or the Smart Control IP.

Contact: www.jung.de/en

LOYTEC electronics GmbH





The LOYTEC Gateways LGATE-950 and LGATE-951 are powerful universal gateways with integrated graphical visualisation that concurrently integrate KNX, CEA-709, BACnet, Modbus, and M-Bus. The L-GATE gateways provide connectivity to KNXnet/ IP and Modbus (RTU, TCP, Master or Slave). M-Bus and KNX TPI device integration needs optional interface modules. The gateways' special features include AST™ functionality, event driven e-mail notifications, a built-in web server, and also a perfect integration into the L-WEB Building Management System. Local operation and override is provided by the built-in jog dial and the backlit display (128x64 pixels).

Contact: www.loytec.com

MDT

AKD-0424V.01 RGBW LED Controller



The MDT LED Controller operates 12/24V RGBW LED stripes (common anode, constant voltage). The max. LED capacity is 288 W at a current of 3 A for each channel. Additionally to the RGB colour space the LED controller can be also triggered by the HSV colour space. In addition to absolute and relative dimming wide scene functions, programmable dimming speed, defining of colours and predefined sequences are available. The integrated temperature- and overcurrent supervision protects the device. A special feature is the integrated 16 A c-load relay that switches the external power supply. The LED controller is available with two, three and four channels for white and respectively RGB/RGBW LEDs.

Contact: www.mdt.de

MDT

SCN-RTIGW.01 / RTIGS.01 Glass Room Temperature Controller





The MDT Room Temperature Controller with LCD display indicates selective or alternately the inside/outside temperature, desired value and/or time. With one touch you select the given temperature and modes comfort, standby. The ventilation can be set stepwise by hand or automatically. Two sensor areas are available for switching lights or shutters. The indicated alarm and text messages are received as I bit or I4 byte telegrams. The controller (2-Point, Pl and PWM) is selectable and has objects for HVAC mode and status. The devices are available with white or black glass, the bus coupling unit is integrated.

Contact: www.mdt.de

NETxAutomation Software GmbH

Certification of MICROS Fidelio/KNX interface



Since May 2014 the NETxLAB. Fidelio. KNX interface is certified by MICROS-Fidelio. Because of this interface KNX and other data points of NETx BMS server can be bi-directional linked with data from Hotel Management System Fidelio. Thus, advanced and complex applications can be realised. The certificate covers the following software functions: *guest in/out/guest data-change with room move *guest message handling online/on request *room equipment room maid status, do not disturb.

The interface is available for these MICROS-Fidelio PMS versions: • Micros Opera PMS V5 or higher • Micros-Fidelio Suite 8.8 or higher • Fidelio FO 6.20 • Fidelio Suite7.13.

Contact: www.netxautomation.com

NETxAutomation Software GmbH

SNMP interface for KNX



The latest version of the NETx BMS Server 2.0 has been enhanced with an SNMP interface. It enables a bi-directional link of SNMP data points with KNX and other systems. The following features are available:

- SNMP device monitoring
- cyclic polling of any SNMP objects through their OIDs
- · evaluation and respond to SNMP traps
- writing of SNMP objects
- · gateway-functionality

Using the new SNMP driver information from network nodes such as router, server, switches, printer or computer can be monitored and controlled within the NETx BMS Server (as well as connected clients e.g. visualisation) in a central way.

Contact: www.netxautomation.com

Schenker Storen AG

Blinds actuator for motors with three limit switches



The new KNX blind actuator MSG-4H KNX DES T6 from Schenker Blinds controls shading motors via one upper and two lower limit switches. The 6TE-wide REG actuator has outputs for four motors with three limit switches. A separate shading function based on the brightness and the sun's position can be configured for each output (internal automatic), or it can be controlled via an external automatic system. The actuator comes equipped with twelve binary inputs (for push buttons or bus functions), the motors can also be operated directly via manual buttons on the device. The channel-LEDs displays the status of the outputs.

Contact: www.storen.ch

Schneider electric

U.motion KNX Server Plus



With the U.motion KNX Server Plus Schneider Electric presents a new powerful server for KNX building management. The device is able to visualise, manage and control KNX plus cross-system functions, as building control via IP cameras, integrated door communication or visualisation of energy consumption. The server can be accessed both, via the local network and the Internet. A standardised interface design for all mobile devices ensures easy navigation and intuitive control.

Contact: www.schneider-electric.com/umotion

Siemens AG

IP Control Center / Sample Project



There is a sample project available for the IP Control Center N152. The sample project shows display and operation surfaces as an example. You can download this sample project from Gamma-TD (SW, Softwarezip) and the intranet "New Products > IP Control Center". When the sample project is loaded into the product, you can see in the editor two standard applications, one is for a smart phone and one for a tablet or PC. In the near future, these sample projects will be shipped as part of the product and shall help you to present the functions and possibilities of the IP Control Center. The sample project can also serve as a project model for installers and system integrators.

Contact: www.siemens.com/gamma

Siemens AG

RMB795



The central control unit RMB795B is a key component for ensuring an energy-efficient and comfortable room temperature. It receives the heating/cooling demand signals from the individual rooms and passes them on combined to the primary plant controllers. Time-based programs can be set for up to ten rooms or groups of rooms. In addition to Synco room controllers, any KNX-compatible room temperature controller can also be connected to the central control unit RMB795B via the bus. The control unit thus acts as interface between the temperature control in the groups of rooms and the primary control.

Contact: www.siemens.com/bt/integrated-applications



IP Gateway KNX/BACnet N143



The IP Gateway KNX/BACnet allows to integrate KNX installations quickly, easily and efficiently into BACnet-based networks and building automation and control systems. Up to 250 BACnet objects can be created, for example for on/off switching, actuation of shutter, blind, or roller shutter drives, or heating, cooling and ventilation. The IP Gateway KNX/BACnet is a certified KNX device and is configured using only the Engineering Tool Software (ETS). The conversion of KNX objects into BACnet objects is fully automatic. This simple configuration for the conversion of data from KNX to the BACnet system and vice versa distinguishes the IP Gateway KNX/BACnet N 143 from previous solutions.

Contact: www.siemens.com/gamma

Siemens Schweiz AG Synco OZW772

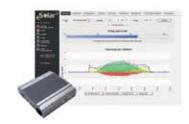


For the first time, version V5 of the Synco OZW772 web server from Siemens allows joint web access to Synco HVAC controllers and KNX electrical devices via one web server, which makes operation, data collection and data analysis for these disciplines significantly easier. This is an essential requirement for integrated applications from Siemens - comprehensively tested applications that make it possible to achieve significant energy savings by automatically exchanging data between the HVAC primary plant and room automation devices. Version V5 of the OZW772 web server supports up to 250 Synco controllers and provides for the integration of up to 230 KNX communication objects.

Contact: www.siemens.com/synco

Sinapsi srl

eSolar CUBO



eSolar CUBO is an integrated device to optimise energy efficiency and monitoring of photovoltaic installations. It permits the analysis and planned management of consumption optimisation, thanks to the powerful synergy with its KNX engine. Via web interface it allows the setup of home automation schedules and operating logics related to production of the PV system. In a simple and intuitive mode it shows the trend analysis of plant efficiency and in this way helps to define the needed policies for increasing one's self-consumption and maximising the plant production. eSolar CUBO supports the CEI 0-21 and CEI 0-16 standard.

Contact: www.sinapsitech.it

STEINEL Vertrieb GmbH Building Automation 3.0



Integrated in building automation by KNX, the HPDI person sensor from STEINEL PROFESSIONAL counts how many people are present no matter whether they are moving or not. Based on camera sensor technology, it works with integrated, advanced real-time image processing. The quantitative information from the sensor opens up completely new possibilities in building automation. Lighting, heating and air-conditioning can now be controlled with greater efficiency and even more accurately in line with needs by factoring in the number of people present.

Contact: www.steinel-professional.de

T2M2 - Gesellschaft für Automation und Engineering mbH

Edition4 PC121 IP65

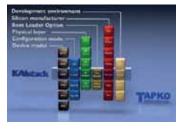


With Edition4 PC121 IP65 T2M2 offers a touch panel which opens up new design possibilities in the pool area. Due to the protection class IP65 the touch panel is protected against the ingress of water or chlorine gases in the bathroom as well as the pool area. The flat glass front with capacitive multi-touch makes it the perfect touch panel to provide a safe KNX installation in the bathroom and the pool area.

Contact: www.t2m2.de

TAPKO Technologies GmbH

Tapko's KAIstack for Beck IPC



The IPC@CHIP® embedded controllers from BECK in combination with KAlstack contain all necessary components to implement KNX based control and communication tasks. This combination of x86 architecture with Tapko's KAlstack brings high computing power together with simplicity of use. Highlights of KAlstack are boot loader for stack and application, support of all media together with the availability of all device models and configuration modes. The modularity of KAIstack enables the customer to configure the KNX stack exactly according to his needs. It's like LEGO. You have your starter kit and as need arises you expand it brick by brick without buying the whole system again.

Contact: www.tapko.de

TAPKO Technologies GmbH

Tapko's KAIstack for NXP



The combination of KAIstack and LPC I I U3x provides an optimal solution for customers wanting to have KNX enabled bus devices based on microcontrollers from NXP. This combination of ARM Cortex-M0 low-cost 32-bit MCU with KAlstack brings seamless integration of high computing power with battery powered devices. This is made possible by the new event driven KNX stack employing "µPower Technology". Further highlights are boot loader for stack and application, support of all media, device models and configuration modes. The modularity of KAIstack enables you to configure the KNX stack according to needs. It's like LEGO. Download a free demo of KAlstack.

Contact: www.tapko.de

TENSE Top Design Switches byba

PIR Motion Detector



TENSE is proud to introduce the smallest KNX PIR Motion Detector in the world. With a diameter of just 16 mm, TENSE offers the best motion detector solution: it notices you without you seeing it. This ultra-small sensor has a considerable operating range of 8 m at a height of maximum 4 m with a 360° view and is installed centrally in the wall/ceiling by means of a 16 mm PVC tube. The PIR Motion Detector's parameters can be set in the ETS software. The PIR Motion Detector is available in black and white to integrate the detector in your interior; making it almost invisible. It's not just a Motion Detector. The PIR can switch on/off the light, activate dynamic scenes and can be put in day/night mode to change its behavior.

Contact: www.tense.be

Theben HTS AG

thePrema KNX presence detector



With its natural shape and transparent lens housing, thePrema KNX gives the appearance of a droplet of water forming. The idea behind the design concept is to fuse lens and housing into one. For this, thePrema has already received several awards. thePrema KNX offers a broad variety of functions, increasing comfort and saving energy. The proven square 360° detection area of up to 100 m² reduces the required number of presence detectors. Configurations such as light scenarios can be conveniently made via the new remote controls theSenda S and P.

Contact: www.theben-hts.ch

Theben AG KNX actuators:

MIX2 and FIX2



Theben is offering a complete MIX2 range for switching, dimming, heating and blind controls. The base devices of the MIX2 actuators with a removable KNX bus coupling unit can be flexibly combined with the MIX2 extension modules of your choice. This means that considerably less infrastructure elements are needed and system costs are reduced. With the new FIX2 compact actuator they offer an alternative, economic model. These are useful when only a base module or a base module plus the same extension module are needed. Alternatively when the removable bus coupling unit is not needed the FIX2 option can be considered.

Contact: www.theben.de/en

Theben AG

xtheServa KNX visualization



Theben theServa S110 is the high-performance KNX visualisation solution for lighting, blinds and temperature control via smartphone and tablet. The colours of the RGB LEDs can be conveniently mixed using the colour wheel and then saved. Integrated logic, scene and sequence modules make it possible to combine individual programs. Current weather data and forecasts can be linked via weather stations. Load management ensures automatic shutdown when thresholds are exceeded, theServa allows the integration of IP cameras and offers alarm management with automatic SMS reports.

Contact: www.theben.de/en

Theben HTS AG

theRonda KNX Presence Detector



The new theRonda KNX presence detector from ThebenHTS with two lighting channels is a convincing solution for energy-efficient lighting and climate control in large and high ceiling rooms such as entrance and sports halls or warehouses. The large and round 360° detection area with a range of up to 24 m can be limited as needed. The light can be controlled by constant light control with stand-by function or by manual switching. Functions such as teachin of the brightness switching value, fully or semi-automatic switching as well as setting and calling up scenes by remote control, increase the comfort.

Contact: www.theben-hts.ch

Think Simple S.r.l.

Vitrum KNX Series



From the elegance and simplicity of glass combined with the perfect mix of the KNX protocol and ergonomics, arises a switch with a simply inimitable design, unique for its beauty and purity of the materials. Vitrum has completely redesigned the switch: thanks to the combination of materials with a strong aesthetic impact and integrated KNX protocol, Vitrum is compatible with the entire group of KNX certified devices and controllers. Through a valuable processing, glass is sculpted to allow you to easily identify the command area. The multi-coloured backlighting makes Vitrum pleasing to the eye and easy to locate in the dark.

Contact: www.vitrum.com

Tokka Sp.Z o.o.

Flush mounted bus interface FMBI41



The flush mounted bus interface module FMBI41 is a mixed version of two KNX devices – a push button interface and binary output. The device has four inputs with detachable 4-pairs plug and switching output: 250 V AC/5 A. Each input as well as the physical output is parametrised individually by the installer. An ETS application also allows defining internal connections between inputs, physical and virtual outputs with trigger release. Multi AND, OR and XOR gates can be used when logical operations should be executed. With this device, the control of home and building devices becomes much easier.

Contact: www.tokka.pl

Trivum technologies

AudioBox - the advanced hifi system



trivum present their newest multi-room audio development, the "AudioBox". Simple plug'n play functions allow listening to music within minutes. Streaming player for NAS, AirPlay and internet radio. Moreover, it contains a FM RDS radio and an analog and digital input. The analog preamplifier output can be used flexibly as a preamplifier out, subwoofer out or second zone. A new DSP and stereo power amplifier with 2x25 watt offer more listening pleasure through higher dynamics. The AudioBox can be combined with all trivum Audio-Actuators as well as the trivum TouchPad. The AudioBox is KNX compatible and can therefore be integrated into a KNX system.

Contact: www.trivum.com

Trivum technologies

Software updates with trivum Version 8.58



The new software version 8.58 supports RTI as control element for the trivum products AudioBox, C4 and AudioAktors. Online streaming providers such as Simfy are now officially supported. This means that online music can be selected in just the same way as local music on a NAS server through the trivum APP or the trivum TouchPad. Track info like artist, track name and cover are shown in the visualisation. For the TouchPad the software version 2.01 is available. The updates add several improvements for AirPlay, like KNX events plus a redesign of the EasySetup WebConfig.

Contact: www.trivum.com

VIATRON GmbH

MusicClientOne



Viatron GmbH Germany presents the MusicClientOne now with universal interface. The integrated web radio and MP3 player for the audio matrix Viatron Autrix deliver music in different zones – fully controllable via KNX. With the requirements of comfortable multi-room audio and the ease of integration into the KNX bus system you operate the MusicCientOne – platform independently and without app directly on all web-enabled devices. Multi-room Audio – no matter where you are.

Contact: www.viatron.de

Video-Star Electronics Co. Ltd.

4 fold, I – I 0 V switch / dim actuator



ADTV-04/16.1 is a 4-channel I – 10 V switch/ dim actuator, the driving mode is passive, 16 A per channel for switching and output 100 mA per channel for controlling the ballast, each channel has a switch, dimming, scenes, manual control and other functions.

Contact: www.video-star.com.cn

Video-Star Electronics Co. Ltd.

4fold, LED Dimming Actuator, 350 mA/750 mA



KA/D 04.L1.I is a 4-channel constant current LED driver, each channel has a switch, dimming, scene and manual control functions. The input voltage is $12\,V\sim48\,V$ DC, each channel include two independent 350 mA outputs, while supporting two parallel channels with the output of 700 mA. This design is suitable for down lights, spotlights and flat light which required constant current driver. Meanwhile, the device has an output short circuit protection, over temperature protection, to ensure that the equipment is stable and reliable.

Contact: www.video-star.com.cn

Vimar SpA

New KNX Web Server



The new Vimar KNX Web Server is used to supervise the KNX system locally and/or remotely via smartphone (browser or Vimar By-web KNX app for iOS and Android), tablet or 10" Multimedia Video Touch Screen. The main features of the new device include the possibility to configure ETS projects by importing, the availability of load control and energy supervision functions, logical functions, the possibility to programme up to 30 (timer-operated) scenarios and the management of automatic e-mail notifications/alarms.

Contact: www.vimar.com

Weinzierl Engineering GmbH

KNX IP BAOS 777



New platform, new features: With the KNX IP BAOS 777 Weinzierl presents another device of the reliable BAOS series based on a completely new hardware platform: the body shape provides optimised connections and an OLED display on the front allows diagnosis and – together with a keypad – settings directly on the device. The device is configured via ETS and offers increased performance over previous KNX IP BAOS devices. The unit offers logging and also logic and timing functions. The KNX IP BAOS 777 it is suitable for connecting numerous applications over IP to KNX ETS, each with an individual database entry.

Contact: www.weinzierl.de



KNX Development Tool kScript



The increasing complexity of modern KNX devices requires new ways of development. As a model-based method kScript is a new and innovative solution to automate the development process and thus to increase productivity. With kScript the device or the application is only defined once as a script - this ensures consistency in the development. kScript offers all the options of a programming language such as loops and subfunctions. The kScript library creates the framework of the developed device in "C" syntax and the XML file for the KNX MT or for the ETS. kScript is available as an optional add-on for all versions of the new Weinzierl stack NGS.

Contact: www.weinzierl.de



WHD DAP 255 digital audio player



The DAP 255 is a network digital audio player with a stereo amplifier in mounting housing — and a real universal multi-unit. Songs can be downloaded on the internal 32 GB memory or played via a USB stick. The audio player also plays music from a central server in the house or your favourite songs from different internet radio channels. The DAP 255 supports Airplay, UPNP, DLNA and FTP. Through WLAN the music can be controlled directly by smart phone, tablet or KNX. For getting unlimited music pleasure connect more than one DAP 255 to a network.

Contact: www.whd.de

Windowmaster A/S

Control panels for smoke and comfort ventilation



FlexiSmoke™ is a new range of flexible, modular smoke panels for the control of window actuators for large buildings. A built-in LCD touch screen enables easy installation, configuration and maintenance via the BUS network. The KNX interface provides access to all the operation and status functions of the FlexiSmoke™. It allows a BMS system to utilise the window actuators, while continuously monitoring the state of each unit. Freely programable KNX I/O objects are available, making it easy to adapt the functionality of the KNX interface to the specific needs of the KNX system integrator.

Contact: www.windowmaster.com

Yönnet Bilisim Yazilim Egt. ve Dan. Hizm. Ltd. Sti.

Combo Modules ITR5XX Series



Yönnet, under its brand Interra, launches a totally versatile device series that covers many automation requirements in a smart building. These combo modules allow a variety of functionalities including lighting, heating, shutter/blind (two and four outputs) and fan coil (two and four pipes). Outputs of the combo module can be configured to different functions depending on the project needs, therefore supporting many combinations. The combo has been developed to provide a complete control in the residential and hotel sector. The Combo actuator is now available with 12 and 16 channel outputs. Modules are supplied over the KNX bus and do not need any other external power supply.

Contact: www.yonnet.com.tr

Zennio Avance y Tecnología, S.L.

KCI – KNX Consumption Interface



The KNX Consumption Interface (KCI) is the new Zennio interface for up to four meters with standard S0 pulse outputs. KCI monitors the measured electricity (energy and power), water and gas (volume and flow rate) consumption and allows easy access to this information via the KNX bus. A removable backup battery ensures that S0 pulses continue to be counted even during a KNX bus power failure. LED indicators enable the user to conveniently check the existence of communication with each S0 channel, as well as the battery status (low/ empty), information which is also available via the KNX bus. The device is DIN rail mounted (two DIN rail units).

Contact: www.zennio.com

Zennio Avance y Tecnología, S.L. DIMinBOX 2CH



DIMinBOX 2CH is Zennio new universal dimming actuator of two channels for up to 310 W or 125 W and regulates conventional, LED or low energy lighting. Apart from facilitating manual control and including ten logical functions, the device has two analog-digital inputs that may be configured as binary inputs for sensors and potential-free push buttons, as temperature probe inputs or as motion sensors inputs. DIMinBOX 2CH enables you to be competitive, since it allows through a single actuator to control not only lighting, but also other elements of your KNX project.

Contact: www.zennio.com



National Groups



KNX Belgium launches new stand concept at Batibouw 2014

This year was the fourth time in a row that KNX Belgium had a 100 m² stand at Batibouw, Belgium's leading building trade fair for consumers. This time, they used a new stand concept involving four different "boxes": the "Basic box" presented the advantages of simple KNX installations; the "Energy box" focused on energy efficiency and smart metering; in the "Comfort box" visitors could experience how diverse KNX functions can make day-to-day life considerably easier and more pleasant; and in the "KMO Box", KNX Belgium showed how KNX can



The KNX stand at the Batibouw 2014 fair



be used in commercial buildings. Thanks to this new concept, the KNX stand attracted a great deal of interest from thousands of visitors.

Contact person:

Herman De Vadder **Email:** info@knx.be **Website:** www.knx.be

Another successful GEBT trade fair for KNX China

This June, KNX China once again welcomed visitors to its stand at the Guangzhou Electrical Building Technology (GEBT) fair.

This year, home and building automation was in a new hall, hall 9.1, in which KNX China and its members (including both manufacturers and system integrators) once again occupied a central location. Other KNX members, including local KNX

manufacturers such as GVS and HDL, and international members like Schneider Electric and Wago, also had their own stands at the fair.

KNX Association International made its traditional appearance on the Pearl Promenade at the Agora stand, giving presentations spelling out the advantages of KNX, and looking at the ETS and KNX applications for smart homes and buildings. Also this

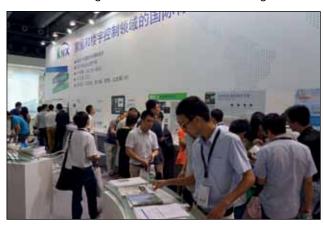
year, KNX China welcomed visitors to a KNX Technical Seminar on the second day of the fair, this time in hall 10.1, where a full room listened to presentations from KNX International, local Chinese KNX manufacturers, KNX integrators, and a representative from ITEI's KNX-accredited Chinese test lab.



Contact person:

Shen Pu

Email: info@knxchina.org **Website:** www.knxchina.org



A view of the KNX stand



An indication of the number of visitors at the annual GEBT fair

WorldSkills Americas 2014 chooses KNX as THE technology for its competition

As has become a tradition, KNX Association this year once again supported the WorldSkills International competition. This time KNX had the opportunity to contribute at WorldSkills Americas 2014, which was held in Bogotá (Colombia) from 2 to 5 April. This Latin American event featured more than 300 experts and competitors, who strove to demonstrate their skills in front of the nearly 30,000 attendees who visited the 40,000 m² competition area each day. KNX Association, in collaboration with KNX Colombia, supported the discipline Skill 18 (Electrical Installations), in which the competitors had to realise an installation based on the KNX technology. Competitors enthusiastically completed this task, which involved designing, commis-



sioning and programming the KNX installation for a house. Ten countries participated in this part of the competition: Argentina, Bolivia, Colombia, Costa Rica, Chile, Guatemala, Honduras, Mexico, Panama and Paraguay, all of whom

displayed a high level of interest in KNX. KNX Association congratulated all participants, and in particular the winners Brazil and Colombia.

In acknowledgement of their efforts, KNX Association awarded all competitors and



experts a free license for the ETS4 software, to enable them to expand their knowledge and raise the profile of the KNX technology across the continent. WorldSkills Americas Bogotá 2014 exceeded all expectations by bringing together more than 120,000 people. KNX is already looking forward to the next competition in Mexico!

Contact person:

Haiber Roland

Email:

haiberjimenezb@misena.edu.co **Website:** www.knx.org/co

KNX Denmark hosts seminar at EL & Teknik entitled "KNX Day 2014"

In May 2014, KNX Denmark was represented with a stand at EL & Teknik, the biggest fair in Denmark for the electrical power industry. The 72 square-metre stand featured KNX City, communications from KNX Denmark, and a wide range of solutions from key members of the National Group. This sent out a strong message about how businesses in Denmark are cooperating

with one another to promote and support KNX. In addition, KNX Denmark held a 'KNX Day' at the fair, consisting of II seminars covering various aspects of KNX. Aimed at installers, consultants and architects, the KNX Day generated a pleasingly large amount of interest. Each seminar started in the same way, by looking at the business opportunities presented by KNX. Attendees also

had the opportunity to network with other professionals interested in KNX. Lillian Andersen, President of KNX Denmark, said, "The next EL & Teknik fair is in two years, and no doubt we will take part again, with a dedicated KNX stand. Regarding the KNX Day, it is likely that we will keep that separate from the fair next time, as giving it its own day will enable us to make a bigger impact."



Contact person:

Lillian Andersen

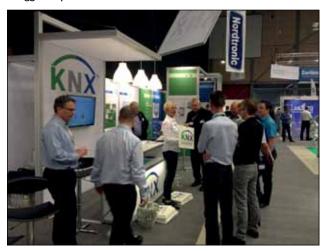
Email: Lillian.andersen@ schneider-electric.com

Website:

www.knxdenmark.dk



Lillian Andersen, President of KNX Denmark, at the KNX Day seminar



The KNX Denmark stand at EL & Teknik

Winner of Finnish KNX Award announced at SähköTeleValoAV 2014 fair

The winner of the Finnish KNX Award is traditionally announced during the opening ceremony of the SähköTeleValoAV trade fair, which this year was attended by more than 600 invited guests and representatives of exhibiting companies. The Finnish KNX Award 2014 went to the National Group for Education and Training, a group of educational institutions that develop, produce, approve, and organise the distribution of KNX educational and training materials. Two schools - Tampereen Ammattikorkeakoulu and Yrkesinstitutet Prakticum - accep-ted the award on behalf of the group, with Valkeakosken ammatti-ja aikuisopisto additionally receiving an honorary diploma. These schools played a major role in the activities of the Education and Training Group, and in making the educational materi-



The Finnish award ceremony

als available in both Finnish and Swedish.

The training materials are for use by teachers at those educational institutions that offer courses in building automation. Complying with the requirements of the Finnish Ministry of

Education, they include all materials required both for teaching and for compulsory student projects. This comprehensive package is designed to ensure that students throughout Finland receive standardised tuition. The KNX part is worth



six points (approx. 3 %) of the total available in University of Applied Science courses, and between three and six points (approx. 4 %) at "Secondary Vocational Institutions". The course is used by the 28 members of the KNX Finland Education Group, or around 28 % of those Finnish state educational institutions offering training for installers and engineers and courses in electrical engineering and automation.

Contact person:

Johan Stigzelius

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KNX France organises successful workshop and plans ETS seminar



KNX France workshop at Paris Porte de Versailles

KNX France organised a KNX workshop for "Prescripteurs" (Consultants), which took place on 17 June at the Porte de Versailles exhibition centre in Paris. Aimed at architects, designers and consultants, the purpose of the workshop was

to showcase the benefits of KNX, and to make attendees aware of the degree of energy efficiency that can be achieved with KNX. Participants included KNX France members, KNX Association, and two design firms that had already

used KNX in their projects, and who demonstrated those projects to the delegates at the workshop. The presentations covered a range of topics, including an introduction to KNX France by its president, Patrice de Carné of ABB. Other talks



dealt with the challenges facing the market (Rexel); regulation (ABB); the KNX City concept (KNX Association); and the benefits of ETS (Hager and KNX Association). "This is the first time that we had spoken to an audience that did not already know us, but the feedback we received was positive," said Amel Karim, Secretary of KNX France, adding: "We are currently preparing a similar event specifically for installers, at which we will announce the launch of ETS5."

Contact person:

Amel Karim

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KNX Germany at Smart Home Nord Conference



The Smart Home Nord conference was well-attended

KNX Germany and KNX Association were both represented at the Smart Home Nord Conference, which took place in the north German town of Oldenburg from 26–27 February. The conference was a collaboration

between one of the pioneering KNX training centres – the bfe in Oldenburg – and the association SmartHome Initiative Germany, a non-profit focused on promoting the Smart Home concept in the market. The first

day of the conference consisted of a selection of workshops running in parallel, while the second day was made up of a series of presentations. During his speech, Joost Demarest, CTO of KNX Association, stressed



the ten advantages of KNX over the other solutions available, backing his statements up with remarkable figures showing the growth in the numbers of supporting manufacturers and users worldwide over the last few years. Joost Demarest drew the audience's attention to the undisputable success of the eCampus for newcomers to KNX, and gave some insight into the KNX-related activities that had taken place worldwide in 2013.

Contact person:

Hajo Deul

Email: knx@zvei.org
Website: www.knx.de

KNX Greece educates electrical and lighting market



Visitors to Electrotec 2014 experienced a range of KNX-controlled scenarios.

KNX Greece shared a stand with the National Association of Electrical Installers at Electrotec 2014 – the main exhibition for electrical installers and engineers in the Greek market.

Held every two years, the purpose of Electrotec is to promote new products and trends in the field of electrical installation and lighting to electrical installers and engineers in the

Greek market. Electrotec 2014 was held at the Metropolitan Expo Exhibition Centre, Athens, 8–11 May, and included a wide range of companies promoting electrical instal-



lation and lighting products to over 2,000 visitors. The KNX Greece stand included a hands-on KNX installation running various scenarios. It was deemed a great success, as it helped electrical installers and engineers to appreciate the benefits of KNX, and gave the National Association of Electrical Installers a much better idea of the KNX technology and its effect on the global market.

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Awareness of KNX on the rise in India

This year, KNX India participated for the first time at Elecrama, India's biggest fair for home and building control, which took place in Bangalore from 8-12 January.

KNX India welcomed 6,000 guests at the KNX India members' stand. The KNX member

companies ABB, ASIN, Hager, Jung and Somfy, as well as the KNX partner companies Entelechy, Sapthashree and the KNX Userclub India, showcased the latest KNX solutions.

The fair meant that 2014 got off to a great start for KNX India. The aim this year is to focus

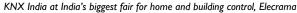
more on the KNX Userclub, which will continue to promote knowledge of KNX throughout the market.

There are already more events scheduled for the KNX National Group and the KNX Userclub to further raise awareness of KNX in India.



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KNX: your key to the future

In collaboration with the Association of Engineers of Syracuse, KNX Italy organised a KNX event in Syracuse called "KNX: your key to the future". The event was sponsored by CEI, one of the two Italian standardisation bodies.

Massimo Valerii, President of KNX Italy, said, "European legislation on energy efficiency in buildings means there is now a greater emphasis on decentralised building systems. KNX -which meets the requirements of the European Standard EN 15232 - is the answer to the need for low-energy buildings. KNX Italy will therefore be supporting further events of this kind in various cities in Italy." The event, attended by more than 100 member engineers, highlighted the advantages of choosing the KNX technology. First, delegates were introduced to the opportunities opened up



The KNX workshop in Syracuse at the beginning of the presentation entitled 'The opportunities presented by the KNX system'





by the KNX system and shown how energy-efficient solutions can be implemented according to the standard EN 15232. The second part of the programme then introduced participants to the only tool necessary for realising KNX projects: ETS. The rest of the presentations were devoted to individual KNX applications such as renewable energy, lighting, heating, smart metering and remote control.

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New KNX National Group Japan gets straight down to business

The founding meeting of KNX Japan, which was attended by a number of major Japanese and international companies, took place in February 2014. All members greatly appreciated the KNX activities that had taken place up until that point in the Japanese market, and were - and are-keen to see more activities being undertaken. The Group's President is Naoki Aihara from the major Japanese member company Fujitsu General, the Vice President is Hiroyuki Takahashi from ABB, and the office of Secretary is held by Takayuki Shintani. The first activity of the new Group was to take part in



The founding members of KNX Japan at its launch meeting

the International Smart Grid Fair in Tokyo – this was the second time that KNX had been represented at this event. As solutions for sustainable cities, the KNX standard and KNX City were two of the most popular attractions among visitors to the fair.



KNX has made a brilliant start in Japan, as confirmed by the many visitors to the KNX stand.

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Korean Electronics Association now Secretary of KNX Korea

Three years ago, KNX was still unknown in the Korean market. However, after three years of ongoing activities organised by KNX Korea, KNX is now the most popular technology in the market. In order to consolidate the growth of KNX in Korea, KNX proudly signed a cooperation agreement with the Korean Electronics Association, one



The cooperation agreement is a milestone for KNX in Korea

of the biggest associations in the country. The focus of this cooperation is to organise joint events and KNX training, and work towards the approval of KNX as a Korean standard. This cooperation marks the start of a new era for KNX in Korea, and will have a major impact on developments in Asia and worldwide.



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KNX Luxembourg at "myenergy days" and light+building

From 21 to 23 March, KNX Luxembourg participated in the "myenergy days" 2014 trade fair. This is one of the most important events in Luxembourg for companies and organisations active in building construction and energy efficiency. As usual, the Luxembourgish KNX National Group had a KNX stand at the fair, focusing on energy efficiency. Statements about the KNX city concept were also displayed to visitors at the stand. Together with GME (the Association of Importers and Wholesalers of Electrical Equipment of Luxembourg) and the Technical Lycée of Luxembourg, KNX Luxembourg invited all members to attend the trade fair light+building 2014, to find out



The group visiting the KNX City stand in Frankfurt (light+building 2014)

about new KNX products and solutions recently launched by KNX Members. In addition, KNX Association International

welcomed the group of visitors from KNX Luxembourg to the KNX City booth, where KNX staff introduced the group to



the latest version of ETS, including showing how ETS can be used on a tablet, and introducing them to the various ETS apps, etc. In all KNX Luxembourg has consolidated its ties with members and has now also established contact with schools.

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KNX now a member of the Dutch Building Automation Trade Association





KNX Netherlands has joined the Dutch Building Automation Trade Association, which brings together a large number of players in the home and building control market. This means that KNX can now help steer, as well as join in the discussions and actions to enlarge the overall market for home and building

control, which will be the association's key aim over the next few years. One of the Group's main activities this year will be its participation in the conference Bits, Bricks and Behaviour. This national home and building control conference takes place on 6 November 2014 and focuses mainly on end users, investors

and facility managers. The aim of the conference is to give the target group a better insight into the need for, and importance of, home and building control. With the slogan Making money with technology, a large number of contributors from the target group will not only show why home and building control is im-

portant, but will also define the role and function of the various aspects of home and building control. Some notable KNX projects will also be presented. More information about the conference can be found at www.conferentiegebouwautomatisering.nl.

Contact person:

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KNX New Zealand collaborates with the Electrical Contractors Association of New Zealand

KNX New Zealand and the Electrical Contractors Association of New Zealand (ECANZ) will be working together to promote the move towards compatible platforms across the electrical industry.

The two organisations share important synergies and ECANZ members will benefit from KNX's manufacturer-independent open protocol providing a truly converged solution in home and building automation on a single platform.

"ECANZ is keen to provide the best products and technology for its members so they can provide better solutions for their clients. Compatible platforms and products are beneficial to our members and therefore our support of the KNX standard is a sensible step", says Chief Executive Neville Simpson.



Ulrich Frerk of KNX New Zealand (left) and Neville Simpson of ECANZ (right)



"We are very pleased to be working with ECANZ," commented Ulrich Frerk, President of KNX New Zealand. "The range of interoperable KNX products on offer from over 340 manufacturers is growing daily and when you look at projects like the Rotorua Police Station and the ANZ Tower in Sydney, you see just how complex and varied an electrical installation can be," he added.

Contact person:

Ulrich Frerk

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KNX city presented for the first time in Poland

On 3rd June, the National Group KNX Poland organised the first KNX City Conference at the Kamienica Theatre in Warsaw. The 150-plus attendees, comprising mainly architects, were first introduced to general topics relating to KNX such as "Internationalisation and the Growth of KNX". This was followed by information on how to implement energy-efficient

projects and how to create an integrated living environment in order to realise more sustainable cities based on the KNX technology.

The purpose of the event was to promote KNX as the standard for home and building automation. This included getting across to the audience that KNX is more than just a system for controlling individual buildings,

and that the KNX standard can be used to integrate separate KNX projects into a city with the aim to turn it into a KNX city in the long term.

Such events are in line with the main objectives of the Polish KNX National Group, namely to raise awareness of KNX and to increase the number of projects using the KNX technology in the Polish market.



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KNX facts and figures presented by Jan Worobiec, President of NG KNX Poland



The audience at the conference

The first steps of KNX Romania

Following the founding meeting of KNX Romania in 2013, the new national association received official approval in February 2014. It held its first Annual General Meeting at the Auditorium Pallady in Bucharest, an outstanding example of a building equipped with the KNX technology. The AGM included the usual formal activities, for example voting on rules and electing members of the executive board, defining the various committees, and approving new members - of whom there are already 14. Additionally, members agreed on the Group's activities for 2014, namely: developing the KNX Romania website (www.knx. ro), producing KNX flyers and brochures, participating in the IEAS (International Electric and Automation Show) in September 2014, introducing KNX Romania



Members of KNX Romania at its first AGM



at various events with the aim of recruiting new members and organising technical seminars to promote KNX among both professionals and students. With such an array of activities, it is clear that KNX Romania is ready to fly... with the help of KNX.

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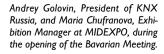
KNX Russia promotes KNX both in and outside Russia

The Russian KNX National Group participated in the "Bavarian Meeting" for KNX integrators, held in Moscow. This event introduced Russian KNX system integrators (both companies and individuals) to this year's new products and the latest developments on the market. KNX Russia also took part in the Smart City Forum on 27 May. The purpose of this event, aimed at building automation professionals, was to inform more than 50 professionals about trends in the market for building automation systems. In addition to these events, KNX Russia and its members also collaborated with Messe Frankfurt Russia on producing the magazine "Business in Russia", which was distributed to Englishspeaking readers in Frankfurt, Germany. The magazines were given out to exhibitors in halls 8, 9 and 11 at the light+building 2014 trade fair, to inform people about the main developments in the world of KNX in Russia.





The audience at the Bavarian Meeting.





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KNX Road Show South East Asia

KNX Association's first KNX Road Show of 2014 took place in South East Asia from February 10–21. The Road Show travelled to Indonesia, Singapore and Malaysia. During each two-

day stop, KNX members and partners explained the benefits of the KNX standard. Manufacturers were also introduced to the KNX technology with the aim to promote the use of it

in their product development. Each event concluded with a KNX training session, organised by the local training centre in each country. Prompted by the many positive developments in



Malaysia, the Road Show was also used to launch the KNX Userclub Malaysia, as a result of which the Userclub immediately acquired a large number of members. Thanks to the hard work of KNX South East Asia over the last two years, KNX has become the leading technology in the market. It therefore came as no surprise that almost every event in the Road Show was sold out.



The first ever KNX event in Indonesia, which kicked off the KNX Road Show

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KNX Spain works with FENIE to promote KNX nationally



KNX Spain seminar at the ASINEM Association of Majorca, which was attended by more than 45 delegates.

Together with various local branches of FENIE (Spanish National Federation of Employers of Electrical and Telecommunications Installers), KNX Spain has organised three seminars so far. These one-day events introduced delegates to KNX and showed them how it can be used in building automation and energy management. The first seminar was held in

January 2013 in Zaragoza, and attracted over 40 delegates. Speakers included the Secretary of KNX Spain, Michael Sartor, and the General Manager of the KNX Spain member company



Hogartec, Enrique Barrera. The second event, held in January 2014 in Seville, was attended by more than 45 delegates, and the third was also held in January, this time in Majorca, again with over 45 delegates. According to Michael Sartor, "These seminars allow industry professionals to learn first-hand about the great possibilities that KNX offers. They have been remarkably successful, and have encouraged us to negotiate with FENIE to offer more events during the latter part of 2014."

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KNX Swiss at light+building 2014

KNX Swiss organised a trip for 55 of its members to the light+building trade fair in Frankfurt between 30 March and I April.

The motto of the trip was: "Experience KNX". The Swiss contingent travelled together by bus and stayed at a hotel near the fair grounds. At the fair they were given VIP tours that brought them to 8 KNX Members' stands. These prearranged tours in small groups meant they could learn quickly about the manufacturers' latest products without needing to queue. The day concluded with an introduction to ETS5, the KNX Award ceremony, and an official welcome for the Swiss National Group at the





KNX city stand. On the second day, the visitors had plenty of time to explore the fair at their own pace. This was the second time that KNX Swiss had arranged a trip to this fair, and it was again a great success. The hotel is already booked for light+building 2016!

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KNX UK celebrates a great night at the BCIA Awards



KNX UK members at the BCIA Awards

8 May 2014 was a great night for KNX UK at the annual Building Controls Industry Awards, which recognise excellence in the building-controls industry. KNX UK has been a major supporter of the event for many years and members have always been out in force to capitalise on valuable networking opportunities and raise the profile of KNX. This year, two KNX UK system integrator members were shortlisted for awards in the category of Independent Building Controls and BEMS In-

staller: KNX Consultants for its Equine Centre installation in the Scottish Borders, and Bespoke Automation for its installation at the historic Astor Barn. In addition, KNX UK Board Member Andy Davis of Siemens was voted Engineer of the Year



and ABB was shortlisted in the category Technical Innovation of the Year – Products for the Busch-Jaeger Comfort Touch and App.

lain Gordon, President KNX UK, said, "It was a great night for KNX as a whole. We were delighted that two of our KNX UK integrators' projects reached the final. This will encourage our members to go for more recognition at future events and is a sure sign that KNX is very much on the rise in the UK."

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New Training Centres





ABB has set up a KNX training Centre in Shanghai, China. The training centre will be open to all the engineers and designers interested in KNX. ABB plans to provide KNX basic training courses concluded with a Partner certificate after successful completion of the course.

Contact: www.abb.com.cn





The AKJANXA training center is the first training centre approved by KNX international in Ecuador and has as main objective the promotion of the KNX technology and the spreading of knowledge about the KNX standard in the region. The demand for knowledge and the trend of alternative energy sources in the country require professional and scalable solutions in the field of energy efficiency and smart spaces, automation and control, demonstrating

high levels of security and remote management. The training centre has certified professionals with extensive experience in education and projects based on the KNX standard. They want to share these skills, knowledge and experience with their students, in this way contributing to the knowledge society and technological infrastructure of the region.

Contact: www.knxcenterecuador.com





BEMCO, a leading independent electrical wholesaler, has launched the first central London KNX training centre. The facility is designed for electricians, installers, developers, architects and designers to learn about KNX. The training centre will offer the accredited KNX Basic course and a range of one day courses focusing on particular KNX technology topics including: lighting control, heating control, door entry, touch screen technology and remote control using iPad/iPhone/smartphone ap-

plications. Courses can also be tailored to requirements, whether they be knowledge building for consultants/designers, or technical workshops for integrators. The facility can also be used by manufacturers to promote their new products. BEMCO has 8 branches around the UK and will offer roadshows and training facilities at these locations on demand.

Contact: www.bemco.co.uk





The vocational college Gladbeck is a public vocational school in Recklinghausen (North Rhine-Westphalia). Currently around 1,500 pupils attend classes at the school offering technical, commercial and home economics education. Since years the KNX basics are taught as a part of the electronics education, which is an important part of the end exam. The technol-

ogy is also part of the education in the two-year vocational technical school. In order to more strongly educate pupils in the area, they will now get the KNX Partner certificate after completion of the end exam

Contact: www. berufskolleg-gladbeck.de





The activities of the vocational school 5 in Linz, in terms of KNX technology, consists of planning and configuring a KNX system with their apprentice field engineers and programming and commissioning KNX devices. Apprentices in the field of building services are trained in KNX with emphasis on diagnosis and troubleshooting in KNX systems, so that the prospective electrical professionals can competently install, program, and operate a KNX system. They

also offer further education to the point of shear building control systems. In this secondary module nearly only KNX exercises and content is given during a period of five weeks. People wanting a KNX certificate have the opportunity to visit five evening classes at the BS Linz for the basic course training and take an exam for the basic course certificate.

Contact: www.bs-linz5.ac.at/impressum.html



INDIA Bitscraft Integration Service (BIS)



Bitscraft Integration Service (BIS) is strategically located in the silicon valley of India, Bangalore, dedicated to train and develop talented young engineers in the future proof KNX technology. A minimum of 4 KNX (basic) training sessions are planned for 2014 (winter, summer, monsoon, spring). The BIS program director brings an extensive experience in building/industrial automation, a substantial benefit for new KNX integrators. BIS services are focused on total integration solutions for

modern smart buildings, industrial units and smart homes including design, implementation, commissioning and training. BIS extends the continuous support to their customers even after project commissioning through annual maintenance contracts. BIS's other activities include environmental support, green initiatives, safety trainings and organizing seminars.

Contact: bitscraft_integration@hotmail.com



ITALY

Building Intelligence Group KNX Training Center



The Building Intelligence Group has been active in KNX since 2006 and its owners have over 10 years of experience in home and building automation. Over the years, BIG has carried out projects of varying size and complexity, winning the first edition of the KNX Italy award in 2011 in the category "Best Italian project". BIG is not only a KNX training center, but is also a system integrator and software development company. BIG develops "BIG

Studio", software used to manage every complex KNX project. It is BIG's goal to bring a maximum number of people into contact with the KNX technology and obtain theoretical and practical skills in installing, programming and improving KNX projects. At the end of the KNX Basic Course, students passing the exam will become KNX Partner.

Contact: www.bigsrl.it



ITALY

Cnos-Fap Sesto San Giovanni



CNOS-FAP follows the example of Don Bosco as the basis for its educational offer: his cleverness, his common sense and his deep spirituality helped him create a teaching system whose purpose is to develop the whole individual - body, heart, mind and spirit. CNOS-FAP's environment encourages everybody to do his utmost best. In this way, the student becomes more responsible and takes on the attitude to choose the good, the true and the beautiful things in life. Facilities are set up for educators and trainers to

be as comfortable as possible. Everyone, as a family, is concerned to work together in order to guarantee safe, clean and tidy places. Buildings have lifts or slides, with no architectural barriers. The indoors locations are used for lessons and for school other activities. Classrooms, laboratories, offices and the canteen are spread over four different buildings overlooking the internal courtyard.

Contact: www.cnosfap.lombardia.it



DMS

Digitale Mess- und Steuersysteme AG

DMS AG Ditzingen was founded in 1981 in Gerlingen and currently has a subsidiary in Suzhou, China in addition to four locations in Germany. The priorities of the medium-sized technology and services company are building, factory and process automation. The core competence of DMS AG is to develop high-quality and intelligent individual automation solutions. This is made possible by an extensive process and industry expertise, many years of

experience in integrated building automation and after intensive development efforts. The expertise in solutions covers all fields of control engineering. They have in particular expertise in the development of automation solutions for buildings in which the highest standards of quality and reliability are also placed under severe environmental conditions.

Contact: www.dms-ag.de



SPAIN

Escuela Politécnica Superior de Sevilla



The Department of "Tecnología Electrónica" of the University of Seville is located in the "ESCUELA POLITÉCNICA SUPERIOR". The Department has extensive experience in designing electronic systems, communication software and specific software/hardware for industrial processes and home/building automation. The school has an interest in teaching KNX,

KNX product design and carrying out research and technical support. It has solid experience in designing gateways, OPC systems, integration solutions with other protocols and visualisation software for personal computers, industrial computers and embedded systems.

Contact: www.eps.us.es



ITALY

Fenice Green Energy Park – KNX



Fenice's aim is to satisfy different needs in the most efficient way possible: providing new skills for a competitive and sustainable industrial environment (training) and achieving an effective cultural impact (education) by combining new productive attitudes with responsible consumer behaviour. A specific goal was not set, other than to find an innovative way to reach a maximum number of people. This is achieved by providing an open space to yield the skills and knowledge every per-

son will eventually apply in his own working or living context in an interactive and social way. Expert counselling is provided to entrepreneurs and installers. Strategically, it was necessary to create a highly collaborative and motivated background among different actors such as industry, public administration and third sector, all operating within the same geographical area.

Contact: www.fondazionefenice.it



GERMANY

Handwerkskammer Potsdam



Handwerkskammer Potsdam

The centre of industrial promotion Götz - Training Centre of the Chamber of Potsdam has conducted its first certified KNX basic course in March 2014. As the largest and most modern training centre of the craft in the region, it offers ideal conditions for the education and training of their members, masters of business administration and building energy consultants. The KNX technology has long been part of the master training in the electrical trade. Because of an increased demand

for certified courses, their experienced instructors have been trained again and the latest technology was purchased. They will start initially with two certified basic courses per year, supplemented in 2015 by advanced courses. Brandenburg companies have the opportunity to become official KNX Partners without traveling far and thus start professionally installing the KNX technology for the the end user.

Contact: www.hwk-potsdam.de



GERMANY

Hochschule Mittweida



In the context of education and training for light and building Control (ITWM) the Mittweida institute of technology made the students familiar with the latest trends in the field of energy-efficient and intelligent building technology. A profound knowledge of building system technology teaches the student about KNX hardware and its programming. In addition, the course deals with the topic of lighting technology, which contributes significantly to better

understanding lighting control and regulation. Practical skills in dealing with KNX are achieved through problem-oriented, realistic experiments and consolidated in the form of research papers. The topics of the dissertations are often part of cooperation services with the companies ABB CONTACT and Alexander Maier GmbH.

Contact: knx-itwm@hs-mittweida.de





JUNG Vilnius - a subsidiary of Albrecht Jung GmbH & Co. is a logistics, support and training center for the entire former Soviet Union (Lithuania, Latvia, Estonia, Russia, Ukraine, Belarus, Caucasus region, Moldova, Uzbekistan and Kirgizstan) as well as Poland. Main activities include: sales, logistics, consulting, training, technical support and seminars. JUNG Vilnius has one of the best show rooms and training facilities in the Baltics. Main activities of the JUNG Vilnius Academy include:

KNX basic and advanced course training, but also KNX product training, seminars for architects, designers, electricians, installers, sales people and entrepreneurs. Most KNX products are available from stock, making practical training very efficient. JUNG Vilnius partners have proven their knowledge with a high level of competence in projects, some of which have been nominated by KNX association.

Contact: www.jung.lt





Kinden Corporation is one of the best engineering companies for integrated systems in Japan and is active in a wide range of business activities, including electrical power transmission/ distribution, instrumentation, information & communication works, air-conditioning & plumbing works, interior systems, sustainable energy work etc. Kinden is not only active in Japan but also overseas. Kinden Corporation has decided to establish the first KNX cer-

tified training centre in Japan at its own training centre, the heart of the educational activities at Kinden. The pu – pose is to spread the knowledge about the KNX system – the worldwide standard – to its employees. This will enable Kinden to tie up with manufacturers and offer KNX to meet individual customers' needs in Japan.

Contact: www.kinden.co.jp

JORDAN Noor ala Noor



The KNX Training Centre Noor ala Noor is the first KNX related center in Jordan and has the goal to provide KNX basic training to sales and marketing engineers, design, testing and commissioning engineers as well as to green building industry professionals. The KNX product range includes energy monitoring devices, lighting controls, blind and shutter control, security, environmental control (HVAC), presence and movement detection as well

as audio visual management. The KNX technology can help implementing numerous strategies as part of the official LEED training, in this way KNX solutions enhance LEED certification. The training centre Noor ala Noor will offer four KNX basic trainings per year and certify up to 16 professionals.

Contact: nidal@nooralanoor.net

UAE
Total Automation



TOTAL AUTOMATION organises centre KNX certified basic courses for home and building control in Dubai, the most thrilling place in the world. The company has been providing high quality KNX solutions and services for over 15 years. The five day course provides participants with indepth understanding in design, installation and commissioning of the KNX system, assisted by certified KNX tutors with over 10 years hands-on experience. The state-of-the-art training centre is equipped with

sophisticated tools and equipment available to the participants. Customized training solutions on visualisation, energy management, integration to other systems and smart devices etc. can also be provided. After completing this course the participants will have sufficient knowledge to work on KNX projects in a professional and profitable manner.

Contact: www.tacdubai.com

JAPAN
TÜV Rheinland Japan
Ltd.



Active in Japan since 1978, TÜV Rheinland Japan Ltd. established the Global Technology Assessment Center (GTAC) in 2005. It offers a variety of testing facilities and services under one roof to meet the everincreasing conformity testing demands of manufacturers to have their products accepted on the market. TÜV Rheinland serves a wide variety of industries, including consumer electronics, office equipment, medical devices, automotive suppliers, and many others. Dedicated teams

perform qualified services, many of which are independently accredited for competence. Approved for WiFi and other protocol testing, EMC facilities, outdoor & indoor PV testing, power grid connectivity and more, the teams are ready to respond to the changing requirements of the global marketplace, genuinely caring about success and safety of their clients and their customers.

Contact: www.tuv.com/en/japan/home.jsp





New Scientific Partners



FRANCE

Commissariat à l'énergie atomique et aux énergies alternatives



CEA-LETI, the Laboratory for Electronics and Information Technology is operated by the Direction de la Recherche Technologique at CEA. It mainly aims at helping companies to increase their competitiveness through technological innovation and transfer their technical know-how to the industry. As a major player in the MINATEC Micro-Nano technologies innovation centre, CEA-LETI benefits from 8,000 m² state-of-the-art facilities, with equipment worth some 160 million Euro. It is currently employing about 1600 peo-

ple among whom CEA employees and 100 people from industrial partners. CEA has a very important patents portfolio and filed more than 200 patents and 700 publications last year. The six departments of CEA-LETI cover activities in the fields of silicon technology, micro-electronics, micro-systems, optronics, system and sensors design, telecommunications, smart ambient, and technologies for bio and health.

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SPAIN Institute IMDEA Energy



The IMDEA Energy Institute is a non-profit research centre located in Mostoles (Madrid) working on different energy related topics including smart management of electricity demand, energy systems with enhanced efficiency and energy storage coupled to renewable energies. The Electrical Systems Unit recently implemented a lab-scale home automation demonstrator integrating several KNX devices for measurement and regulation, energy storage and renewable energy sources such

as photovoltaic panels. The system will be used as a benchmark system to test different energy management strategies and validate the expected performance. During the development of new control algorithms for the home automation system, particular attention will be paid to energy efficiency and the integration of renewable energy.

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SWEDEN

School of Engineering, Jonkoping University



The School of Engineering at Jonkoping University organises education in embedded systems: as part of these different communication classes, it plays an important role in the overall competence profile of the students. With the growing popularity and interest in KNX, the department now wants to add KNX related laboratory sessions and discuss KNX in the context of building automation. The

University also has dedicated educational programs for architectural lightning and KNX is of special interest when it comes to lighting control systems. This is of particular importance since some of the market leaders in lighting system design and manufacturing are located in close vicinity of Jonkoping.

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GREECE

National Technical University of Athens



National Technical University of Athens The Lighting Laboratory of the National Technical University of Athens is active in: Lighting education for students (courses "Lighting technology", "Rational use of energy in buildings, active and passive systems", "Installations and networks")

• Training of engineers in lighting techniques • Photometric tests on lamps, luminaires, signals, signs • Rational use of energy in indoor and outdoor lighting installations (buildings, roads) and energy management systems • Lighting controls (photosensors, ballasts, dimmers) for uti-

lization of daylight • CCD imaging systems for lighting controls • Design of luminaires (optical parts, controllers) • Measurement of road and tunnel lighting with CCD camera on moving vehicle • Energy audits of lighting installations • Minimization of light pollution of outdoor lighting • Chaos phenomena in power supplies of lamps • Harmonics and power quality in lighting systems.

Contact: fvt@central.ntua.gr



Universidad Tecnologica Nacional



The Santa Fe Regional Faculty began operations in 1953, along with five other founding faculties of the National Technological University, one of the three biggest national universities in the country. The Faculty has established strong links with the industry of the coastal region and the entire community through transfer work and technological research. Today it is a centre of excellence in the training of engineers for careers in civil engineering, electrical, mechanical, industrial

and information systems. It has approximately 3,000 students, 430 teachers and 144 researchers. Currently it performs training of professionals (national and international) in the area of domotics and intelligent buildings, in the form of education at distance, with expert teachers and remote laboratories equipped with different technologies.

Contact:

ciencia_y_tecnologia@frsf.utn.edu.ar



KNX Userclub / KNX Professionals



Professional - teachers and students in turns

The organisers of the meeting "KNX Professionals Germany e.V." invited to Tiengen near Hochrhein. The program was colourful, as for example with its visit of the oldest of the twelve River Power stations of Europe (1894) in Rheinfelden. In the years between 2003 and 2010 they regenerated this place to a very modern Power Station. The system integrator Max Böck (Member of KNX Professionals) planned the lighting technology in this project. This power station runs down to six floors under the earth. Therefore, it was very urgent to plan and build safe lighting technology. Another motive for this meeting was to give training to the professionals. Consequently presentations were given and the professionals were informed about the current status of ETS5. The speaker was André



The summer meeting of KNX Professionals e.V. in Tiengen (Schwarzwald)

Hänel from KNX Association in Brussels – he is in charge of the field system and tool.

He prepared for different questions, as for example: What is new about ETS5? and Why did it come into life at all? For several points he gave live de-

monstration for instance on the extended parameter preview at multi selectiv devices. The next presentation was given by Rainer Bülskämper (Data design System GmbH), one firm which developed software for CAD – aspecially for electrical



engineering, sanitary, heating, airconditioning, ventilation and photovoltaic. He offered the software for the topics planning, computation, simulation and documentation with ETS5.

Concluding the meeting the members had a get to-gether to discuss internal affairs, where they accepted four new members into the club KNX Professionals

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KNX User Group Hong Kong participates in its first exhibition, Build4Asia

From 7–9 May, KNX User Group Hong Kong exhibited at the region's leading fair for building technology, Build4Asia. Following the foundation of KNX User Group Hong Kong in October 2013, the member companies Suffice, GVS, HDL and JUNG Hong Kong set up a joint KNX stand at the fair where they presented their latest KNX products to a tremendous number of visitors.

The stand not only gave visitors an insight into KNX installations in general, but also introduced them to the concept of KNX



The busy KNX Hong Kong stand at Build4Asia.



city, which received a great response, and was seen as a very positive step in the right direction. More events to promote KNX in Hong Kong are planned, very soon.

Contact person:

Sharon Li

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Sharon.Li@tuv.com

KNX Professionals Polska consolidates KNX's position in Eastern Europe

On 28 March, a Polish KNX Professionals group was founded in Zalesie Górne. The main aim of the new organisation - called KNX Professionals Polska - is to serve as a platform where everyone in the KNX world can share their experience. The group is made up of system integrator companies and one official KNX Training Centre. In total KNX Professionals Polska has 13 members, and is already busily organising activities for the group. KNX Professionals Polska will be registered in Poland as an independent association under Polish law. During the founding meeting the constitution was approved and the following Executive Board elected:



The official minutes of the founding meeting of KNX Professionals Poland



- Andrzej Stachno President
- Adam Dziedzicki Vice President
- Tomasz Janecki Secretary

KNX Polska and KNX Professionals Polska will work together very closely and conduct some joint activities. Initially KNX Polska will provide support to KNX Professionals.

Contact person:

Andrzej Stachno

Email: info@knxpolska.org **Web:** www.knxprofessionals.pl

All change for KNX Professionals Spain

In January 2012, the KNX National Group Spain and KNX Professionals Spain decided to collaborate on various activities and events. Subsequently the two associations took the decision to merge to form a single body, with KNX Professionals Spain becoming part of the National Association KNX Spain in January 2014.

This merger will have distinct advantages for KNX Professionals Spain members, for example specialised events for system integrators, indepth technical workshops, an online platform, etc.

Following the merger, the

community of KNX integrators and installers in Spain continues to grow and position itself as the key player for projects requiring the design, programming, installation, implementation and maintenance of home and building automation systems. For further information or how to join, please contact Michael Sartor, Secretary of KNX Spain (see contact details below).



archive picture



Contact person: Michael Sartor Email: michael.sartor@knx.es

KNX Userclub Kuwait signs cooperation agreement with Kuwait Society of Engineers

Since the foundation of KNX Kuwait in October 2013, further steps have been taken towards ensuring the sustainable growth of KNX in the country. In addition to scheduled events and training courses, KNX Userclub Kuwait has signed a cooperation agreement with Kuwait Society of Engineers, an association for electrical engineers. Because they share



Cooperation between KNX Kuwait and Kuwait Society of Engineers promises a bright future

many goals, this agreement benefits both parties and puts KNX Kuwait on track to become the best-known association for home and building control in Kuwait. Further events and training courses have been scheduled, which promise a great future for KNX in Kuwait and throughout the Gulf region.



Contact person: Yousef B Almutairi Email: yb.almutairi@paaet.edu.kw

KNX features at the WorldSkills Malaysia Competition for the first time





Contact person:

GP Chandran

Email: gpchand@zmc.net.my

One of the workstations at the WorldSkills Malaysia Competition.

On 20 February, on the final stop of the KNX Road Show South East Asia, KNX Association and KNX South East Asia founded the KNX Malaysia Userclub. The Malaysian KNX community responded enthusiastically to this public founding meeting, and more than ten compa-

nies joined on the spot. The spokesman for the newly-formed group is GP Chandran, a certified KNX Tutor at the KNX Skills Development Centre.

The first activity of KNX Userclub Malaysia was to get involved in the WorldSkills Malaysia Competition, formerly known as the Malaysia Skills Competition. The competition is restricted to under-21's, who must demonstrate 23 skills over the course of four days. This year the KNX technology featured in the competition for the first time, in the Electrical Installation discipline.

The winners were Muhamad Hafiz Bin Rohani (Gold), Muhd Nur Amin B Abd Kholin (Silver) and Ku Siti Khadijah Binti Ku Pera (Bronze). The medals and prize money were presented to the winners by the Malaysian Prime Minister, Najib Razak.



Simple controls and visual tours de force!

The subject of the meeting for KNX Professionals that took place on 24 June was: the interaction between KNX and visualisations. Here delegates received not just practical information, but also some visionary ideas and inspiration. The meeting concluded with a sneak preview of the new ETS5 software, which will be available from October 2014.

Visualisations are undoubtedly the most eye-catching part of a KNX home and building control system. It is their slick visuals that help KNX Professionals persuade end users to opt for home and building control in the first place. As the number of visualisations available grows and professionals have more creative freedom to work with, professionals have more than ever the opportunity to set themselves apart from their competitors. Although the technical possibilities today virtually have no limits, the desires of end users should always remain the ultimate determining factor. For them, simplicity and convenience comes first - and precisely that was the central message at this meeting. A more detailed report about the meeting and the various presentations can be found at www.knx-professionals.nl/ Bijeenkomst/Info/44.



In the afternoon there was plenty of opportunity for "speed dating" with manufacturers of all kinds of visualisations.



Networking is one of the main ingredients at Dutch KNX meetings, which take place three times a year.

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KNX at International Conferences / Fairs

Portugal

KNX training conference in Lisbon

More than 50 delegates from a range of KNX-certified training centres around the world (including Lebanon, Israel, Brazil, India and various European countries) listened carefully to presentations held by KNX Association at the recent KNX training conference in Portugal. Ufuk Unal updated delegates on major changes to the requirements for training centres and to the training documentation. Participants were also brought up to speed on



Ufuk Unal's presentation at the KNX training conference

the latest KNX facts and figures. André Hänel gave the audience a comprehensive introduction to the features of the new ETS5. The delegates then had a full day to test the beta version of the software, making them one of the first groups to do so (apart from them only KNX manufacturers had had the occasion to do this). ETS5 received a positive reception from the delegates.

Contact: info@knx.org

China

KNX city at the UrbanTec Asia Conference in Beijing

The focus of UrbanTec Asia (29-30 May) was on technologies and services for smart cities, and in particular the question of how to make megacities better places to live in. The aim of the conference was to provide a forum where town planners, governments, leading solution providers and other professionals could exchange ideas and network with one another. At times, discussions between delegates and speakers were heated, nota-



Delegates were capably introduced to the KNX city concept during the "Global Smart City Dialogue"

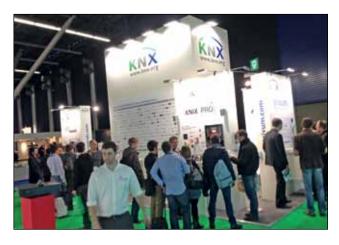
bly during the "Global Smart City Dialogue", which looked at environmental and policy issues relevant to megacities. During this event KNX successfully introduced delegates to the KNX city concept. During the conference, cities and companies (Siemens, Bayer, NEC, and Samsung) had the chance to introduce delegates to their latest relevant developments in a "brand showcase".

Contact: info@knxchina.org

The Netherlands

KNX Members present their innovations at ISE

This year KNX Association once again participated at the "Integrated Systems Europe" fair, together with a number of KNX Members. This time five KNX Members were represented at the stand: Divus, Elsner Elektronik GmbH, EMT Controls, Bleu Comm Azur EURL/iKNiX and Trivum Technologies GmbH. The KNX Members at the joint KNX stand presented solutions for visualisation (smartphones, tablets and PCs), re-



mote communication, and audio-visual applications for home automation systems. It is clear that solutions of this kind for home and building automation systems are becoming simpler and more convenient all the time.

Contact: info@knx.org

The KNX stand at ISE2014, at which five KNX Members were also represented

Japan

2nd Japanese Forum of KNX Technology a major success

On 4 July, in collaboration with KNX Japan, KNX Association held the "2nd Japanese Forum of KNX Technology and Applications for Home and Building Control". The 70 representatives of major Japanese companies who attended had the chance to learn about KNX during a series of presentations by major Japanese and international KNX members and partners. Just one year



Mr Shintani, Secretary of KNX Japan, plays host at the 2^{nd} Japanese Forum of KNX Technology and Applications.

on from its launch in Japan, KNX is now the top technology in the country, not only for export, but also in the domestic market. Further activities, such as another forum in Osaka and participation by the National Group at a number of Japanese trade fairs, are also planned and will further boost the success of KNX in Japan.

Contact: info@knx.org

Japan

KNX Demand Response soon to be put into practice

Following the major tsunami in Japan, the Japanese government has turned its attention to the issue of demand response, in order to save energy and integrate renewable energies more fully into the country's consumption patterns. Research into how to implement demand response strategies is being conducted by the Waseda University, one of the leading universities in Japan. Follow-



Demand response being put into practice at Waseda University – \mbox{KNX} to be integrated soon

ing a demonstration of model homes, the university is now very keen to integrate KNX into its solutions. Because KNX already has solutions available for demand response, thanks to KNX city, KNX will be a major component of the first demand response project, which is due to be rolled out worldwide.

Contact: info@knx.org

Greece

KNX in the spotlight at the International Conference for Energy Efficiency in Buildings

The International Scientific Conference on Energy Efficiency and Renewable Energy Sources in Buildings was held by the KNX Scientific Partner "TEI of Western Macedonia" in Kozani in Greece from I-3 June 2014. This conference brought together engineers, researchers, organisations, students, authorities and manufacturers from Europe and all over the world. More than 65 people attended the conference, the focus of which was on promoting methods, products



The conference focused on energy efficiency in buildings, and KNX was once again present as the main technology

and services in the field of energy efficiency and renewable energy sources. KNX stood out, as it was presented as part of the KNX city concept, which was explained to the audience by KNX Association System Engineer Vassilios Lourdas.

Contact: info@knx.org

Greece

KNX solutions for future engineers in Kozani

More than 65 students and professors attended the KNX Workshop organised by KNX Association in Kozani on 4 June 2014. During the Workshop, attendees had the opportunity to learn in a step-by-step way how KNX applications such as lighting and shutter control are realised, and what the advantages are compared to conventional installations. This part of the event was led by KNX Association In-



The KNX Workshop at the Technological Educational Institute of Kozani attracted more than 65 students.

ternational's System Engineer, Vassilios Lourdas. The Workshop also addressed the issue of training, and the question of how to learn KNX skills, so naturally the e-learning platform ETS eCampus and the Certified KNX Training Centres in Greece were discussed here.

Contact: info@knx.org

United Kingdom

Six more certified KNX tutors at Schneider Electric UK and IRL

In a boost to the local and international training activities of Schneider Electric UK and Ireland, six candidates took and passed the theoretical and practical parts of a KNX tutor crash course held in London on 20 May. The six tutors came from a wide range of countries – not only the UK and Ireland, but also Germany, Lithuania, Po-



The six tutors together with the representative from KNX International

land and Italy. KNX congratulates all new tutors on their results and looks forward to seeing intensified training activities from Schneider UK and Ireland.

Contact: info@knx.org

Japan

First KNX tutors from Kinden in Osaka successfully certified

KNX International and KNX Japan continued their local training efforts with a threeday KNX tutor crash course from 3-5 March 2014 at the training facilities of Kinden, one of Japan's leading integrated systems engineering companies, near Osaka. The three candidates, including a medal-winner from the recent Leipzig edition of WorldSkills (the worldwide competition for the best KNX installer) and his WorldSkills trainer, all passed the final theory and practical exam. These young gentlemen have thus now joined the ranks of the pioneers in this emerging KNX market.



The KNX training team (including Mr Shintani, Secretary of KNX Japan) and the three new KNX tutors, Mr Kinoshita, Mr Sakamoto and Mr Kawashita, together with their managers.

Contact: info@knx.org

China

KNX organises new KNX tutor course in Beijing

From 4–6 June, KNX again ran a KNX tutor crash course at the Dafang Hotel in Beijing. Candidates needed to undergo intense preparations prior to the course, studying the course material independently and taking evaluation tests. Ultimately six candidates joined the course: two potential tutors from ABB Shanghai, two from ITEI, one from LDS and one from Tiansu.

KNX would like to congratulate the new KNX certified tutors in China, both those joining the training staff at existing Chinese KNX-certified training centres, and those who will become tutors at KNX training centres that have yet to be set up.



The tutor from KNX International together with the six candidates and representatives from ITEI, the organisation running the KNX China Secretariat.

Contact: info@knx.org

Finland

KNX Finland organises KNX tutor course in Helsinki

KNX Finland ran a KNX tutor course at the Prakticum Technical School in Helsinki from 3-5 June for teachers at universities and technical schools who teach automation and KNX, to give them the chance to obtain KNX Tutor certification. The aim was also to establish an official Certified ++ training centre in Finland that could also train future teachers. The six participants came from Oulu University of Applied Sciences (OAMK), Tampere University of Applied Sciences (TAMK), Vocational Education Centre SEDU and Yrkesinstitutet Prakticum. All participants passed the exams, an achievement that means SEDU and OAMK can now establish a training centre and confer official KNX Partner certification, and Prakticum can apply for Training Centre ++ status.

Contact: info@knx.fi



The participants in the Finnish tutor course

Germany

KNX Days in Wiehl

Schneider Electric held its international "KNX Days" in Wiehl (Germany) from II-I3 June. KNX Association was invited as a speaker to present the soon-to-bereleased ETS5 and showcase the program's new functions. Nearly 50 people attended this presentation by Andre Hänel from KNX, which was followed by a very lively discussion about the new features and capabilities of the software. This was a great chance for KNX Association to present ETS5 once again at the event of one of our most active KNX members, following the first public announcement of ETS5 at light+building 2014.



KNX Association Tool Manager André Hänel presenting ETS5

Contact: info@knx.org

Belgium

New national KNX Journals available

In addition to the international KNX Journal, KNX Association now also offers three national KNX Journals: the Austrian, Belgian and French editions, which are now available for download at the KNX website. The national KNX Journals are written in the local languages and include not only general information about KNX, but also articles specific to the country, e.g. about local KNX projects.

Link: http://www.knx.org/knxen/knx-journal/index.php Contact: info@knx.org



The cover of the Belgian KNX Journal

KNX Conferences / Fair Schedule

2014



KNX National Group Conference

30. 9. – 2. 10. 2014 Dubai (UAE) Yearly conference for all KNX National Groups

www.knx.org



Euroskills 2014

2. - 4. 10. 2014

Lille (France)

Europe's largest international skills competition

www.euroskills.org



Hem & Villa Stockholm

2. - 5. 10. 2014

Stockholm (Sweden)

The largest do it yourself trade fair

www.hemochvilla.se



Home & Living Expo 2014

II. – I9. I0. 2014 Kirchberg (Luxembourg)

Fair for building, renovation, etc.

www.luxexpo.lu



CIHAC 2014

14. - 18. 10. 2014

Ciudad de Mexico (Mexico) Trade fair for building, energy and renewable energies

www.cihac.com.mx



Automation 2014

15. - 18. 10. 2014

Mumbai (India)

The prime industrial automation sector trade event in India

www.iedcommunications.com



WorldSkills ASEAN Competition Hanoi

23. - 28. 10. 2014

Hanoi (Viet Nam)

International skills competition in South East Asia

www.worldskillsasean.org



MATELEC 2014

28. – 31. 10. 2014

Madrid (Spain)

An ideal platform to present the new developments related to HBS and telecommunications.

www.ifema.es/ferias/matelec/default.html



KNX Scientific Conference 2014

30. - 31. 10. 2014

Wiesbaden (Germany)

Two-yearly event to encourage co-operation between universities/institutes and the KNX industry

www.knx.org/knx-en/community/scientific-partners/ scientific-conferences/index. php



European Utility Week 2014

4. - 6. 11. 2014

Amsterdam (Netherlands)

The largest and most comprehensive smart energy event of the year

www.european-utility-week.

INTERLIGHT MOSCOW

powered by: light-building

Interlight Moscow

11. - 14. 11. 2014

Moscow (Russia)

International Trade Fair for Decorative and Technical Lighting, Electrical Engineering, Home and Building Automation

www.interlight.messefrankfurt.ru

GET Nord

GET Nord 2014

20. - 22. 11. 2014

Hamburg (Germany)

Trade Fair Electrical, Sanitation, Heating, Air-Conditioning

www.get-nord.de

Integrated Systems Europe

ISE 2015

10. - 12. 2. 2015

Amsterdam (Netherlands)

Europe's No. I event for the professional AV and electronic system industry

www.iseurope.org



Batibouw

26. 2 - 8. 3. 2015

Brussels (Belgium)

Belgium's biggest building trade fair

www.batibouw.be



ISH 2015

10. - 14. 3. 2015

Frankfurt (Germany)

Trade fair for bathroom, building, energy, HVAC, renewable energies

www.ish.messefrankfurt.com



myenergydays 2015

20. - 23. 3. 2015

Kirchberg (Luxembourg)

The energy trade fair of the building sector

www.myenergy.lu

Imprint

KNX Journal international

The KNX Journal is the international magazine for home and building control based on KNX technology. Experts, practitioners and professionals show the way in applying and developing the KNX standard – from home and building control trends to devices and application projects; from the KNX members and partners to useful information on event stand and publications. Special attention is given to members and activities of the KNX Association international and their national groups.

Distribution

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www.knx.org/news-press/knx-jour-

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KNX Tools Online Shop: https://onlineshop.knx.org



Tool Support KNX Online Support: https://onlineshop.knx.org







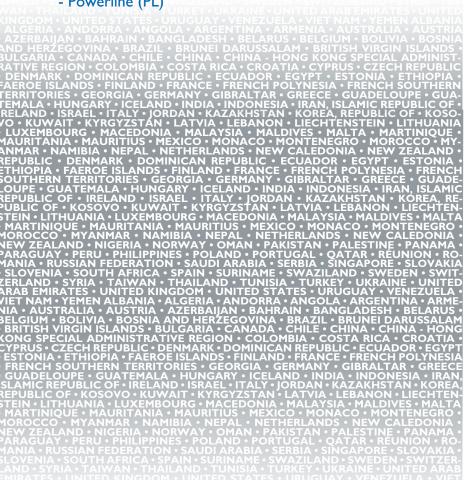






The worldwide STANDARD for home and building control

- One Standard (ISO/IEC 14543)
- One Tool (ETS)
- All Media:
 - Ethernet (IP)
 - Twisted Pair (TP)
 - Radio Frequency (RF)
 - Powerline (PL)





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MEMBER

43.323 Partners in 126 Countries



299 Training Centers



41 National Groups



105 Scientific Partners in 28 Countries



7 Associated Partners



16 Userclubs / **Professionals** in 15 Countries



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