



Intelligent Hotel Room

Hoteliers and operators of large hotel chains are facing ever new challenges due to Hotel Industry 4.0, digitalisation and growing customer demands.

Even today, the automation of entire hotel complexes or a hotel room is going a long way to providing a satisfactory experience for guests. Particularly in hotels, a custom-configured system can simplify numerous processes from which guests as well as staff and, ultimately, operators benefit. Above all, the focus is on the presence and absence of guests. For this, STEINEL offers a unique solution concept consisting of hardware, software and a range of services.

This end-to-end solution and the integrated technology can be used for perfectly monitoring the processes taking place in hotel rooms. For example, it provides the capability of detecting with absolute certainty which rooms are still occupied by guests. As a result, service can be optimised and, on the whole, provided far more quickly. On top of this, huge gains in efficiency can be achieved.

By combining state-of-the-art technology with building management, STEINEL creates the platform for all of the comforts and conveniences today's hotel guest comes to expect.

Technology is our passion

Pioneering spirit and experience for making buildings more intelligent

We have consistently evolved from pioneer to technology and innovation leader in sensor-controlled lighting since 1959. Intelligent products of world renown are created at our own development centres. This is where we set store by innovation and durability.

STEINEL has been developing solutions for the future for more than 70 years. In 1959, Heinrich Wolfgang founded STEINEL in Rheda-Wiedenbrück. With the arrival of Ingo Steinel, who joined the management team in 2004, STEINEL has consistently evolved from pioneer to technology and innovation leader in the sensor-controlled lighting, heat-tool and hot-melt glue applicator markets. STEINEL has been using high-frequency sensor technology for detecting movements in spaces and buildings since 2002. Today, products

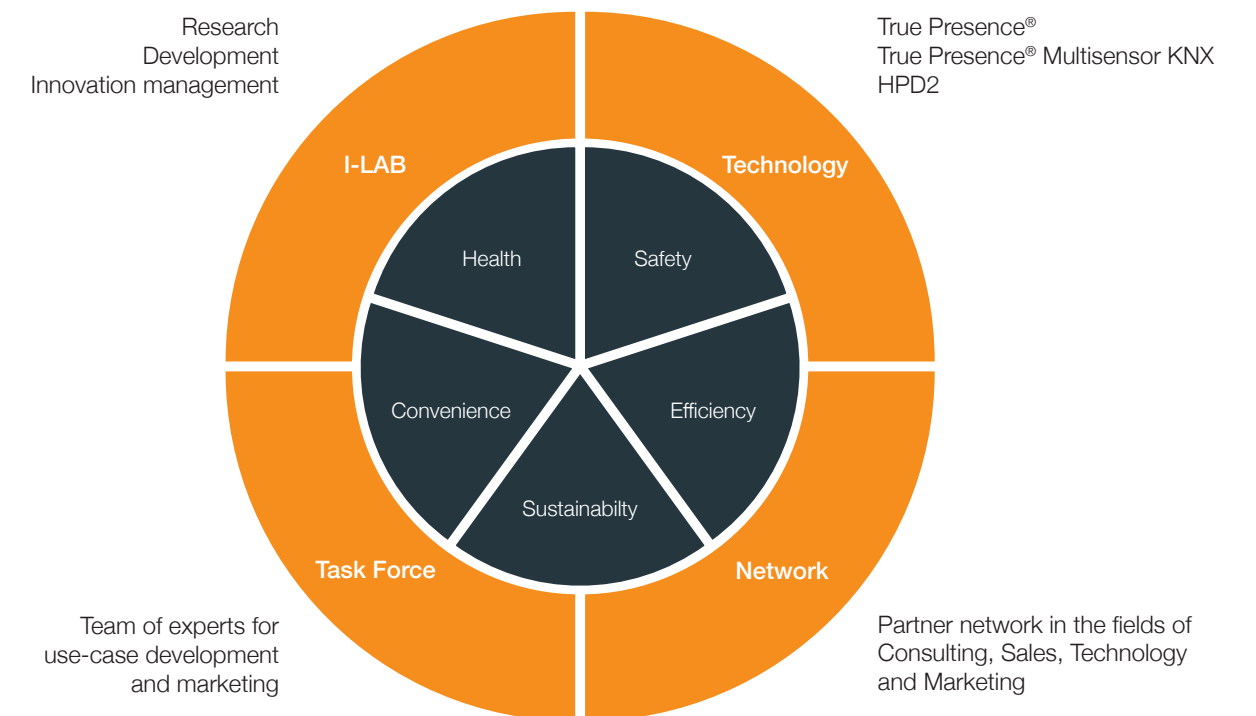
and solutions are available under the STEINEL brand for DIY enthusiasts and professional users alike. All products are manufactured by company-owned factories in Germany, Switzerland, Romania, Czech Republic and the Republic of Moldova. Made in Europe is STEINEL's formula for success. Partners and subsidiaries sell our products in 62 countries. With more than 1,600 employees, we are a leading global supplier for sensor-controlled LED technology, ensuring that there's always suitable light in any situation.



The STEINEL portfolio for Building Intelligence

More and more, intelligent systems are being used for controlling all sorts of building types. Buildings are becoming intelligent. This makes it possible to save energy, automate recurring processes, facilitate the usability and operation of rooms and installations and achieve a completely new dimension of function and flexibility. This is where our new generation of sensors will make a key

contribution. They not only control light but also count people and detect true presence. This is STEINEL's vision of building intelligence. In an innovation lab, a task force will continue to work on network solutions, and STEINEL Systems too will help us make buildings more intelligent in the future.



Greater efficiency, comfort and convenience by digitalising the hotel room

On cruise ships, intelligent sensors detect which rooms or cabins guests are present in. If the guest is out, lighting and air conditioning are automatically regulated as appropriate. This can save a great deal of energy and make service faster and more efficient.



True Presence® and True Presence® Multisensor
The innovative sensor detects the presence of a person. Air quality can also be monitored and adjusted by means of the air-conditioning technology.



Fine-tuning
When guests are absent, the air-conditioning switches to ECO mode. A temperature reduction of 1°C in heating or cooling can provide energy cost savings of up to 6%. When guests are in their hotel room, they can conveniently adjust the air-conditioning in any way they wish.

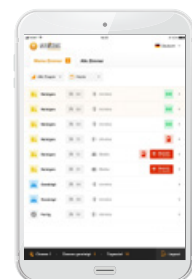


Housekeeping
The service team can efficiently structure the work plan such that guests never come eye to eye with cleaning staff. The cleaning plan can also be organised around the guest's particular habits and routine.



Human detection
Conventional presence detectors are not suitable for hotel rooms. Although they detect movements, they do not detect true presence. In contrast, True Presence® from STEINEL reliably detects the presence of hotel guests. Regardless of whether they are moving or not.

Tablet for service
The tablet attached to a cleaning trolley indicates the particular «room status». As a result, housekeeping can be planned more efficiently, the guest does not perceive any disturbance and reception can provide precise information at any time on whether rooms are ready for new guests.



Automated energy saving

Money spent on HVAC accounts for a large share of energy costs. The True Presence® sensor is a suitable means for controlling air conditioning with a focus on efficiency. When the guest leaves the room, it switches off after a very short time or returns to ECO mode. Ventilation can also be controlled with efficiency in mind by measuring VOC and CO₂.

Smart solutions A real benefit for hoteliers and their guests

Intelligent technologies not only make it possible to reduce energy and maintenance costs in the hotel environment. Many factors influencing people's sense of well-being can also be optimised with all-embracing solutions. It is in this way that building intelligence from STEINEL also helps to

make housekeeping more efficient, optimise the utilisation of staff capacities and guarantee the guest a higher level of service for a pleasant stay. Innovative, sensor-assisted hotel automation provides many benefits for hotel operators, staff and guests:

Greater operating efficiency for **hotel management**

- Energy saving (air conditioning only when guests are in the hotel room)
- In the event of an evacuation, it is possible to identify with certainty which rooms are still occupied

Greater comfort and safety for all **hotel guests** during their stay

- Room-cleaning status can be viewed per app
- Hotel experience offering more comfort and convenience
- The guest is not disturbed by staff

Higher quality of service from **staff** at reception

- Practical overview of the current status of rooms
- Further functions can be added via a tablet interface, such as towel changing and soap replenishment

Optimised plannability for **service staff and guests**

- Time and labour savings from efficient cleaning plans, no knocking on room doors, and measurement of time spent on cleaning individual rooms



park inn
by Radisson

MV
WERFTEN
FERTIGMODULE

GENTING
HONG KONG

Park Inn by Radisson, Wismar

With the Park Inn by Radisson hotel in Wismar, the Radisson Hotel Group opens its fourth hotel at the Baltic Sea. Consisting of 98 rooms all equipped with the latest STEINEL sensor technology, the hotel offers great atmosphere and a very special experience. With the help of the True Presence® sensors it is possible to optimize the energy consumption in the rooms, increase guest comfort and enhance the service quality. This means more satisfaction for everybody involved.

„Instead of cardholders we have installed in all rooms the new True Presence® sensor from STEINEL. In this way it was possible to optimize both, the climate control and our guest's well-being!“

Dipl.-Ing. Rato Juko, M.Sc.
Project Manager MV WERFTEN Fertigmodule GmbH



True Presence®

The only sensor technology of its kind in the world for exact presence detection

True Presence® from STEINEL offers a whole new dimension in sensor detection, opening up completely new capabilities in building automation. This now makes it possible to gather the qualitative data essential for controlling complex room situations of the type found in a hotel.

True Presence® is based on high-frequency detection within the surrounding environment. It involves the use of a new sensor system with extremely high resolution. This provides the capability of reliably detecting the presence of a person in a room, regardless of activity or movement. True Presence® indicates the presence of a person when respiratory and vital functions are detected in the form of three-dimensional breathing patterns.

In conjunction with unique sensor software, this detects a person with 100% precision. A microprocessor evaluates the sensor data and makes a stay-ON time unnecessary. True Presence® can detect temperature, humidity, CO₂, volatile organic compounds (VOC) and light level in one product, making the building "truly intelligent".

The sensors



True Presence® Sensor

It is the first detector for identifying human presence. Reliably detects presence and absence of people in an area of 64 m², the "True Presence". At a previously unattainable 177 m², it has even been possible to triple its total presence detection zone (Minor Motion) over conventional presence detectors.



True Presence® Multisensor

True Presence® technology with enhanced senses for brightness, room temperature, humidity, distance detection, approaching and moving away, CO₂, volatile organic compounds (VOC) and air pressure. It misses absolutely nothing.



HF 180

The HF 180 wall switch is equipped with a high-frequency sensor that's capable of reliably picking up movements regardless of ambient temperature changes or any wall partitioning. Alongside an angle coverage of 180° and an adjustable reach of up to 8 m, the HF 180 wall switch also impresses with its outstanding design.

