# Smart solutions bolie and the second second

HOTEL





## Choose a smart solution for your hotel.

Throughout history, people have continually innovated to make their lives more comfortable and to maximise their available resources. And, even if innovation often demands a significant investment, the long-term benefits make it all worthwhile.

Back in the 17th century, Dutch inventor Cornelis Drebbel created an incubator that used a thermostat to maintain a constant heat, allowing chicken eggs to hatch all year long. This was perhaps the world's first automation system. Since then, we've come a long way. Thanks to progress in IT and the development of data collection and analysis systems, **automation is now a common feature in many buildings** – and, more recently, it has become intelligent.

Just like humans, machines need a common language to communicate so they can work together and uncover new possibilities. When it comes to building automation, that common language is known as **KNX**. And by integrating KNX into your building, you'll be able to deliver a host of benefits, including additional comfort, cost savings and monitoring systems.

At **Hager**, you can rely on our unique expertise and products to create the perfect solution for your project. Discover our KNX Building Automation solutions – and give your hotel projects an innovative edge!



## Building automation for hotels.

Today, "hospitality" is about more than welcoming guests. It means fulfilling their needs and covering every aspect of their stay – from wellbeing to entertainment.

By using the latest technology, you can build intelligent systems with user-friendly interfaces that deliver on both guests' expectations and your hotel's requirements.

The **Building Management System (BMS)** centralises all the different data from within the building, including information about door statuses (through the Access Control network), comfort devices (commands, lights, shutters) and HVAC (temperature). It is the central "brain" that records and analyses data, and then sends commands to room devices and instructions to staff on any actions that need taking.

The booking status of rooms is managed by desk staff using special **room booking software (Property Management System or PMS)**. This software also offers an overview on room occupancy and maintenance operations.

By connecting different **devices** to a central network where information is shared, you'll be able to better manage your hotel's whole system. Guests will benefit from greater comfort and you'll be able to monitor occupancy to save energy, improve maintenance operations and boost security.



### Building automation The many benefits for your hotel.



Enhances guest experience (page 8)



Boosts energy efficiency (page 12)



Facilitates maintenance (page 14)



Allows upgradability (page 14)



Improves safety (page 15)



### Guest experience Because comfort matters.



Berker B.IQ stainless steel with Manufaktur customized laser engraved symbols

### Friendly technology that is easy to use.

Sometimes, there are so many switches on the wall that it looks more like a plane cockpit than a hotel room.

And when you're trying to sleep at night, those LED light indicators keep shining brightly, keeping you awake. Not to worry: there's a solution – and it involves using your switches and lights more intelligently. By pre-programming in-room devices, you can adapt them to different scenarios. For example, why not create a "good night" scenario, which automatically turns off all the lights in the room, illuminates the "do not disturb" sign, closes all the shutters and dims pushbutton indicators to a brightness of just 10%. Once the mode is activated, any button you press will simple turn on the orientation lights to help you find your way in the dark – without blinding you.

### Never too hot nor too cold, just the right temperature.

When you enter a hotel room, you expect it to be just the right temperature. And, by connecting your temperature control devices with your building management system and room booking system, that's exactly what you'll get.

As soon as guests enter their room, they'll find the temperature is optimised for their comfort. Depending on whether the guest is in their room, not yet checked in or about to arrive, the temperature changes. It's all managed by the building management system, which retrieves the room status from the booking system and then sends orders to the in-room HVAC device to adapt the temperature accordingly.



KNX thermostat Berker Q.3 anthracite





### **Guest experience Everyone** is unique – and so are their requirements.

#### A room is not yours just because you have the key, but because it offers what you need.

Maybe you prefer the corridor light dimmed? Or the room ceiling light set at 50% brightness? Perhaps you like the shutters slightly closed or the room temperature at 22°C? Whatever your preferences, all your choices will be recorded in the building management system (BMS).

The system will then begin interpreting your habits, developing them into settings and creating different scenarios. Depending on the time of day, it will command the lights, heating and shutters to create just the atmosphere you want at the time you want it.





### How habits are turned into comfort settings.



### Energy efficiency Save resources, save money.

## Energy overconsumption is one of today's biggest challenges.

Overusing energy has a direct impact on the environment and raises questions about our future way of life. It causes pollution and waste through the overconsumption of natural resources.

To save energy, you need to control energy consumption by closely monitoring it at all times.

And thanks to the combined data of the booking management system and building management system, you'll have access to all the data you need to monitor, control and save energy in your hotel.

#### Motion detector

Detects if a guest is in the room and commands the light to turn on or off.



Wall-mounted motion detector Berker Q.1 polar white

#### **Measuring devices**

Measures and displays an overview of energy consumption in the building.



Multi meter SM103E



Reduces energy waste by turning off heating and air conditioning when a window is open.





detector

Looking for a smart alternative to the hotel key card switch?

Using a combination of a door opening detector and a presence detector, your system knows when the guest is in the room – and enables the right comfort settings.

Hotel key card switch

#### The right climate.

By consulting the booking management system, the BMS can identify the status of each room (vacant, booked, checked in, checked out or occupied) and information on temperature settings. It then transfers instructions to the room's HVAC to adjust the temperature accordingly.

It's a great way to use resources only when they are strictly necessary – without ever compromising on comfort!



### Easy maintenance Upgradability and optimised safety.

### Because prevention is better than cure.

By monitoring the electric current in your hotel, you'll know the status of each light in each room.

Every light bulb has an estimated lifespan equivalent to the number of hours it is switched on. Thanks to the monitoring device, a special warning message is sent to the BMS when a light bulb is approaching its estimated lifespan. Your hotel staff can then replace the bulb the next time the room is vacant.

With the BMS, the status of any connected device can be identified and communicated – meaning you'll be aware of any potential problems at all times.



Switching actuator with current monitoring TYA606E



Berker TS Sensor

#### On average, a hotel is refurbished every 7 years.

Refurbishment means a big investment and major work. But if you already have a building automation system installed, you'll save both time and money.

Instead of having to redo your electrical cabling, you can simply change the function assigned to each switch to match the new configuration. Button functions can then be adapted and finalised when the work is complete. Which means less dust and more style!



### Combine comfort with safety!

Information from the hotel's security system can be collected by the building management system. In the event of a disturbance or an emergency, the BMS can then force doors to open and switch on lights to help people find their way to safety.



\* Not compulsory. Functions can be set through the BMS in line with your needs.



## KNX a powerful protocol for connecting your hotel.

#### **Guaranteed compatibility**

For over 20 years, the KNX logo has been a stamp of approval on products, indicating they can communicate seamlessly with each other, even when produced by different manufacturers. Today, KNX is a guarantee of flexibility for anyone wanting to extend or modify their facilities.

#### **Seamless continuity**

The KNX community is extensive, giving the protocol a unique power in the building automation market. Thanks to its broad range of products, KNX provides a solution for every situation.

#### Openness, a state of mind

Need greater interoperability? A number of gateways exist to link KNX to other specification standards such as DALI and BACNET.



manufacturers in 41 countries

**410** 

training centres in 67 countries

More than **68000** 

KNX partners in 159 countries

\* Source: knx.org

### KNX **Multiple applications** with multiple benefits.



Blind / Shutters control



Audio / video integration



Guest room management

Energy management

Load management

Security alarm ((





### KNX delivers exceptional flexibility for your installations.

### An example of KNX topology:

By choosing KNX technology, you'll give yourself complete freedom with your system design. Almost anything is possible.

How does it work? Up to 64 KNX devices can be connected to the bus in a single line (including the coupler). The main line can have as many as 15 sub-lines. And each line or area needs a power supply and a line/area coupler.





### KNX makes maintenance simple.



### A single point to collect and display all your data.

Data collected from all the devices connected to the KNX installation is gathered on a single computer.

This allows users to create tailored reports and check updates on maintenance operations.

And because each product is independent, it's not a major problem if one product on the network is out of service, as it won't affect any other devices. Whatever happens, the data will continue to flow.



### Make maintenance more efficient.

When the facility manager needs to carry out maintenance work, he or she simply enters the information into the BMS. Data from the BMS is then correlated with booking data from the PMS to schedule operations when rooms are vacant. This means any room under maintenance won't be bookable. And you'll be optimising both your operations and your staff's time.



### KNX optimises installation costs and reliability.

## Program room functionalities faster.

A single actuator can manage several rooms. Simply set the room configuration you want, and then copy it to other rooms.

It's a great way to save time so you can focus on other activities.



Switching actuator TYM620D



Power suppy TXA112

### Use a single product for multiple rooms.

Excellent quality doesn't necessarily mean excessive costs. By getting multiple rooms to share certain system components, you can cut costs.

In small hotels, for example, you can have just one power supply and one coupler per floor. (See figure on page 20 for an example.)



## Hager, your partner for smart solutions.



The world is changing, and we are changing with it. As a family company, we have grown steadily over the last sixty years to become a reliable partner to expert technicians and electrical wholesalers around the world. All while remaining true to ourselves and to our values.

And so we continue today, with a number of wellknown brands – each with their own distinctive strengths – working together under the Hager Group umbrella.



### Hager brings energy to your projects.



### **Energy** distribution

We provide reliable and easy to install distribution boards and protection devices such as flush or surface mounting enclosures, ACBs, MCCBs, MCBs, auxiliaries, RCDs, HRC fuse carriers, motor starters, earth fault relays and surge protection devices.



### Security

We enhance security at home with technology control centres and door communication systems, as well as alarm systems, heating controls and detectors.





### Actuators

Our range of actuators has been developed for commercial building specifications. The system is more compact, flexible and better adapted to power grids (fine settings, enhanced and smart functionalities, etc.).

### Cable management

We offer installation solutions for floors, walls and ceilings allowing provisions of energy and data where they are required.



# Berker design Smart is beautiful.













Berker Q.7

Berker S.1

Berker B.3

Berker B.7

Berker Q.1







Berker K.1

Berker K.5





Berker R.1



Berker R.3



Berker Serie 1930



Berker R.classic



Berker TS



Berker TS Sensor

0		0
•		0
۰		0
0		0

Berker R.1/R.3 **Touch Sensors** 



Berker B.IQ



Berker KNX touch control



### Manufaktur The only limit is your imagination.





Countless options. One-stop shopping.

We create customised solutions, covering the entire spectrum of smart electrical installations – from switches to cable management. Just tell us what you want.

We'll deliver an integrated design. Within a manageable timeframe and at a reasonable price.

Welcome to Hager Manufaktur.



### Hotel projects Clients who put their trust in us.





POD Hotel, Cape Town

South Africa



**Europe** – Hotel Sacher, Vienna | Hotel Lux Alpinae, St. Anton am Arlberg | Hotel Schloss Elmau, Elmau | Vigilius Mountain Resort, Lana | Hotel Puerta l'America, Madrid | Lloyd Hotel, Amsterdam | Hôtel L'orée des cimes, Vallandry | Hôtel Thalasso Château les Tourelles, Pornichet | Hôtel Intercontinental, Marseille | Hôtel Alizé, Paris | Hotel Ifen, Kleinwalsertal | Hotel Park Inn, Berlin | Hotel Kempinski, Berlin | Hotel Courtyard Residence Inn, München | Hotel SOHO House, Berlin | Hotel Steigenberger Am Kanzleramt, Berlin | Hotel Ameron, Hamburg | Hotel Ramada, Leipzig | Hotel Indigo, Düsseldorf **China** – Le Royal Meridien Hotel, Shanghai | The Ritz-Carlton, Shenzhen | InterContinental, Shenzhen | Swissôtel Grand Shanghai, Shanghai | Swissôtel, Foshan | Thousand-Islands-Lake Golden Horizon Hotel & Resort, Hangzhou | Guoguang Garden Hotel & Resort, Hainan | Sheraton Hotel, Changsha | Kingston Hotel, Zhangpu | Sea Links City Hotel, Hong Kong | Island Shangri-La, Hong Kong | Grand Lisboa Hotel, Macau **Singapore** – Park Regis Hotel, Singapore | Ramada Hotel, Singapore | Shangri-La Hotel, Singapore | The Singapore Resort and Spa Sentosa, Singapore | Four Seasons Hotel, Singapore Grand Hyatt, Singapore Grand Copthorne Waterfront Hotel, Singapore Malaysia – Genting Highlands Hotel, Genting JW Marriott Hotel, Kuala Lumpur | Tune Hotel, Kuala Lumpur **Turkey** - Hyatt Regency, Istanbul | Marriott Hotel Şişli, Istanbul | Sheraton Ataşehir, Istanbul | Swissôtel, Istanbul | Le Méridien, Istanbul | Hilton Hotel, Izmir | Crowne Plaza, Istanbul | Lasagrada Hotel, Istanbul | Conrad Hotel, Istanbul | Ottomare Hotel, Istanbul Other countries – The Ritz-Carlton Bali Resort & Spa, Bali | Makati Shangri-La Hotel, Manila | Sedona Hotel, Mandalay | Four Seasons Hotel, Seychelles | Rixos Quba Azerbaijan Hotel, Quba | Sheraton Hotel, Lagos | Summerland Kempinski Hotel, Beirut | Hyatt Regency Hotel, Delhi | Al Raha Beach Resort, Abu Dhabi | The Ritz-Carlton, Doha | Shangri-La Hotel, Dubai | Taj Palace Hotel, Dubai | Samriya Hotel, Doha | Shangri-La's Barr Al Jissah Resort & Spa, Muskat | Mövenpick Hotel West Bay, Doha | Hyatt Regency Tashkent, Uzbekistan | Whyndam Tashkent, Uzbekistan



Hager Vertriebsgesellschaft mbH & Co. KG Zum Gunterstal 66440 Blieskastel Germany

Hager Electro S.A.S. 132, boulevard d'Europe B.P.3 67215 Obernai cedex France

hager.com