

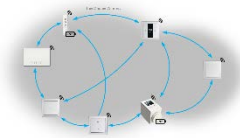


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ABB GPG Building Automation Webinar News Light + Building 2016 Part 2

Webinar “News Light + Building 2016 Part 2”

Agenda



- ABB-free@home
 - ABB-free@home Wireless



- Door communication ABB-Welcome
 - New products



- ABB i-bus KNX
 - Busch-ControlTouch KNX
 - KNX for commercial buildings (Sensors)
 - KNX LED Dimmer



01

ABB-free@home[®] Wireless

ABB-free@home® Wireless

The new freedom – Complete and wireless

ABB-free@home® Wireless. Now sensors, actuators and the control are being connected into a flexible system. Without cables it preserves the substance of the building and is perfect for modernization. This is how even old buildings are turned into a Smart Home.



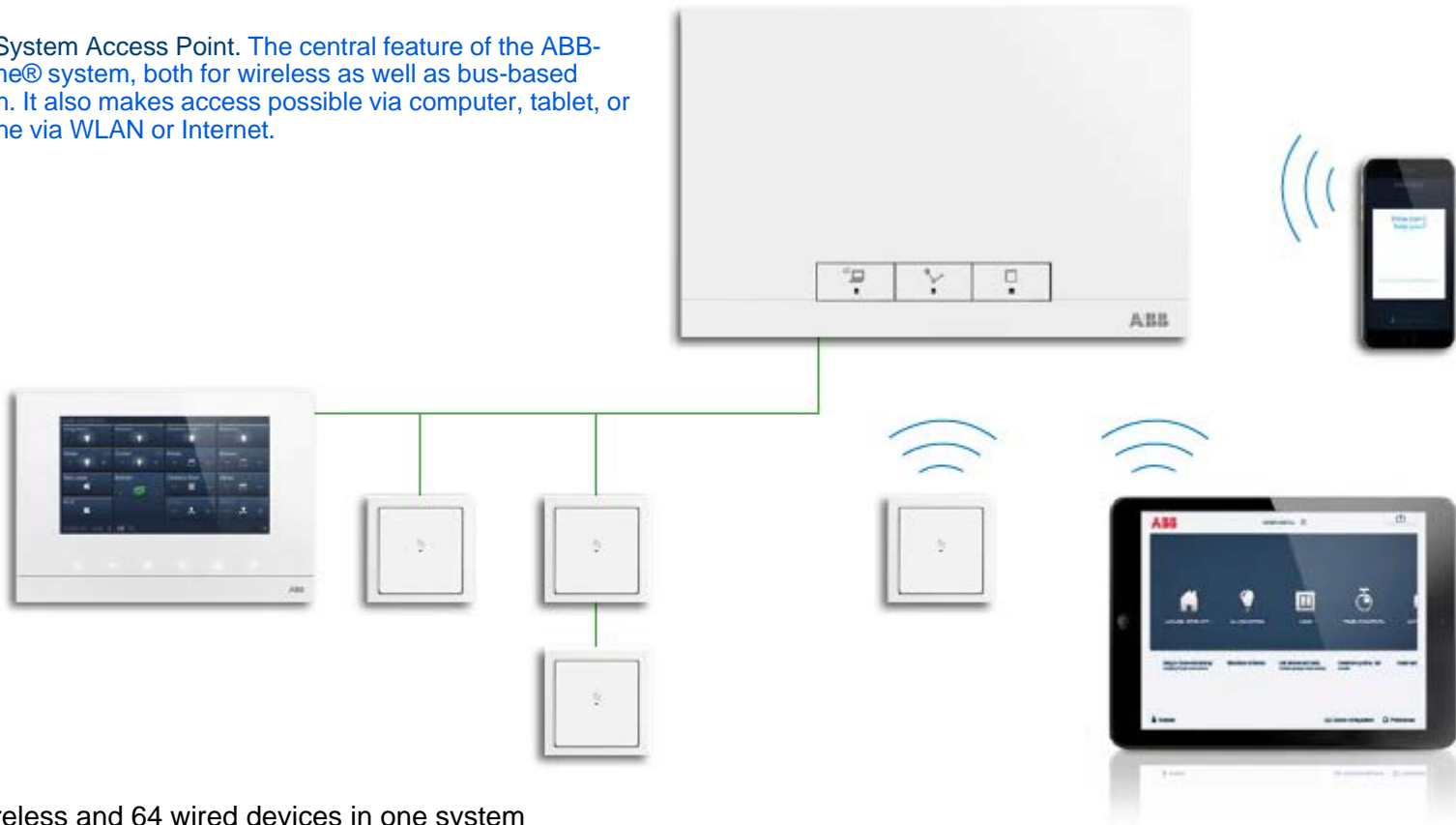
- The wireless version opens new possibilities for modernisation projects
- The best radio connection thanks to meshed network
- Economical installation
- Cabled and radio components in one system
- Makes possible the smart control of light, heating, air-conditioning and blinds



ABB-free@home® Wireless

Wireless integration and flexibility

The new System Access Point. The central feature of the ABB-free@home® system, both for wireless as well as bus-based installation. It also makes access possible via computer, tablet, or smartphone via WLAN or Internet.



- 64 wireless and 64 wired devices in one system
- **Now** also interesting for renovations

ABB-free@home® Wireless

The new freedom – Renovation

Those who would like to renovate their home will appreciate the wireless freedom as much as the electrical fitter.



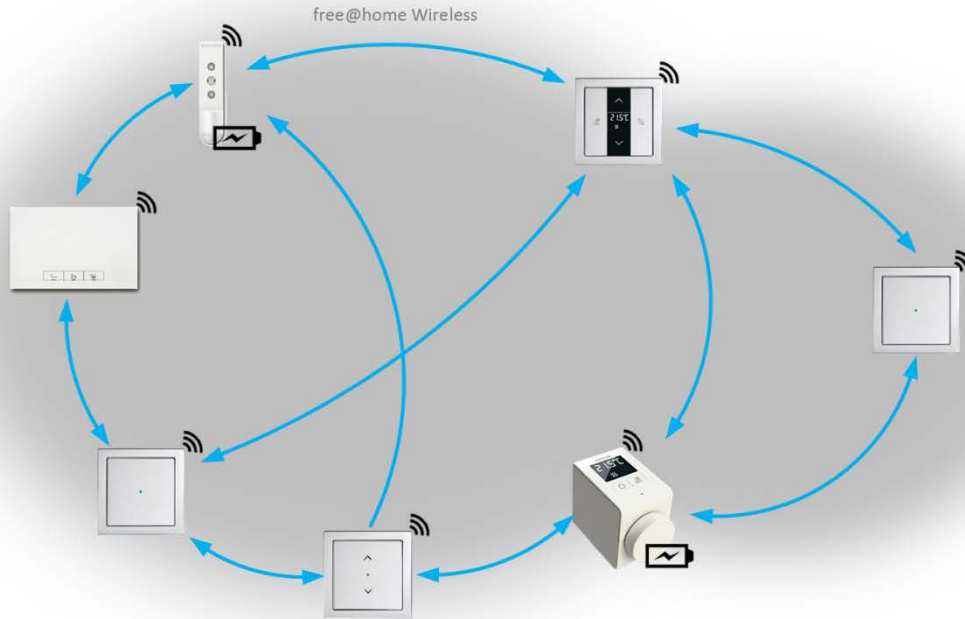
- he uses a system that has a better overview and greater efficiency
- he can offer more to his customers
- an existing system can be extended by up to 64 wireless components
- The wireless devices support the intelligent control.
- If required, the ABB-free@home® system also sends an e-mail or a push message via the myABB-LivingSpace remote access
- The range of functions of ABB-free@home® with time programs or speech control becomes even more comprehensive together with the wireless technology.
- If functions and comfort features are to be extended, this is possible at all times without any great effort.



Up to 64 wireless components for the house, set up wireless and configured.

ABB-free@home[®] Wireless

The new freedom – Meshed network



System Properties

- RF Standard: 2.4GHz
- Security: AES-128
- Proprietary protocol – Meshed Network
- Participants: 64 wired + 64 wireless

meshed network: Every free@home wireless device with a mains supply simultaneously acts as a transmitter and receiver.

- + The signals of a device can thus be transmitted across the entire network even if the total distance exceeds the transmission range of a single device.

ABB-free@home® Wireless

The new freedom – seamless functions



Blind control and window monitoring. With just a glance at the screen one can see which windows are open or closed. Blinds can be set centrally.



Control of air-conditioning and individual rooms. Energy efficiency is maintained and increases with precise control. The decentralized and made-to measure control cares for the best savings. The thermostats are controlled wireless.



Heating system control. The perfect temperature must not be the same everywhere. The climate can be precisely controlled room for room wireless and mobile, wireless retrofitted with radio-controlled actuating drives.



Switching and dimming lights. The light atmosphere is influenced where one needs it at the moment: while reading on the couch, during cooking, at the dinner table. The transmission of data frees itself wireless from conventional built-in switches.



Door Communication. The door bell always sounds without prior notice. Who wants to get up immediately and run to the door? Better one picks up the smartphone – with ABB-free@home® a mobile component of home automation.

The range includes products that are connected to the mains power during installation (flush-mounted sensors/actuators) as well as other products that are battery operated and can thus be installed without any wires (radiator thermostats, window contacts).

ABB-free@home[®] Wireless

The new freedom – flush mounted devices



SU-F-1.0.1-WL (6221/1.0-WL)
SU-F-2.0.1-WL (6221/2.0-WL)

1gang (sensor)
2gang (sensor)



SSA-F-1.1.1-WL (6211/1.1-WL)
SSA-F-2.1.1-WL (6211/2.1-WL)
SSA-F-2.2.1-WL (6211/2.2-WL)
MSA-F-1.1.1-xx-WL (6215/1.1-XX-WL)

1/1gang (sensor/actuator)¹⁾
2/1gang (sensor/actuator)¹⁾
2/2gang (sensor/actuator)¹⁾
1/1gang (sensor/actuator)¹⁾



SDA-F-1.1.1-WL (6212/1.1-WL)
SDA-F-2.1.1-WL (6212/2.1-WL)

1/1gang (sensor/actuator)¹⁾
2/1gang (sensor/actuator)¹⁾



SBA-F-1.1.1 –WL (6213/1.1-WL)
SBA-F-2.1.1 –WL (6213/2.1-WL)

1/1gang (sensor/actuator)¹⁾
2/1gang (sensor/actuator)¹⁾



RTC-F-1-WL (6224/2.0 –WL)
RTC-F-2.1.1-WL (6224/2.1-WL)

RTC sensor²⁾
RTC sensor/switch actuator²⁾

Compatible to all existing free@home design covers

1) with extension unit

2) with connection for an external temperature sensor for detecting the floor temperature

ABB-free@home® Wireless

The new freedom – Range60/ Range44



Power supply by L and N (127V~/230V~)

R60: Removable claws

ABB-free@home® Wireless

Wireless – window/universal sensor



Wireless: WBI-S-1-XX-WL (6222/1 AP-XX-WL)



Wireless: BI-S-1-XX-WL (6222/2 AP-XX-WL)



Window sensor

- ➔ monitoring window handle position (open, tilted or closed)

Universal sensor

- ➔ Monitoring the state (open, closed) of roof windows, doors, gates etc.
- ➔ Additional connection option for an external potential-free sensor (either NCC o. NO contact)



Battery driven

Easy Installation

Notification: e.g. when window is left open.

ABB-free@home® Wireless

Wireless - radiator thermostats



Basic

Wireless: HA-S-1-WL (6256/1-WL)



Comfort

Wireless: HA-S-2-WL (6256/2-WL)

- ➔ Actuator with room thermostat function for controlling radiator valves
- ➔ Version with and without on-site operation
- ➔ Exchange for conventional thermostats
- ➔ Battery driven
- ➔ Easy installation
- ➔ Full compatibility to all free@home functions (e.g. Time Profiles, Remote Control, etc.)



ABB-free@home® Wireless

Wireless – external radio antenna



Picture not final

- ➔ Optional accessory
- ➔ For flexible positioning of free@home wireless antenna if the integrated antenna is shielded by customers

ABB-free@home® Wireless

Wireless – Prices and Availability

Example: sensor/switch actuator 1/1-gang



free@home: 75,00 €



free@home Wireless: 100,00 €

R60

October 2016

		6221/1.0-WL 6221/2.0-WL	WL-Sensoreinheit 1-fach WL-Sensoreinheit 2-fach
		6211/1.1-WL 6211/2.1-WL 6211/2.2-WL 6216/1.1-XX-WL	WL-Sensor/Schaltaktor 1/1-f WL-Sensor/Schaltaktor 2/1-f WL-Sensor/Schaltaktor 2/2-f WL-Bewegungsmeld./Schaltaktor 1-f
		6212/1.1-WL 6212/2.1-WL	WL-Sensor/Dimmaktor 1/1-f WL-Sensor/Dimmaktor 2/1-f
		6213/1.1-WL 6213/2.1-WL	WL-Sensor/Isloussaktor 1/1-f WL-Sensor/Isloussaktor 2/1-f
		6224/2.0-WL 6224/2.1-WL	WL-Raumtemperaturregler WL-Raumtemperaturregler/Aktor



R44

Beginning 2017

		6221/1.0-WL 6221/2.0-WL	WL-Sensoreinheit 1-fach WL-Sensoreinheit 2-fach
		6211/1.1-WL 6211/2.1-WL 6211/2.2-WL 6216/1.1-XX-WL	WL-Sensor/Schaltaktor 1/1-f WL-Sensor/Schaltaktor 2/1-f WL-Sensor/Schaltaktor 2/2-f WL-Bewegungsmeld./Schaltaktor 1-f
		6212/1.1-WL 6212/2.1-WL	WL-Sensor/Dimmaktor 1/1-f WL-Sensor/Dimmaktor 2/1-f
		6213/1.1-WL 6213/2.1-WL	WL-Sensor/Isloussaktor 1/1-f WL-Sensor/Isloussaktor 2/1-f
		6224/2.0-WL 6224/2.1-WL	WL-Raumtemperaturregler WL-Raumtemperaturregler/Aktor



02

Door communication
ABB-Welcome®

ABB-Welcome®

System Controller mini



System controller, mini. A complete central unit, which even supports the complete door communication, everything space-saving in only 6 module widths, for renovations by means of a simple replacement.

- ➔ Only half the space required as before
- ➔ Simple replacement for renovations
- ➔ Supports complete audio and video functions in one device
- ➔ Extension of the ABB-Welcome for **renovations use case**
- ➔ Also door openers and corridor lights can be switched directly



Article No.: 83301-500

ABB-Welcome[®]

System Controller mini – Consumption

max. on internal bus

max. cable length²



or



20 devices

600 m



10 devices

600 m



2 devices

150 m



2 devices

150 m

²) max. cable length between farthest outdoor station and farthest indoor station

ABB-Welcome®

Status modules



Benefits

- ➡ “ringing”, “speaking”, “unlocking”, “not available”
- ➡ Clearly illuminated signals



83190-500

ABB-Welcome®

Info an blind module



83192-500

Blind module

- ➔ Serves as place holder for further planned Welcome modules or as cover for 3rd party devices (e.g. transponder access controller)



83191-500

Info module

- ➔ Customers can display for example, representing opening times, business information or a house number
- ➔ LED back ground lighting
- ➔ Any positioning in an outstation as an additional module

ABB-Welcome®

Camera solution



Camera interface. Greater flexibility and a better overview with up to 15 external cameras. Integrated into the ABB-Welcome system.

- Up to 4 analogue cameras for one interface
- up to 15 analogue cameras/DVRs can be integrated in a Welcome system
- Indoor/outdoor cameras
- Masking of private zones
- IR night view
- Camera angle variable 30° - 90°
- Easy commissioning of the Camera Interface (no software/hardware needed)

ABB-Welcome®

Desktop Stands



- Fulfilment of the market demand for a desktop stand solution for the WelcomeTouch and the free@Home Touch
- Non-slipping desktop stand with brushed metal surface
- Suitable for both the WelcomeTouch and the free@homeTouch



ABB-Welcome®

Prices orientation



450 €



35 €



130 €



400 €



180 €



149 €



350 €



80 €



180 €

03

ABB i-bus KNX

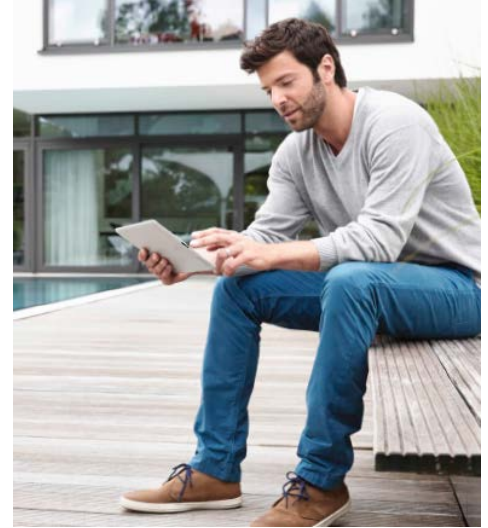
Busch-ControlTouch KNX

KNX for commercial buildings (sensors)

KNX LED Dimmer

Busch-ControlTouch KNX

Market trends



Universal visualization and control

New constructions or existing buildings. Each intelligent controlled building needs to fulfil more and more the demands of being remotely access able. Being easy to control and to configured.

Busch-ControlTouch KNX

Motivation and objectives



- Simple app based remote control solution for KNX
- Easy KNX visualisation
- Web-based commissioning
- Commissioning over myABB-Livingspace portal
- For iOS and Android smart phones/tablets and later on also Apple smart watch and desktop PC/laptop
- Integration of IP cameras, SONOS (UPnP) and Philips hue
- Creation of own scripts (e.g. if – then – else)

Busch-ControlTouch KNX

Product and features



6136/APP-500

Energy consumption:	250mA - 5VDC (+/- 1,3 Watt)
Voltage range:	5-36 VDC
Memory:	4GB eMMC (Flash), 256MB DDR2 RAM
Processor:	Cortex A5
Operating temperature:	0°C to +70° C
Storage temperature:	-40° C to +85° C
Relative humidity:	0 to 90% (non-condensing)
IP class:	IP20
Fire resistance:	UL94-V0
Ethernet:	10/100 Mbit
Additional connections:	KNX
Module width:	4 MW
Mandatory additional PS:	e.g. CP-D 24/2.5

Functions

- ➔ Scene editor
- ➔ Week timer (with astro)
- ➔ Logic scripts (if then else)
- ➔ Alarm or malfunction messages over push notifications and e-mail
- ➔ Diagrams (zoom function)
- ➔ RGB/RGBW support
- ➔ IP camera (MJPEG)
- ➔ PTZ support (Axis, Mobotix)
- ➔ Presence detection option (arp-scan, local network)
- ➔ KNXnet/IP Tunnel
- ➔ Read request (which objects must be read after restart)
- ➔ Philips hue bridge
- ➔ UPnP audio (e.g. SONOS)
- ➔ TCP and HTTP commands (outgoing, not responding)
- ➔ Local user (roles and rights)

Busch-ControlTouch KNX

Product and features



Controls and displays

- ➔ Switch/push-button
- ➔ Dimmer control
- ➔ Blind control
- ➔ Start scene
- ➔ Date/time
- ➔ Go to account, menu, page
- ➔ RGB control
- ➔ Display temperature, brightness, air pressure, humidity, wind speed, other
- ➔ RTC control
- ➔ Slider control
- ➔ Text static, variable
- ➔ IP camera
- ➔ Website
- ➔ Diagram
- ➔ Send command
- ➔ Value sender



Busch-ControlTouch KNX Solution



Supported languages: GER, EN, NL, FR, IT, ES, RU, PL, SE, NO, FI, CN

Busch-ControlTouch KNX

Numerous use cases



Residential buildings, multipurpose buildings or hotels

Whether electrician, electrical planners, hotel operators or end user whether renovation or new construction - flexibility, remote access and visualisation in intelligent buildings is indispensable and must today cover a broad range of criteria more than ever.

Busch-ControlTouch KNX

Market arguments (summary)

- ➔ for smart phones/tablets and Apple watch
- ➔ For desktop PCs/Notebooks (Windows/Mac)
- ➔ Complete online commissioning (changes can be done remotely)
- ➔ Alarm or malfunction messages over e-mail and push notifications
- ➔ Possibility to start other apps (e.g. jump to SONOS app)
- ➔ To integrate a web page (e.g. to open a third party control)
- ➔ App included IP camera view
- ➔ Weekly timer and scenes adjustable by the end customer
- ➔ Write you own logics (helps to create individual solutions)
- ➔ Diagrams with zoom function 3 days, 2 weeks, 3 month or 3 years

Availability and price: April/Mai 2016 , 899,- €

03

ABB i-bus KNX

Busch-ControlTouch KNX

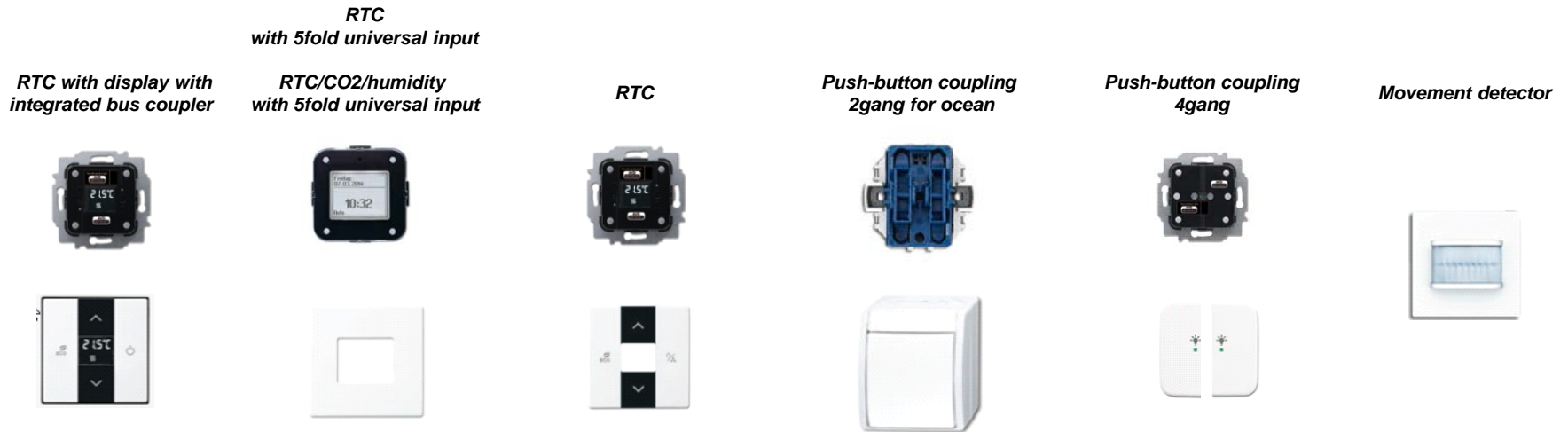
KNX for commercial buildings (sensors)

KNX LED Dimmer

KNX for commercial buildings (sensors)

Motivation and objectives

- A KNX product range specially adjusted to functional buildings
- The range consists of compact devices including bus couplers
- Commissioning takes place via native ETS applications (knxprog)
- New area of application: Measurement of CO₂ and humidity concentrations in rooms



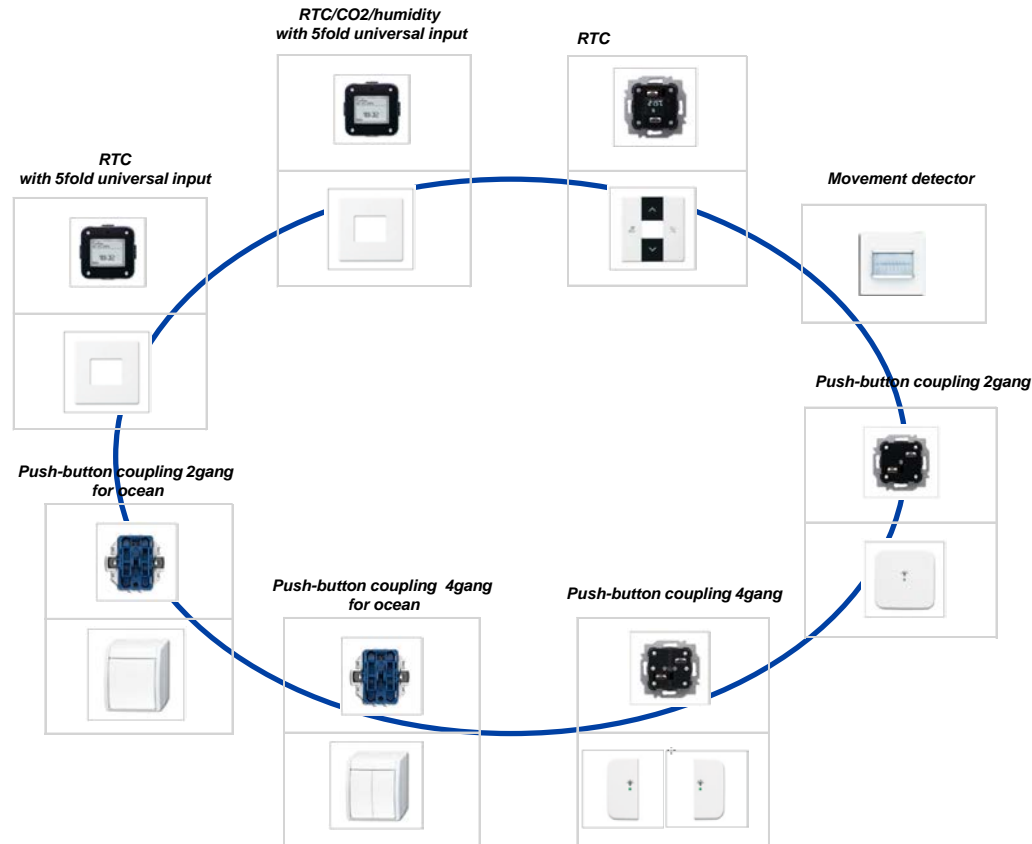
KNX for commercial buildings (sensors)

Brief description

- Push-button coupling unit with BJE colour concept and internal actual temperature sensor for accommodating the F@H cover plates/rockers
- RTC with display and 5-gang, flush-mounted universal input
- CO₂/humidity/RTC with display and 5-gang, flush-mounted universal input
 - When the CO₂ limit value is exceeded, the display backlighting switches from white to red.
- The flush-mounted universal input has the following:
 - 5 binary inputs or
 - 1 analogue input and 4 binary inputs or
 - 1 analogue input, 1 external temperature sensor input, and 2 binary inputs
- Modified push-button coupling unit for integration into ocean[®] surface-mounted housings (Basis predecessor)

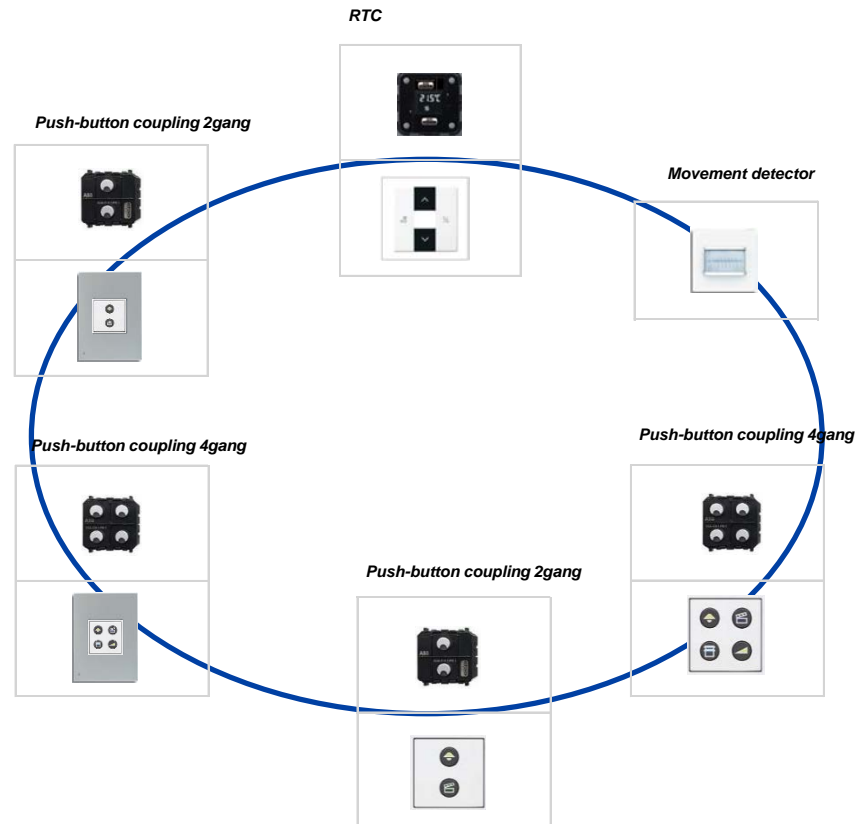
KNX for commercial buildings (sensors)

VDE products



KNX for commercial buildings (sensors)

BS products










KNX for commercial buildings (sensors)

Price and availability

Push-button coupling 2gang with integrated bus coupler	Push-button coupling 4gang with integrated bus coupler	Push-button coupling 2gang with integrated bus coupler for ocean	Push-button coupling 4gang with integrated bus coupler for ocean	Watch dog 180 standard select	RTC with display with integrated bus coupler	RTC with universal input, 5gang	RTC/CO2/humidity with universal input, 5gang
6108/06 6108/06-500	6108/07 6108/07-500	6108/06-AP 6108/06-AP-500	6108/07-AP 6108/07-AP-500	6122/10 6122/10-xxx-500	6108/18 6108/18-500	6109/18 6109/18-500	6109/28 6109/28-500
05/2016 77,50 €	05/2017 88,40 €	05/2018 77,00 €	05/2019 88,00 €	05/2019 145,00 €	05/2019 200,00 €	07/2016 263,00 €	07/2016 320,00 €
							
				-			

KNX for commercial buildings (sensors)

Price and availability

Push-button coupling 2gang with integrated bus coupler	Push-button coupling 4gang with integrated bus coupler	RTC with display with integrated bus coupler	Watch dog 180 standard select
6108/06-BS-500	6108/07-BS-500	6108/18-BS-500	6122/10-BS-500
77,50 €	88,40 €	200,00 €	145,00 €
03/2016	03/2016	03/2016	03/2016
			
			-

03

ABB i-bus KNX

Busch-ControlTouch KNX

KNX for commercial buildings (Sensors)

KNX LED Dimmer

KNX LED Dimmer

Market and trends



- ➔ Especially for the activation of LED modules with constant voltage
- ➔ Activation of RGB or RGBW LED modules
- ➔ Activation of up to 4 separately controllable LED modules
- ➔ Activation of 12 / 24 V LED modules
- ➔ Use of RGB or RGBW LED strips as decorative lighting element in living, kitchen and/or bathroom areas
- ➔ For new installations a trend away from the retrofit LED and toward the encapsulated complete LED lamp can be observed. These lamps are activated exclusively via LED converters.
- ➔ Flicker-free dimming over the entire brightness range
- ➔ Setting of lighting accents in the building
- ➔ Indirect backlighting of floors, ceilings and walls



KNX LED Dimmer Range



The range includes the following types:

1 - 4 channel LED dimmer 6155/30

- ➔ For LED modules used in constant voltage environments
- ➔ Output power: 0 – 240 W
- ➔ Output load: 4 x 2.5 A (10 A max.)
- ➔ Output voltage: 12 – 24 V
- ➔ Price: 198,- €

1 - 4 channel LED dimmer 6155/40

- ➔ For LED modules used in constant voltage environments
- ➔ It comes with an integrated power supply which provides optimum performance and efficiency
- ➔ Output power: 0 - 100 W
- ➔ Output load: 4 x 1 A
- ➔ Output voltage: 24 V
- ➔ Price: 335,- €



KNX LED Dimmer

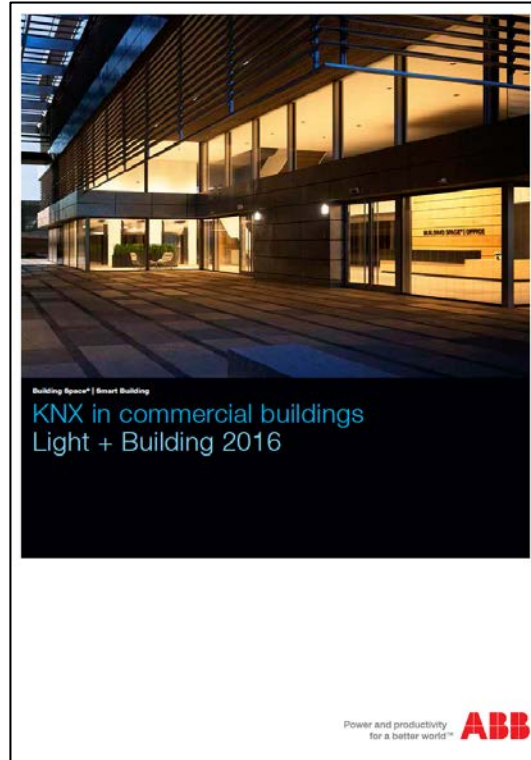
Product specification



- Dimming range 0 – 100 %
 - Mounting direct at the lamp
 - With implemented colour sequencer
 - Every channel is switch and dimmable
 - Individual groups and scenes can be defined
 - With Master/Slave-function
-
- The suitable / necessary LEDs / LED strips are to be obtained via the wholesale trade
 - For type 6155/30 the power adaptors 6191/11-101, 6193/33-101 and 6358-101, as well as corresponding power adaptors from the wholesale trade can be used
 - Corresponding connectors for the connection of LED strips are available from the trade

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New Products Brochure: KNX in Commercial Buildings



➔ Order Number

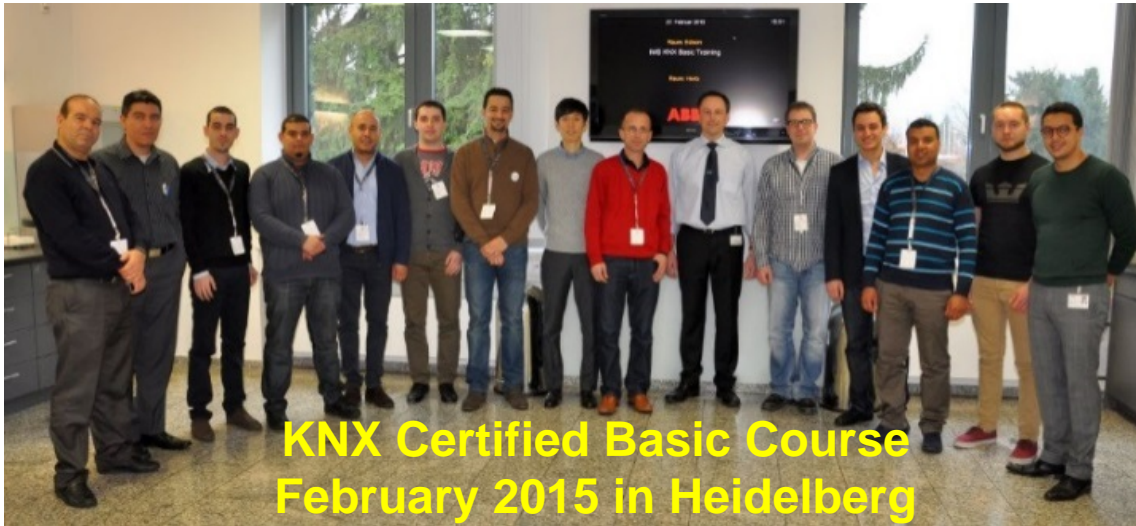
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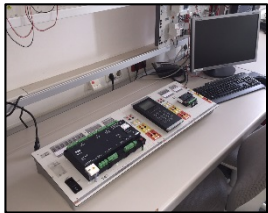


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Trainings 2016 in Heidelberg



- ➔ Certified Advanced Training: 11th to 15th July 2016
- ➔ KNX Tutor Course: 17th to 21th October 2016
- ➔ KNX Security Panel GM/A 8.1 Basic: 20th to 24th June 2016
- ➔ Various courses KNX Security Panel GM/A 8.1 are planned ask your Sales Manager !

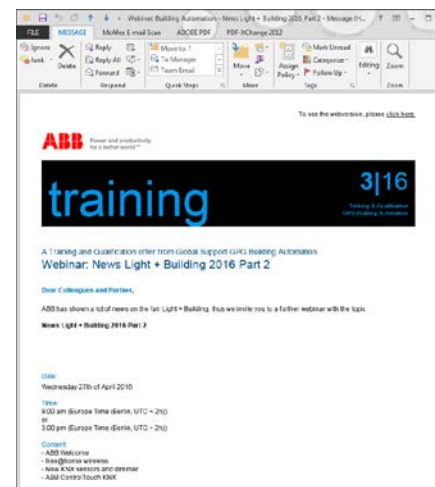


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Next Webinar



- Wednesday 25th of May 2016
 - Morning 09:00 am Europe Time (Berlin, UTC + 2h)
 - Afternoon 03:00 pm Europe Time (Berlin, UTC + 2h)
- Topic will be announced
- You will receive an invitation email on time



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for a better world™

