



SMARTER BUILDING

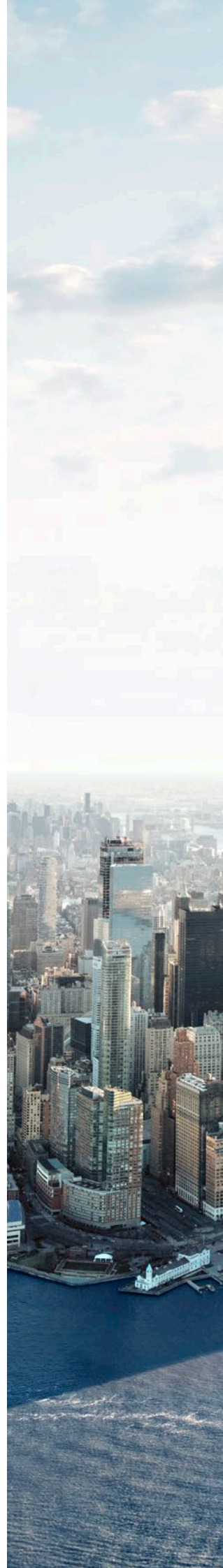
Create smarter

Architecture for today
and tomorrow

The world is getting smarter

The world is constantly changing, and with it so are the needs of the people. Digital, intelligent, and flexible building solutions are in greater demand than ever before and need to be factored into modern building design from the start. ABB is at the forefront of this change and is actively developing a range of smarter systems for homes and buildings with both designer and occupants in mind

new.abb.com/buildings





Integration of flexible supply and demand

Solar and EV markets will experience fast growth over the next 20 years



Digitalization

50 billion networked devices will be in use worldwide by 2022



Urbanization

70% of the world's population will live in cities by 2050

Tomorrow's buildings need to be more than just showpieces for unique ideas and plans. They should work together to create smarter, safer, and more efficient cities, built around intelligent infrastructures – that's what ABB believes anyway. If you agree, come and discover our modern, intelligent systems, and see how they place a world of design and functionality directly at your fingertips.

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Solutions for every need

ABB Eco System

The great thing about digital solutions is that when done properly, they should all work hand in hand to simplify and improve the lives of those using them.

The demand for digital solutions in modern buildings is greater than ever. ABB brings all functions and solutions seamlessly together under one roof, whatever the size of the building.



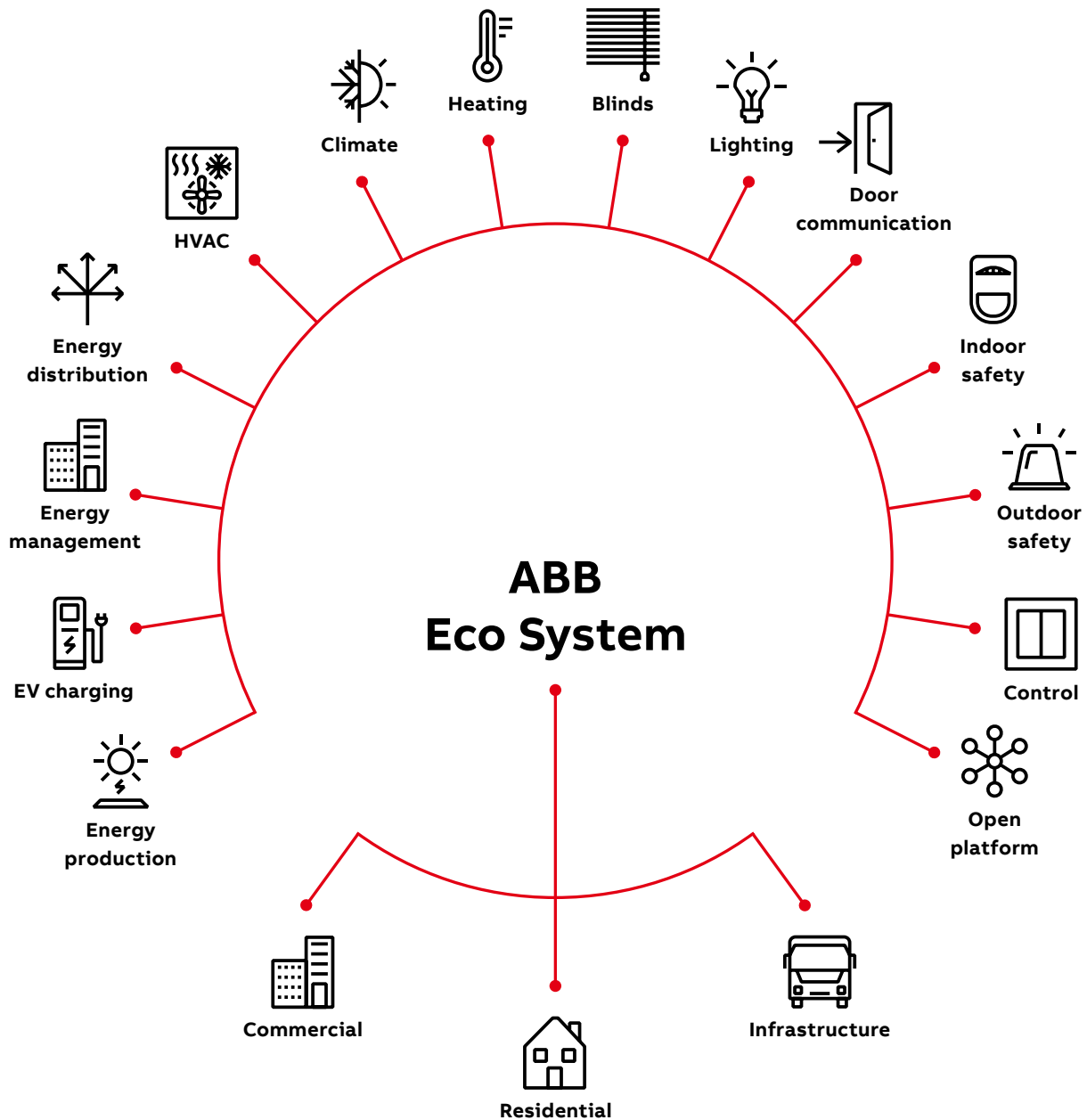


ABB Eco System

All ABB's building solutions and systems work hand in hand with each other and fall within the ABB Eco System. Together they provide a holistic answer to modern building management.

This also incorporates the cloud-based, cross-industry, digital system known as ABB Ability.

ABB Ability™

Controlling and planning smart buildings is now easier than ever: ABB bundles its digital services for homes and buildings in the MyBuildings portal under the ABB Ability umbrella. The online portal gives you access to many of ABB's tools and services that you can use for your individual needs. You no longer need to be in the building to control it. Thanks to state-of-the-art technology, ABB Ability connects people with their buildings in more ways than ever before.

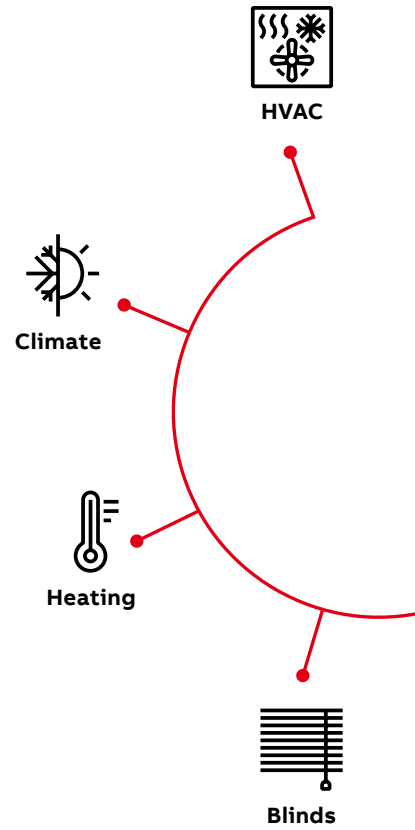
Efficient climate control in one smart system

Buildings need holistic
and sustainable solutions
to meet cost and energy
efficiency targets

HVAC

ClimaECO – all HVAC functions in one system. A significant step towards increasing energy efficiency and reducing operational costs, making your building more economic, sustainable, and comfortable.





— HVAC automation from room to management level.

Climate and heating

Heating, ventilation, and air-conditioning technology is made up of various systems that until now haven't been integrated into a single one. With the proven ABB i-bus® KNX system, it is now possible to automate all HVAC applications and combine them into a one-stop solution.

Blinds

The management of blinds can be effectively integrated into building and home automation. Open and close blinds or adjust the lamella functions fully automatically with timers, sensors, and electric motors.

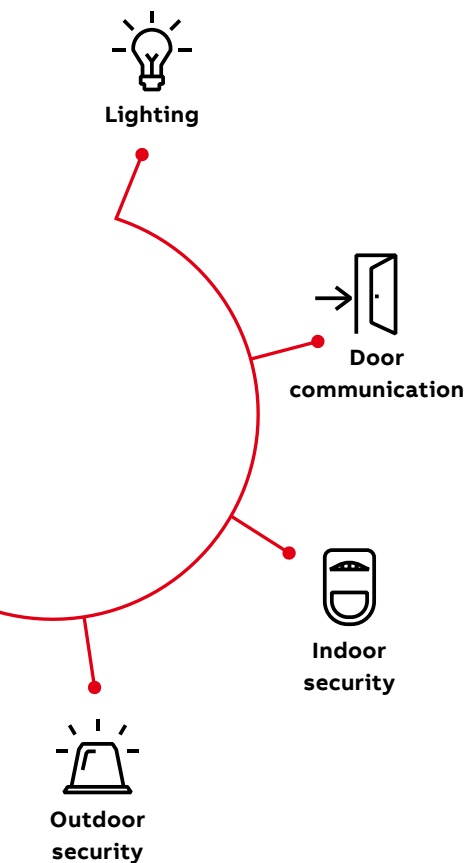


Safety and security go hand in hand

Today's networked security systems make our buildings safer for everyone who uses them

Lighting

Lighting that thinks for itself. In offices, hotels, and public buildings, light needs to function reliably and safely: but only when it's actually needed. Light switched on unnecessarily means wasted energy and money.





Door communication

Modern buildings can now be equipped with the ABB-Welcome door communication system, providing users with maximum levels of security and comfort.

Indoor and outdoor security

Modern-day technology and contemporary design combine to deliver the ultimate peace of mind both inside and outside the building. Whether it's protecting from intruders, fire, or floods or simply producing a greater feeling of indoor comfort, systems such as ABB-secure@home, Busch-Smoke alarm, Busch-Presence detectors, and Busch-Watchdog have got you covered.



A state-of-the-art building requires an equally modern security system.

Control and monitoring from anywhere

Technology that is about
simplifying our day-to-day
lives



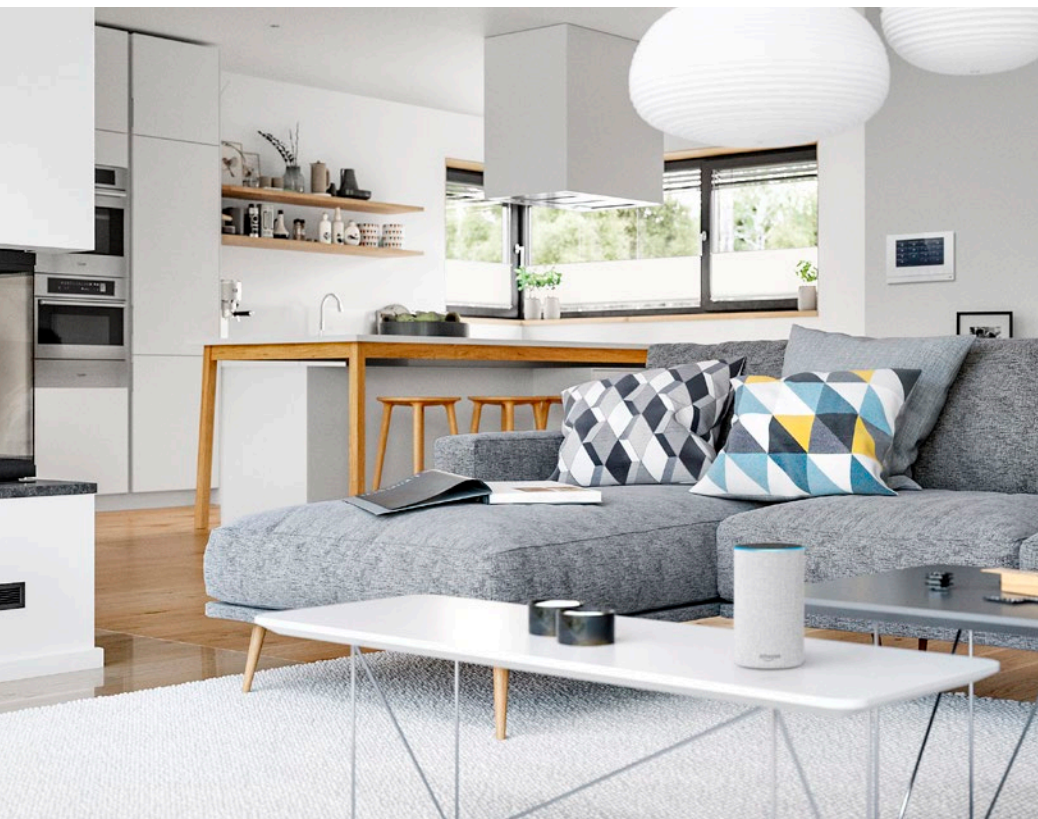
Control

Whether via a switch, a panel, or an app for your smartphone or tablet – you decide how you would like to control your building. Blind, light, heating, air-conditioning, and door communication can be easily controlled in line with your personal preferences. You can use all functions individually or combine them with each other. In other words, you determine the type and number of functions you want to intelligently control yourself.



Open platform

Modern cloud architecture monitors and optimizes the operational processes of residential and office buildings, industrial facilities, hotels, shopping malls, and schools. You have the option to plan ABB-Welcome, ABB i-bus® KNX and ABB-free@home® systems, and as well as to extend system functionality with remote access or voice control.



Control



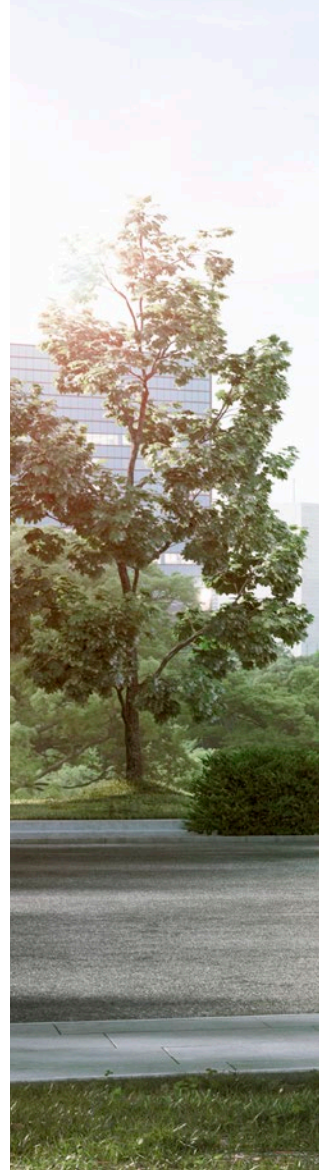
Open
platform

—
Your Smart Home can be controlled via voice command using Amazon Alexa, Apple HomeKit, or Google Home.

Energy efficiency as a future expectation

Collecting and monitoring energy and consumption data is the key to increasing energy efficiency

The Terra 53 DC charging station is suitable for highway rest stops, gas stations, car dealerships, branches, and heavily frequented inner-city areas.



Energy production

Network and plant protection solutions are developed specifically for power generation plants. They detect both over- and undervoltage as well as changes in the network frequency. They are used, for instance, in larger photovoltaic and wind power plants.

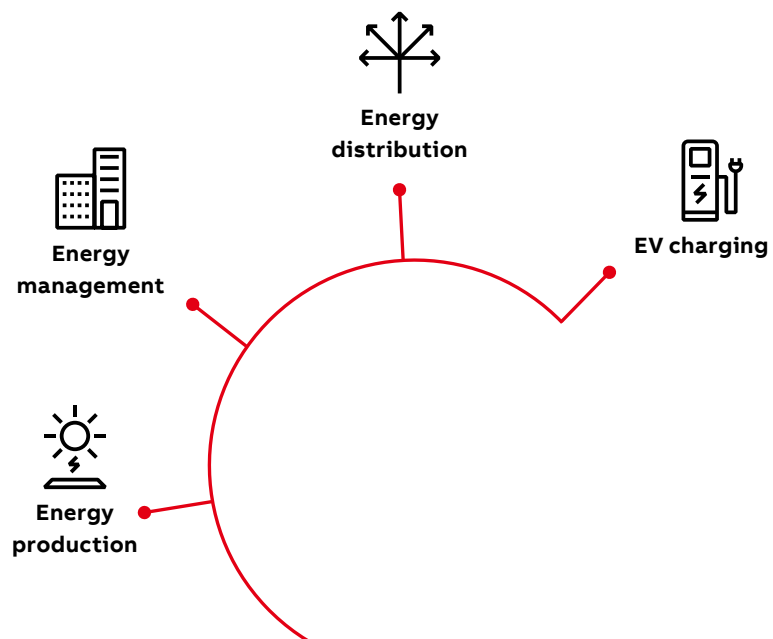
Energy management and distribution

A solution that saves, analyzes, and increases transparency: from light, heating, and air-conditioning consumption to the energy management of a building from one central point. This ensures intelligent energy consumption and efficient operational processes.



EV charging

Charging is the new refueling. Fast, easy, and available everywhere – wherever you are. With electromobility, you maintain the flexibility you've come to expect.



More than a question of taste

Design by ABB

Great design is fundamental to providing people with exactly what they need and desire in their lives. As well as pleasing aesthetically, it should also have a strong element of functionality to help people make the best possible use of their surroundings.

ABB's attention to detail extends to everything from the initial drawing to the finishing touches, from the smallest contact to the most functional surface. All with a view to creating something that leaves people feeling inspired and in control every time they see or touch it.

—
The Busch-SmartTouch®.
Designed to impress with
both its look and its feel.





Architecture places technology at the forefront

Modern design needs to reflect the ever-increasing role of technology in today's residential and commercial buildings

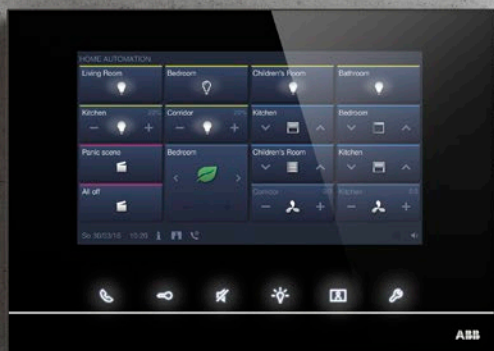
ABB products are not only some of the most technologically advanced on the market, they're also recognized for being some of the most beautiful. Whatever the shape, whatever the form, ABB impresses with the diversity of its designs and is continuously coming up with fresh, new ideas that combine design and functionality, enabling a customer's vision for their building to come true time and time again.

An example is our award-winning thermostat. Material quality and precision are delivered through its bead-blasted aluminum and hardened glass exterior, while simplicity of use is achieved by reducing control settings to the most frequently used essentials such as adjusting the temperature.



ABB has been recognized on numerous occasions for the achievements in innovation and design.





Clean-lined, minimalistic, functional. ABB values technology and design equally and its touch displays are a prime example of this.

The latest technology is fundamental to improving building efficiency and security but means nothing if the design fails to inspire. ABB motion detectors are an example of how state-of-the-art technology and design work beautifully hand in hand.



Function in its most beautiful form

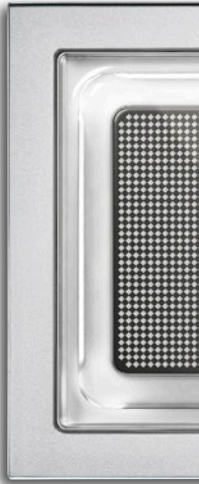
Maximum functionality and a personal touch: with intelligent control elements for buildings that are as individual as their occupants. ABB sets standards in designing products that blend seamlessly into every kind of interior

State-of-the-art control panels are designed to fit perfectly into a room's design without stealing attention from the overall look and feel.

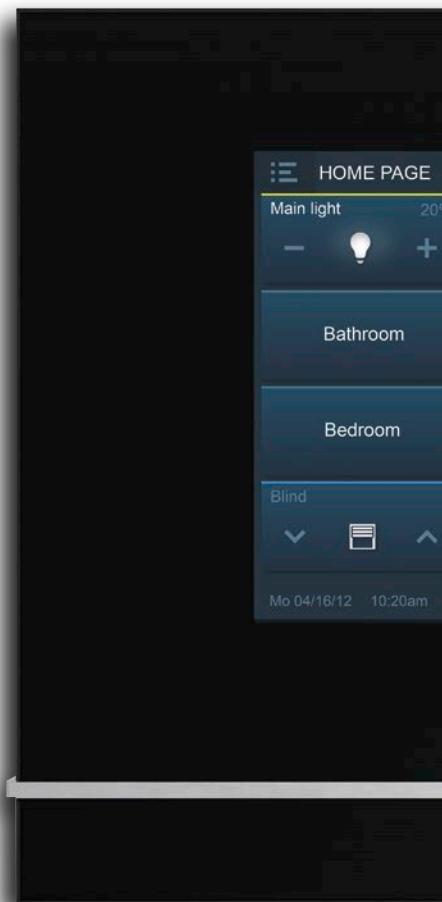
The right solution for every requirement

With a wide range of well thought-out products, optimal door communication can be achieved for any type of building thanks to 2-wire bus technology for easy installation, coupled with high-quality, carefully coordinated materials. This makes ABB-Welcome suitable for both initial use in new buildings and for subsequent integration during modernization of any type of property.

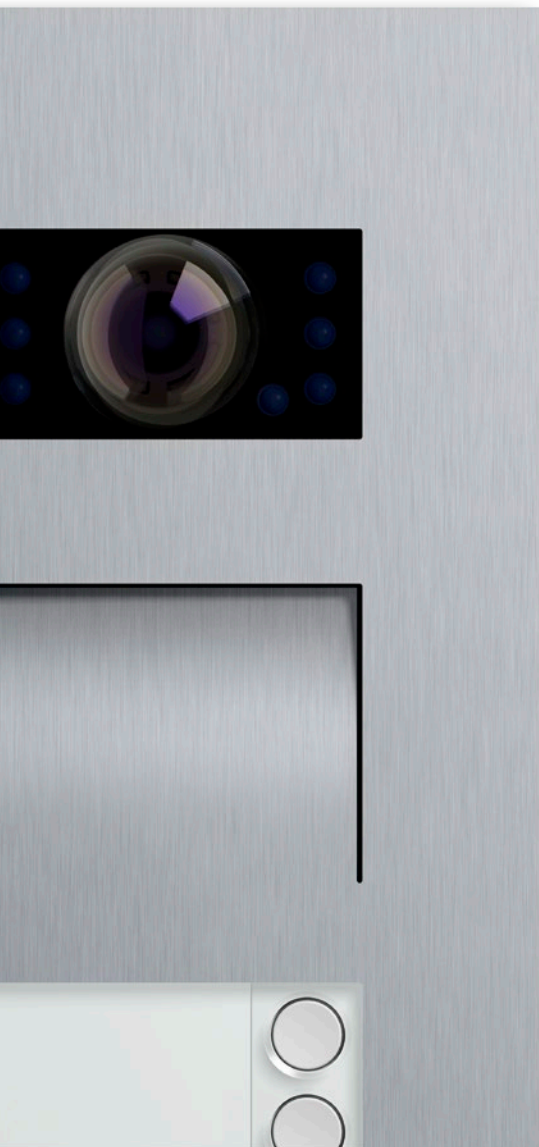
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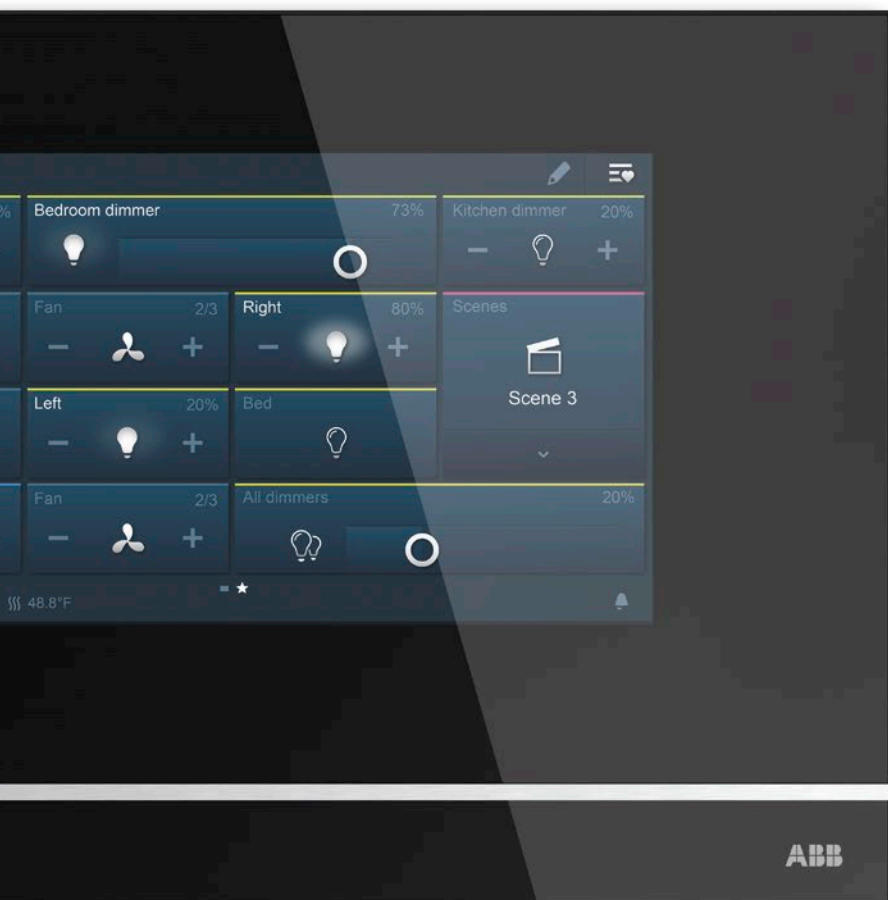


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- 01 ABB-Welcome outdoor video station
- 02 Busch-SmartTouch® 7"
- 03 Busch-Icelight®
- 04 ABB-tacteo® KNX sensor
- 05 Busch-Presence detector
- 06 Busch-Radio BTconnect, future® linear

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06

Switches for every kind of building design

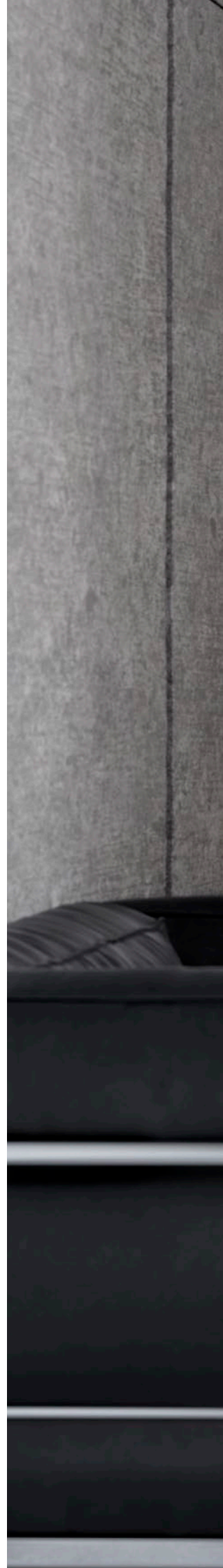
Outstandingly consistent

At ABB we attach great importance to the details. Such as a switch's shape or feel, its surface or acoustics, its color or material. And it's the range of these details that means we can now offer an extensive portfolio of switches to suit every type of personality and every style of building.

We take switches from being a necessary after-thought and turn them into a fundamental part of a room or building's design.



Unwaveringly stylish and consistent in form, material, and design: pure stainless steel offers 100% quality and durability.





Diversity of choice to support every vision

A range of switches and sockets that put the finishing touches to design-oriented hotels, offices, hospitals, and other public and residential buildings

Your vision and ideas shouldn't be held back by switches and sockets that stand out for all the wrong reasons. That's why ours come in a range of shapes, colors and finishes to complement every kind of room and building design imaginable.

Timeless design and modern functionality create individual living ideas.

01



02



03

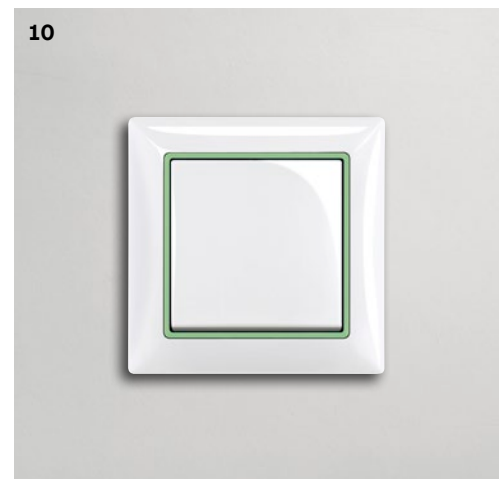




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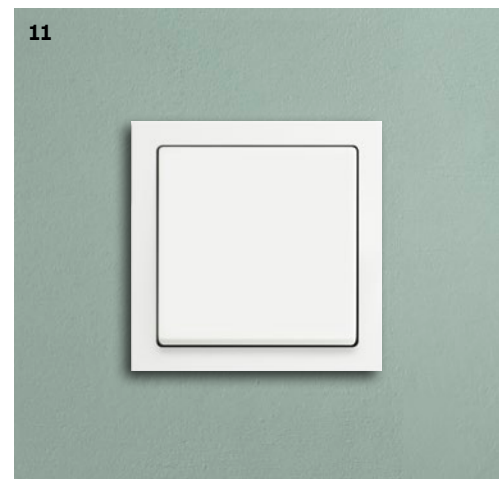
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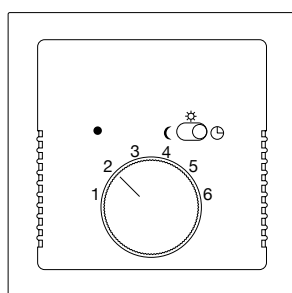
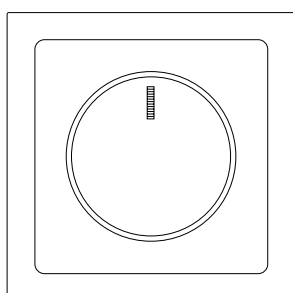
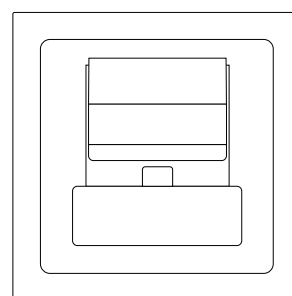
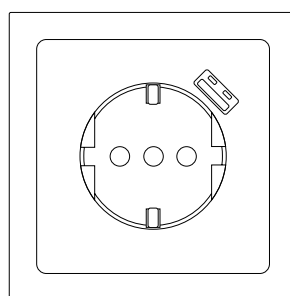
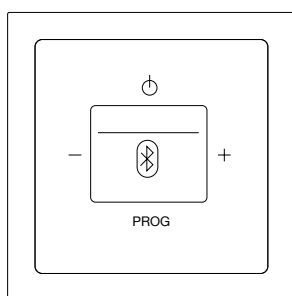
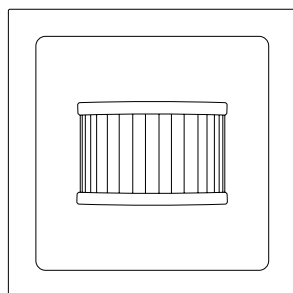
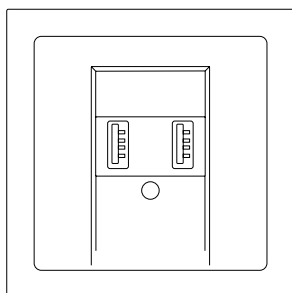
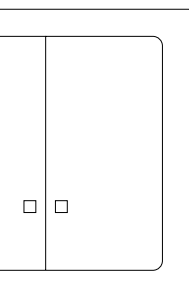
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01 Impressivo
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02 carat®
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03 pure stainless steel
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04 Zenit
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05 Busch-Dynasty®
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06 Busch-axcent®

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07 Sky Niessen
—
08 solo®
—
09 Swing®L
—
10 basic55®
—
11 future® linear

Ultimate functionality has never looked this good

Building control is easier than ever thanks to a wide variety of functions that offer simplicity through the latest technology





— Besides smart solutions ABB offers a wide range of conventional solutions to control an automated building manually.

From light switches through blind control to smartphone charging stations: our wide design portfolio offers you a comprehensive range of functionality to meet all your requirements and ensure a stylish, uniform appearance. The switch ranges are particularly suitable for design-oriented hotels, residential buildings, offices, hospitals, and public buildings.

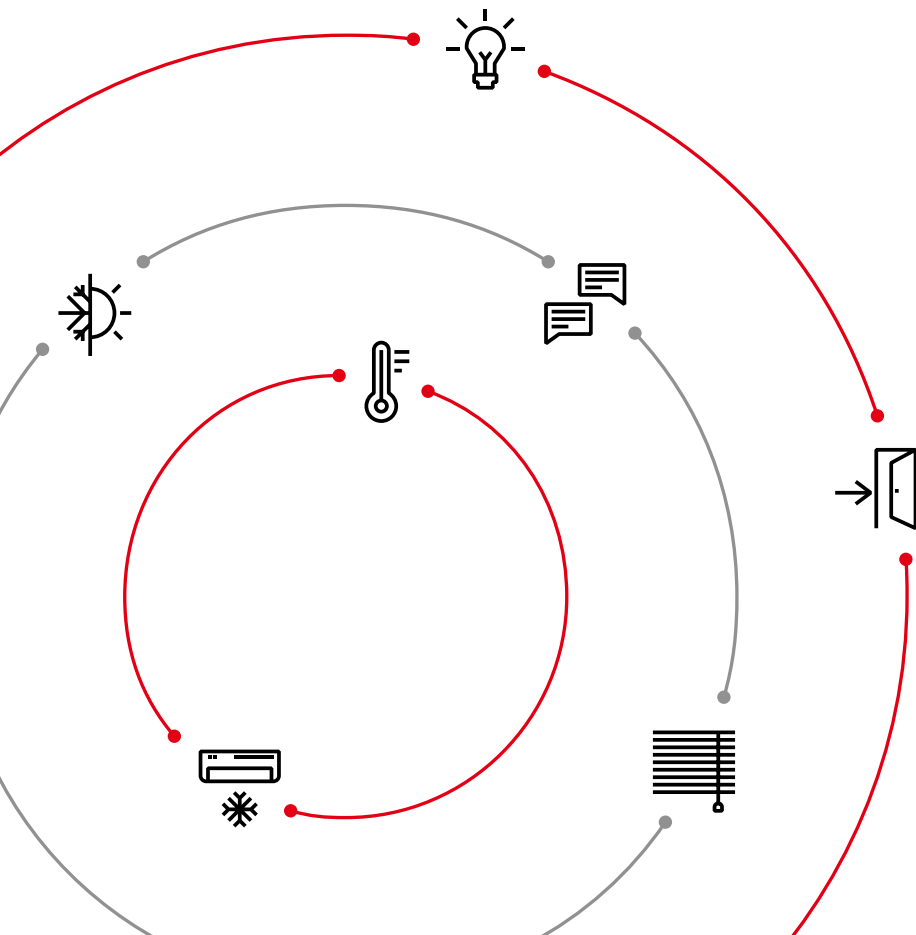


Building intelligence powered by smart technology

ABB building and home systems

Flexibility, efficiency, security. Powering today's and tomorrow's modern buildings requires more than just creative ideas. ABB not only understands what a smart building should offer, it is also an expert in knowing how to develop the technology behind it.

Systems such as ABB-free@home®, ABB-Welcome and ABB secure@home make the best possible use of ABB's i-bus® KNX technology to offer a comprehensive range of solutions that ensure an ABB-powered building reliably gives users a unique, individual experience.



—
Intelligent buildings
are powered by the
smartest technology.

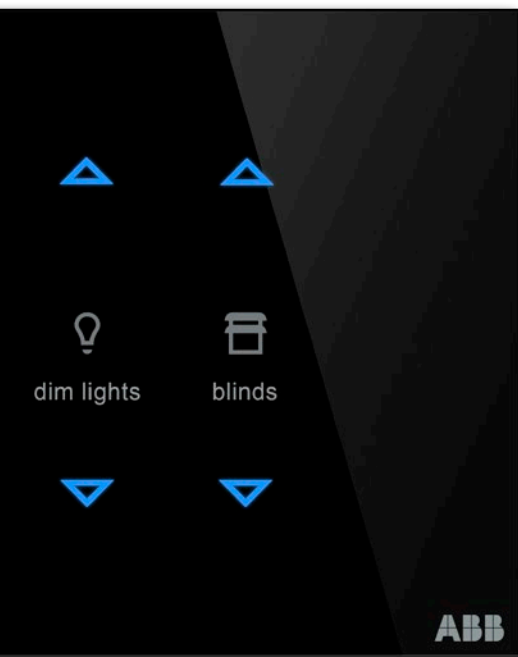
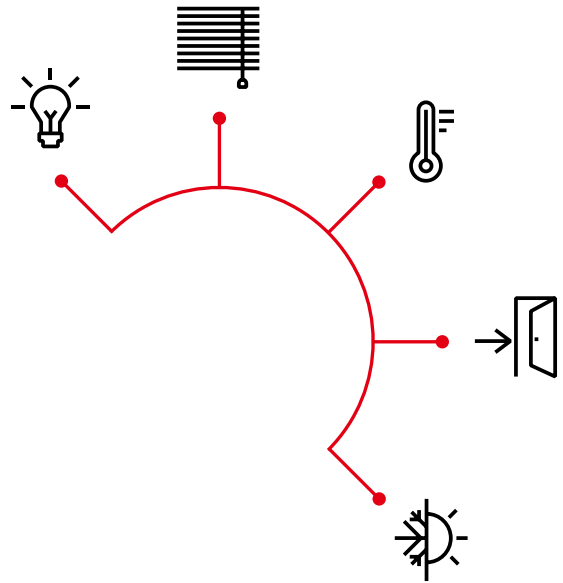




ABB i-bus® KNX

Intelligent building solution for the demands of today and tomorrow

ABB i-bus® KNX is based on the international KNX standard. It is not by chance that ABB plays a leading role in the KNX Association. The fully developed state-of-the-art technology can be used universally and integrates itself perfectly into all current architectural and utilization concepts. Thinking ahead globally is typical for 135,000 ABB employees in more than 100 countries – intelligent networking for smart building systems technology.



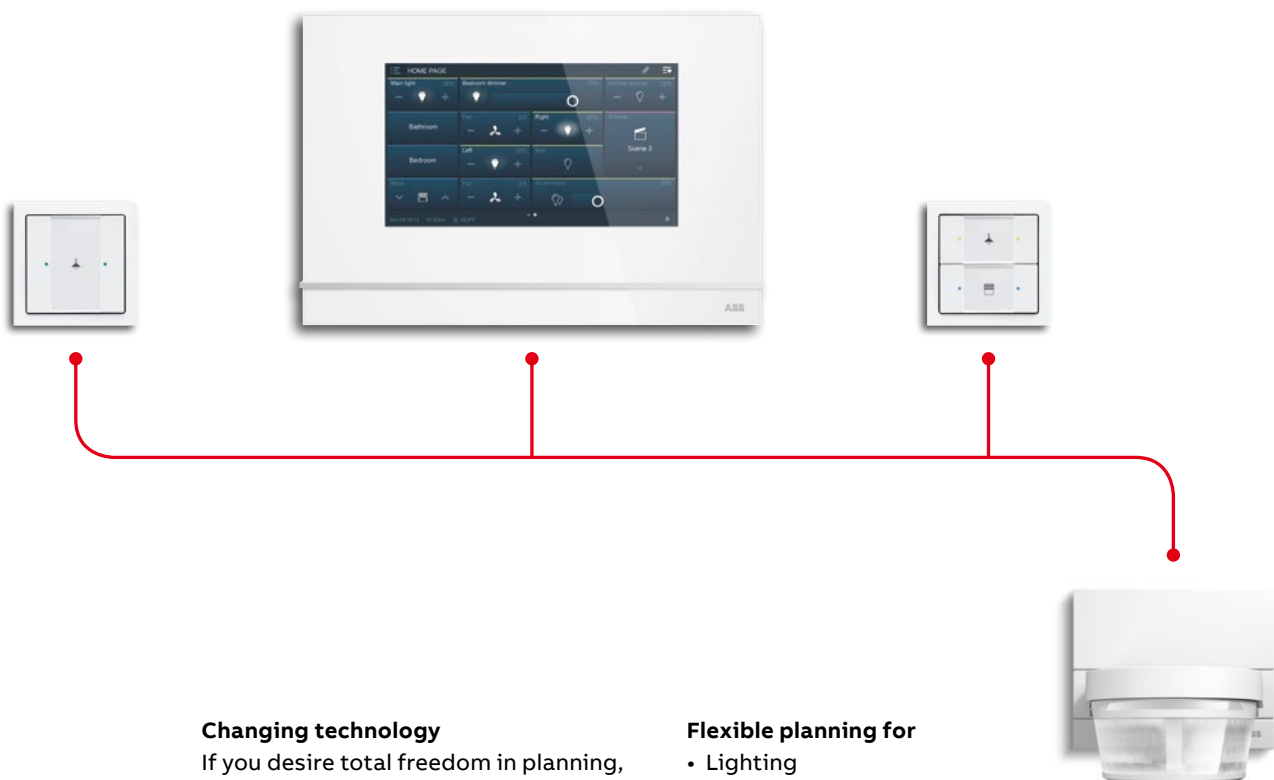
The ABB-tacteo® KNX sensor is a control element that can be individually configured for intelligent building control of high-end luxury hotels, public buildings, and apartment blocks.

Global perfection

The ABB i-bus® KNX technology is used every day throughout the world by electrical planners, electrical installers, and system integrators. The concept is so well thought out that the people in the buildings are unaware that it is operating, because all the components of the technology bring about a fully functioning unit from the first project step to running operation.

The advantages for the suppliers

- Reliable planning
- Economic installation
- Fast integration
- Easy to start up
- Flexible extension
- Safe investment for the future



Changing technology

If you desire total freedom in planning, look no further than ABB i-bus® KNX. The KNX standard even allows the products to be selected independent of manufacturer. The functions of the different trades are linked together, and changes and extensions are possible during the project – without new planning or new cables. Existing systems can also be adapted after many years. Complex becomes simple.

Flexible planning for

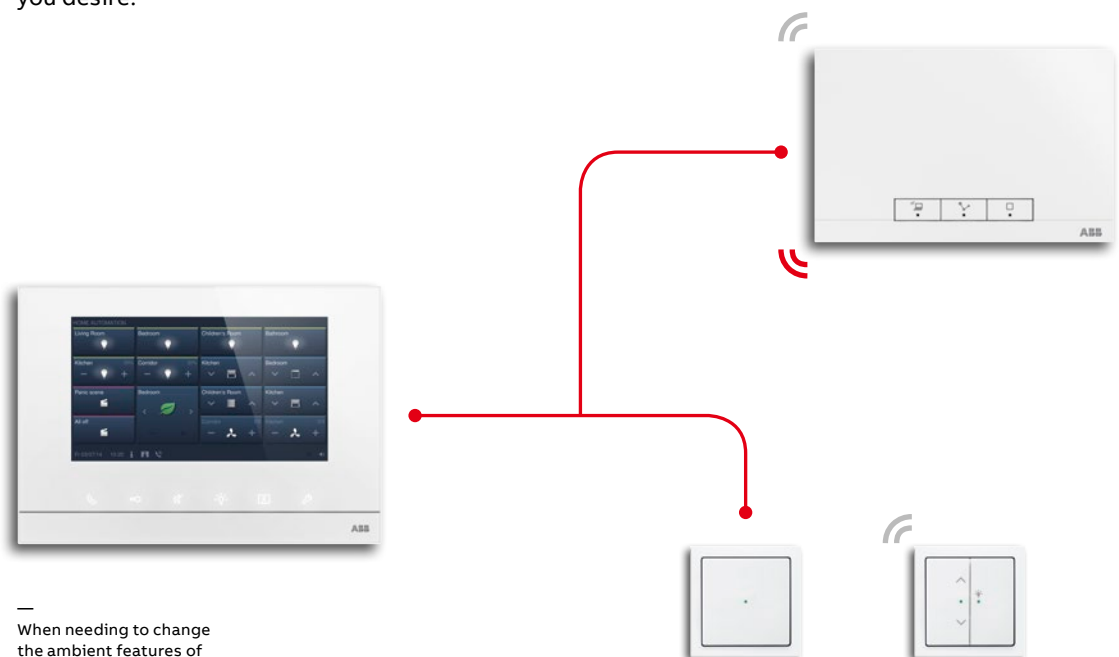
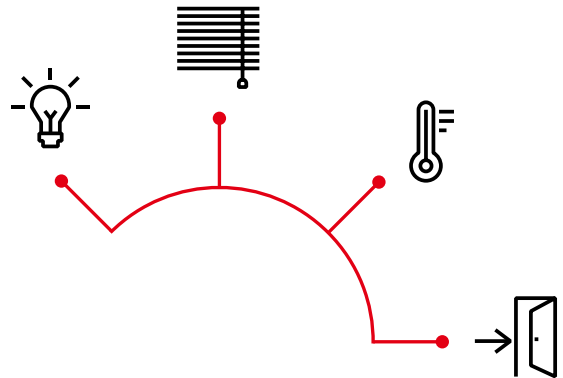
- Lighting
- Air conditioning
- Shading
- Safety
- Energy management
- Operation
- Automation
- Communication

ABB-free@home®

Home automation easier than ever

ABB-free@home® is specially tailored to meet the needs of smart residential buildings and is excellently suited for both new buildings as well as renovation projects. Whether blinds, lights, heating, air conditioning, or door communication, it can all be easily controlled to suit your personal preferences.

A perfect example: to change the lighting mood, just tap on the touch screen of your tablet or smartphone, or use a simple voice command: the blinds will move and the lights will change color. You can use all functions individually or combine them. In other words, you determine the type and number of functions you want to intelligently control yourself. Plus, you have the option of adding desired additional functions at a later date. Simply smarter – for the life you desire.



When needing to change the ambient features of a room, simply adjust the blinds, lighting, or air conditioning from a single, stylish wall panel.

Simple control from a single source



Via touch panels

Panels can be configured with your personal settings and control all functions in your living area from one central location on the wall. The touch screen is easy and comfortable to operate by simply swiping or tapping.



Via Smart Home switch

The switch is the classic operating mode to control your Smart Home. Available in a range of modern designs, our switches enhance every wall and impress with their excellent surface feel and hard-wearing user interfaces.



Via cloud

With the aid of the app, you gain access to your Smart Home from anywhere. Simply log in to the MyBuildings portal, and then most functions can be checked and controlled on your smartphone or tablet via cloud while travelling.



Via voice control

"Switch on the ceiling lamp in the living room." The system answers: "Okay. The ceiling light has been switched on." The intelligent voice control feature lets you control all the functions in your home via voice command. Perfect when wanting to spend a few more minutes in bed.

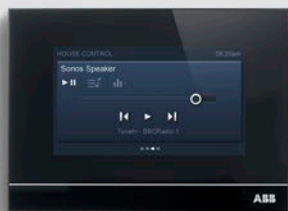
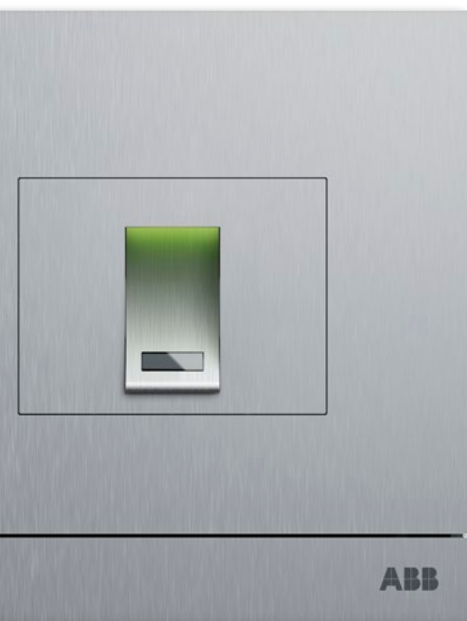
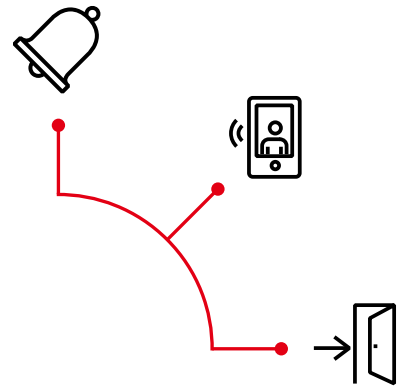
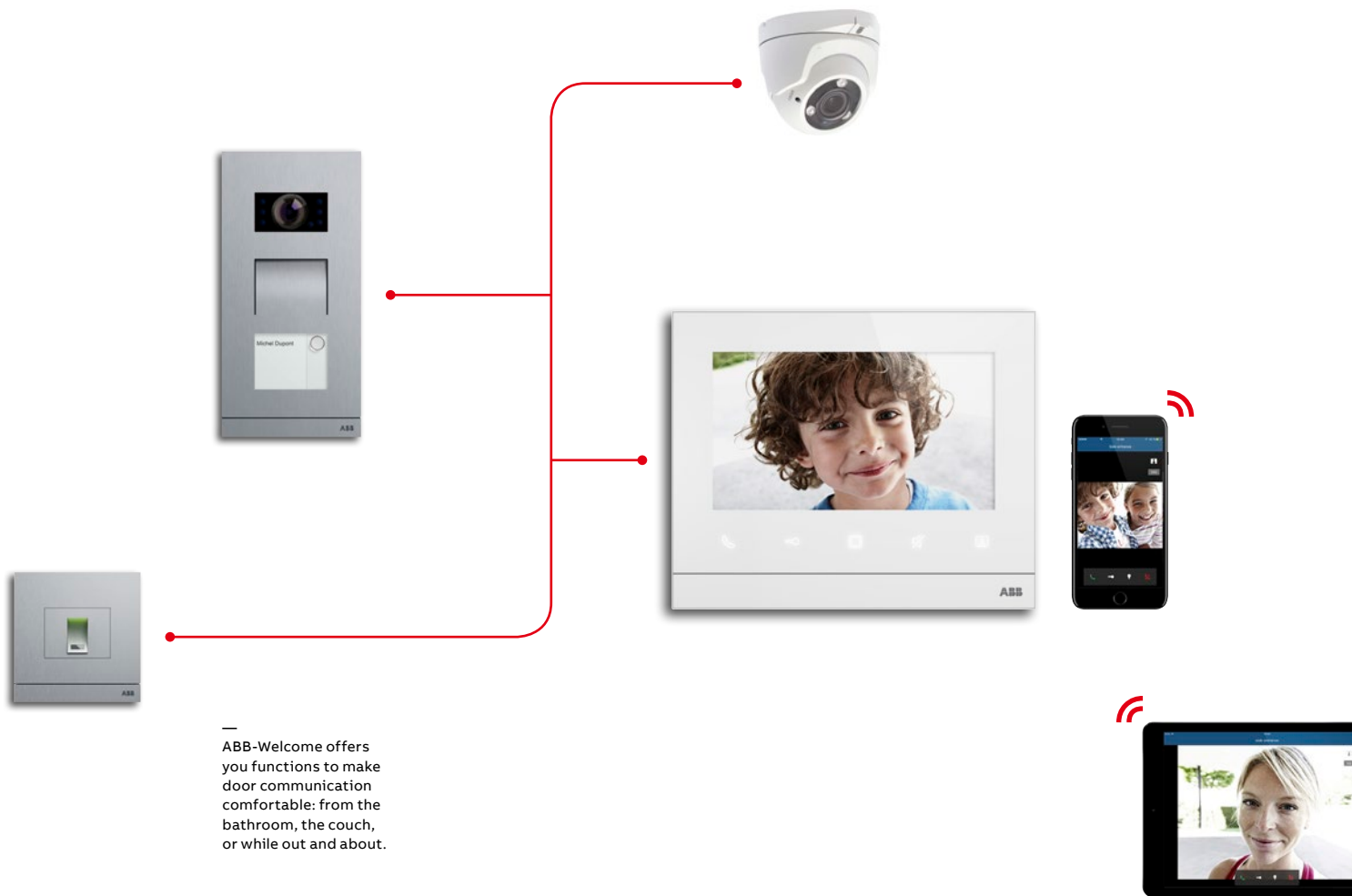


ABB-Welcome

Open to any possibilities:
door communication systems
for homes or buildings

The front door is the gateway between two worlds. It's what separates and protects living or working spaces on the inside from the outside. The ABB-Welcome door communication system creates new possibilities of entry between these two worlds. It takes care of both comprehensive safety and greater comfort, all revolving around the doors to your home or building. Whether it's a door opener, door communication, light switch, or video surveillance, ABB-Welcome offers you a multitude of solutions you can control via a panel on the wall, a tablet, or with a smart-phone. As well as a stand-alone solution, ABB-Welcome can also be combined with ABB-free@home® or ABB i-bus® KNX.





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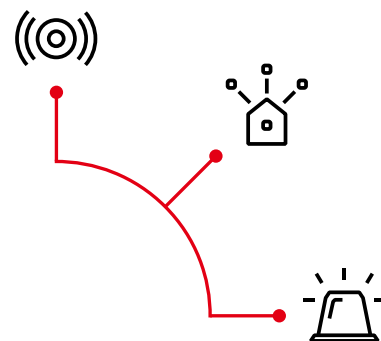
The ABB-Welcome product series is a holistic system that sets new standards, fully complementing the whole range.



ABB-secure@home

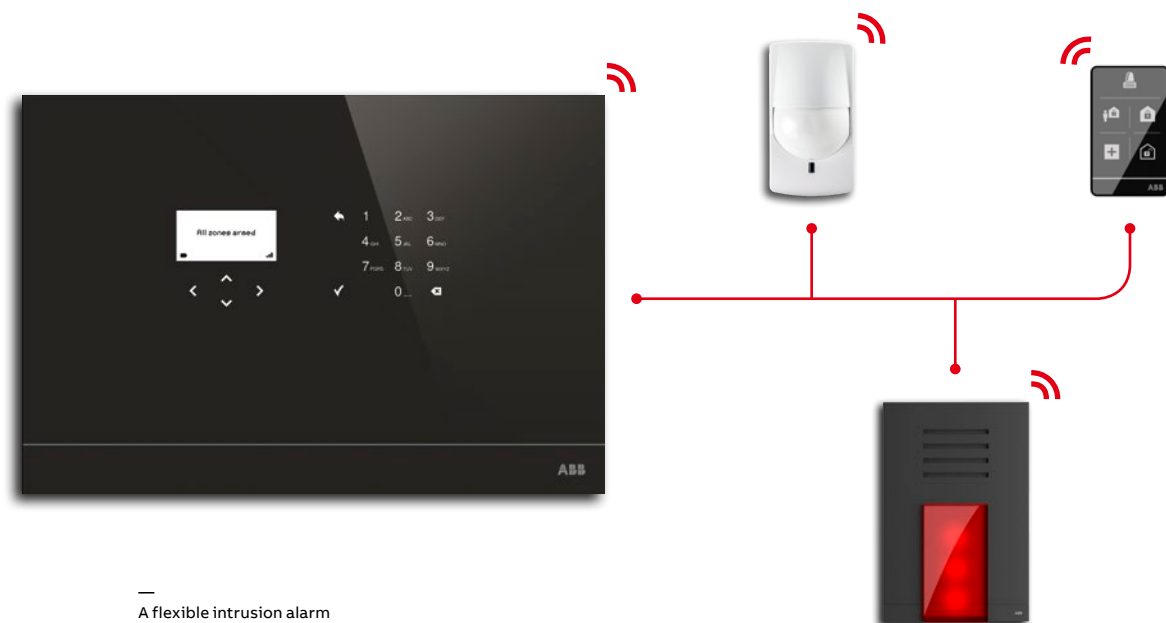
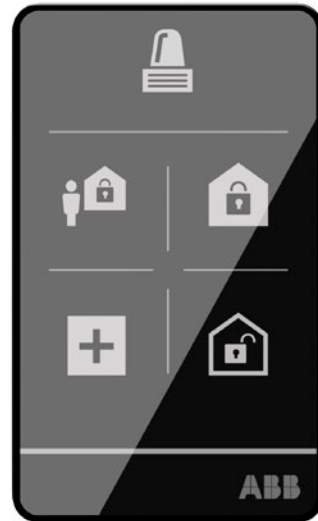
All-round protection both indoors and outdoors

ABB-secure@home helps you keep everything under control in your own four walls. The wireless system protects residential buildings and properties from burglary and theft, but also from sources of danger such as fire or water. It is easy to install, won't damage walls or floors, and can be easily integrated into ABB-free@home®. In the event of an alarm, for example, the lights can be switched on and the blinds raised. Total synergy – Smarter Home.



Comfort in your hands

ABB-secure@home puts the power of your anti-intrusion system directly into your hands in the most simple way possible: with a stylish plug-and-play remote control. Five keys are fully configured and one is freely configurable. The most common functions are assigned to the five preconfigured keys, to activate internal and external alarm systems, to deactivate all the anti-intrusion zones, and to trigger a panic alarm.



—
A flexible intrusion alarm system that can be adapted to any home.

References

We help these partners achieve their vision



Blue Lagoon City Hotel

Located in the heart of Kos, the Blue Lagoon City Hotel is the latest four-star luxury hotel within the Blue Lagoon Group. Its ultra-modern guestrooms and suites provide guests with a wealth of elegance in a modern, city-feel ambience. Intelligent building management is provided by ABB's tacteo® KNX Sensor – an individually configurable control element that's designed with the management of luxury hotels and other high-end buildings in mind.

| | |
|------------------|--|
| Location | Kos, Greece |
| Architect | Bios Architecture |
| Products | ABB i-bus® KNX system, ABB-tacteo® KNX sensor range |

Private Villa

For the owners of a monolith-design weekend home near Heidelberg, Germany, taking it easy has been raised to the next level thanks to ABB. They are able to control all their home services such as blinds, lighting, and heating from the elegant Busch-ComfortTouch® control panel as well as from the app on their tablet or smartphone. Added peace of mind comes from the integrated ABB-Welcome system, which provides even greater security and comfort.

| | |
|------------------|--|
| Location | Close to Heidelberg, Germany |
| Architect | Thomas Fabrinsky |
| Products | ABB i-bus® KNX system Busch-ControlTouch® KNX |

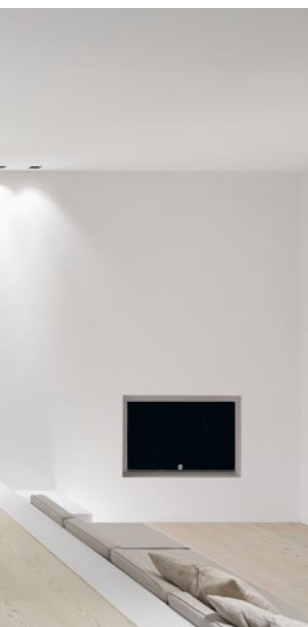




DVAG Headquarters

By taking a 1990s office building and turning it into a sustainable, state-of-the-art structure, the new DVAG headquarters in Frankfurt is a reflection of the company's future orientation. With its combination of attractive, uncompromising, sleek design and contemporary, strong black and white matte colors, ABB's future® linear range of premium switches and automation products perfectly complements the newly renovated building.

| | |
|------------------|--|
| Location | Frankfurt/Main, Germany |
| Architect | meyerschmitzmorkramer |
| Products | ABB i-bus® KNX system Switch range future® linear |



Find more projects at
www.new.abb.com





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