

ABB to demonstrate the future of smart buildings today at Light & Building 2016

ABB, a global leader in power and automation, will demonstrate the future of smart homes and buildings at its 1,400 square meter exhibition space at the 2016 Light & Building event in Frankfurt Germany. ABB will highlight how its broad range of solutions increase energy efficiency, reliability and productivity for buildings and make life easier for its customers, channel partners and end consumers.

With a range of interactive and experiential displays, ABB will showcase the capabilities of its ABB, Busch-Jaeger and Striebel & John branded solutions.

Highlights will include commercial building automation solutions; the next generation of its free@home smart home system; a demonstration of the energy savings potential of the world's first circuit breaker and power manager, Emax2; and a new suite of engineering software, e-Design.

ABB will also showcase its collaboration with PointGrab for the first time. PointGrab provides detailed information about activity within buildings to effectively support energy-saving, facility management, occupant comfort and safety, as well as business intelligence, by using machine learning algorithms to use visual signals for detailed analytics. ABB's corporate venture capital arm, ABB Technology Ventures, recently announced an investment in PointGrab.

Adalbert Neumann, head of sales and marketing for ABB's Building Products business, said: "ABB along with its Busch-Jaeger business is at the cutting edge of smart homes and buildings. We continue to innovate and explore partnerships to ensure that we can deliver efficiency, security and comfort in commercial and residential buildings. A good example of such collaborations is our relationship with PointGrab. This company has an advanced solution which complements the technology of ABB, so we are exploring how we can work together to bring solutions to market even quicker.

"At the Light & Building event, we are able to demonstrate how the Internet of Things, Service and People enables rapid development in a number of fields to improve the experience our industrial customers can deliver and the comfort, security and convenience that people can receive in their own homes. We have some exciting new solutions that will be shown for the first time ever in March this year."

Technology highlights include:

- ABB-free@home[®] – the next generation of this smart home solution will be demonstrated for the first time, as well as the voice-activation functionality. The system controls up to 60 functions in the home and is a breakthrough thanks to the ease of installation and simple user interface, which opens up the possibility of a smart home to a new range of customers.
- Commercial building automation – as more and more products are connected, a strong, stable Internet Protocol connection becomes crucial. New ABB IP routers support the growing Internet of Things, Services and People.
- Safety lighting – ABB will showcase its latest lighting solutions for hazardous areas, from the DTS brand and its ABB Kaufel products, Primora and Serenga exit signs and escape route illumination.
- Emax2 and the Ekip Power Controller - the system is designed to limit the average power consumption in any defined time interval to a pre-determined maximum value. The system supports building operators to reduce energy consumption and building operating costs.
- e-Design software – a new suite of engineering software to make it easier to design and plan the electrical installation system in a full range of building projects.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.



Adalbert Neumann (Chairman Busch-Jaeger, right) and Garrelt Duin (Minister of Economic Affairs in North Rhine-Westphalia) at Light+Building 2014



free@home stand at the Light+Building trade fair in 2014

For more information, please contact:

Lynette Jackson
Head of Communications
Electrification Products Division
Tel: +41 43 317 54 04
lynette.jackson@ch.abb.com

ABB Ltd
Affolternstrasse 44
8050 Zurich
Switzerland

ABB demonstrates voice activation for smart homes

New free@home system controls 60 functions via voice activation

Demand ABB, a global leader in power and automation, has unveiled the world's most advanced voice activated full smart home automation system. Building on the recently launched innovation – free@home – the voice activation feature allows consumers to use voice commands to control more than 60 home automation functions.

The solution offers the unique capability to control the full range of applications in a typical residential smart home environment including lighting, heating, blind control and door communication. ABB launched free@home in 2014 to make it easier for installers to offer home automation, bringing the advantages enabled by the Internet of Things, Services and People into people's homes. The system makes it simple – via smart device or a personal computer – to manage multiple functions to create the home environment of consumers' choice. Now, by adding voice control, home automation becomes even simpler.

Mike Mustapha, Managing Director of ABB's Building Products business, said: "Our aim is to make home automation easier than ever and free@home creates a new space in the market. We continue to add functionality and our latest voice activation provides even more comfort and convenience for users. Coming home after dark, you can just command: 'turn the hall lights on' and lights are activated, or as you leave your house you can call: 'switch all lights off' and it's done."

According to digital research service BI Intelligence, the global market for smart homes devices was worth more than \$61 billion in 2014 and is expected to grow to \$490 billion by 2019, an annual growth rate of around 50 %.

Users can program the system to choose the names of rooms and areas. The system can be set so that users receive a confirmation that a command has been activated, so when you state: 'close the blinds in the living room', you would hear 'the living room blinds are all closed', etc. Additionally, users can ask the system questions about the status of the functions, such as: 'are the lights off in Thomas' bedroom?' and the system will provide an answer.

ABB has implemented a hybrid voice recognition solution which is a combination of grammar based speech recognition and a statistical speech model. Natural speech and 'commando based' input is possible, so the user can state either 'please can you switch the living room lights on' or 'living room – lights – on'. The dialog processor within the voice control system uses algorithms to recognize the user's intention and the context.

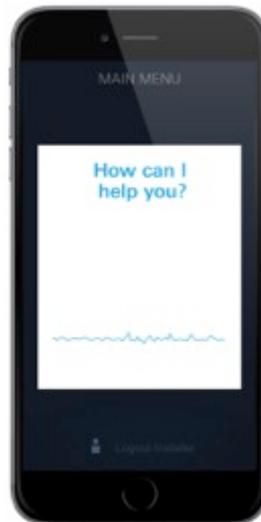
The user does not need to be trained as the speech model adapts based on the words programmed into the free@home system (name of floors in the home, rooms and functions being controlled). The system

gathers the data from the context, but also from a large voice library. Moreover, should the command not be complete enough, the system will ask the user for more information.

An additional enhancement is a new 'Actions' menu, which enables intelligent combination of different processes, using 'if... then', logic. For example, if the room temperature exceeds 25 °C, the blinds could automatically close. And if the movement detector is triggered, the user will receive a notice via email or via push notification on their smartphone.

As part of ABB's Next Level strategy the company is achieving growth through product innovation that unlocks the potential for increased automation in the home through the Internet of Things, Services and People. The company aims to enhance the comfort, efficiency and safety of people's homes through the application of intelligent solutions.

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The intelligent voice control ensures even more comfort, safety and energy efficiency in the smart home

[For more information, please contact:](#)

Lynette Jackson
Head of Communications
Electrification Products Division
Tel: +41 43 317 54 04
lynette.jackson@ch.abb.com

ABB Ltd
Affolternstrasse 44
8050 Zurich
Switzerland