

SOLUTIONS FOR HOTELIERS

# Creating memorable experiences with outstanding technology



# Hotel complexes represent an excellent business proposition

Hotel complexes with a cost-effective management and an appealing environment that provide a high level of comfort and security can represent an excellent business proposition. Innovative building automation system from Smarteh supports these aspects.





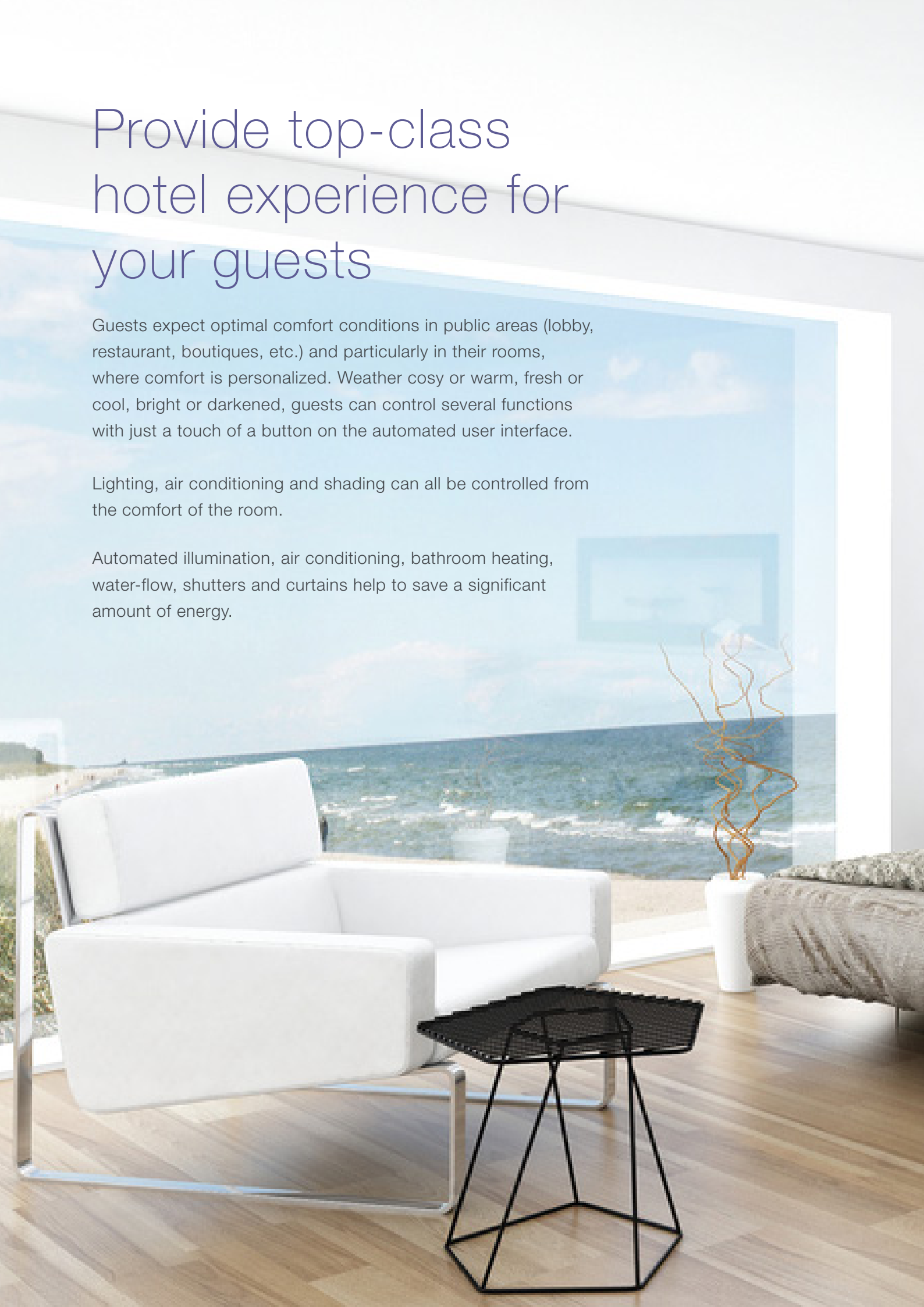


# Provide top-class hotel experience for your guests

Guests expect optimal comfort conditions in public areas (lobby, restaurant, boutiques, etc.) and particularly in their rooms, where comfort is personalized. Weather cosy or warm, fresh or cool, bright or darkened, guests can control several functions with just a touch of a button on the automated user interface.

Lighting, air conditioning and shading can all be controlled from the comfort of the room.

Automated illumination, air conditioning, bathroom heating, water-flow, shutters and curtains help to save a significant amount of energy.







# SmarteH exclusive panels offer a great solution for the most luxurious hotels rooms or suites

In addition to all the functionalities the touch screen offer a whole new level of comfort.



## CLIMATE CONTROL

The Smarteh Programmable Controller enables energy-efficient climate control for heating and air conditioning applications in hotel rooms. Independent of whether the desired temperature is given by the guest, automatically according to the room usage or centrally from the facility management, the controller reacts accordingly. Exactly the required room climate – simply, precisely and economically. Further on Smarteh network system and energy saving algorithms optimize air handling units, hot and cold water treatment ensuring entire building energy consumption is optimized at all times.

## LIGHTING CONTROL

Smarteh comprehensive automation solution offers unbeatable flexibility in controlling hotel room lighting and other hotel facility. Intelligent building control allows all lighting-related functions to be combined in a single installation solution. To further enhance guest comfort Smarteh Programmable Controller can use time schedules, pushbuttons, switches and sensors to control lighting and emergency lights using on/off, integrated dimmer, 0 .. 10 V or DALI (Digital Addressable Lighting Interface) technology. This ensures intuitive and simple operation by guests, increased safety and convenience through, e.g., situation-based operation or energy saving through occupancy based lighting functions.

## SHADING

Shutter and curtain control is an integral part of the Smarteh controlling concept. Smarteh enables the flexibility of deciding whether shading is controlled according to guest requirements, based on the actual room status and usage or according to central facility commands. A truly positive contribution to the level of comfort in the room and to the hotel economics.

## ACCESS

On-line card access system makes almost immediate announcing of card registration along with automatic invalid cards cancellation. Further on on-line system enables track record for all access points providing room entrance full history. Easy cancelation of the card from the reception desk in case of stolen or lost card. On-line system features standard interface, such as Leading Hotel Management System.



# Save the energy and turn your investment into long-term profitability

A hotel comprises of many different areas with diverse usage. Smarteh intelligent building control offers outstanding options for assuring efficient and environmentally friendly operation throughout entire hotel facility i.e. at guests rooms, receptions, in public areas, seminar rooms, conference centres, health and fitness areas, restaurants, kitchens, service areas and outdoor facilities.

In accordance to the European standard EN 15232 the potential savings for thermal and electrical energy can be calculated for each class based on the building type and building purpose. For example, by using class A, 30% of the thermal energy can be saved in the offices.

Building Automation & Control (BAC) efficiency classes to EN 15232		EFFICIENCY FACTOR					
		Thermal energy			Electrical energy		
		Office	School	Hotel	Office	School	Hotel
<b>A</b>	High energy performance building automation & control system (BACS) and technical building management (TBM)	0.70	0.80	0.68	0.87	0.86	0.90
<b>B</b>	Advanced BACS and TBM	0.80	0.88	0.85	0.93	0.93	0.95
<b>C</b>	Standard BACS	1	1	1	1	1	1
<b>D</b>	Non-energy efficient BACS	1.51	1.20	1.31	1.10	1.07	1.07



# SmarteH philosophy enables one solution with respective know-how and spare parts to control the entire facility.

Therefore the energy efficiency will improve to the highest level, without compromises in the comfort for the hotel guest.



SmarteH Programmable Controllers can be easily combined together through a wide range of supported standard communication protocols (Modbus TCP/IP, Modbus RTU, CANopen, LonWorks) into a logical and interoperable network with one monitoring system. This way SmarteH Programmable Controllers interact with other systems and building equipment such as central facility command, i.e. Building Management System (BMS), entertainment set (TV, Internet, telephone) and Hotel Management Systems. Such philosophy allows optimal utilization of all automated devices in the hotel and consequently considerable energy saving.



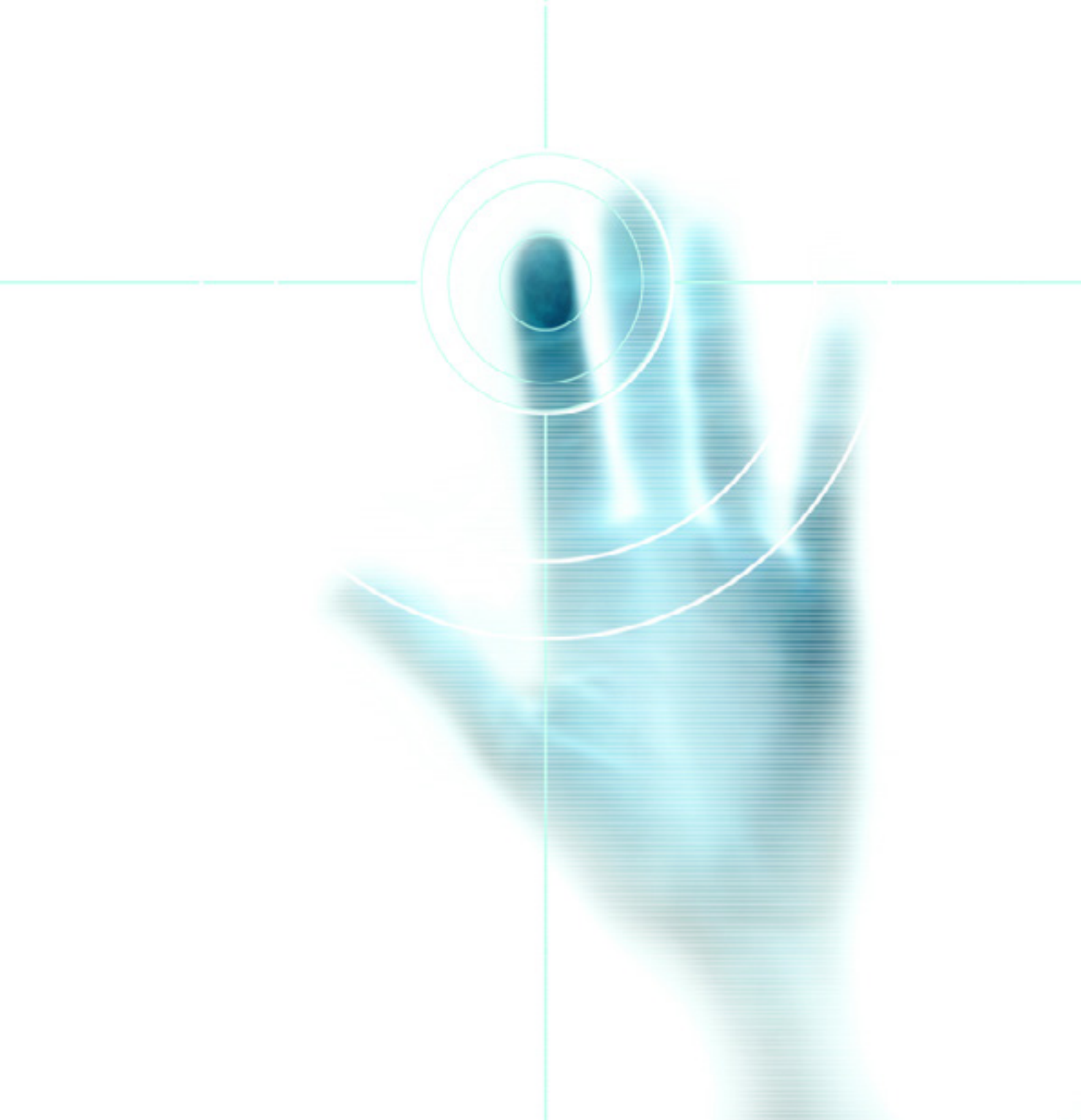
# Security that stands out

Your guests expect you to go any length to cater for their well-being.

The ability of forwarding safety-relevant messages and taking appropriate action from external locations, such as reception or maintenance centre, really makes the Smarteh network solution stand out.

# Staff utilization and monitoring

Not only can your guests inform you of their wishes, now you can remain in constant contact with the room at all times. Smarteh Building Automation System helps the hotel staff to react immediately in case of a problem.





# Intelligent building control ensures the highest level of service



Smarteh philosophy for room control and other hotel facilities is based on a freely programmable, modular PLC (Programmable Logic Controller). With this solution the system can be easily adapted to any type of functions. The automation demand of the rooms, corridors, staircases, restaurants is not a problem. Depending on the number and type of functions (inputs/outputs) it is just necessary to select the optimal combination of input and output modules. Even if the hotel has many different types of spaces all of them can be controlled with the same type of controllers.

# Easy maintenance for the entire building

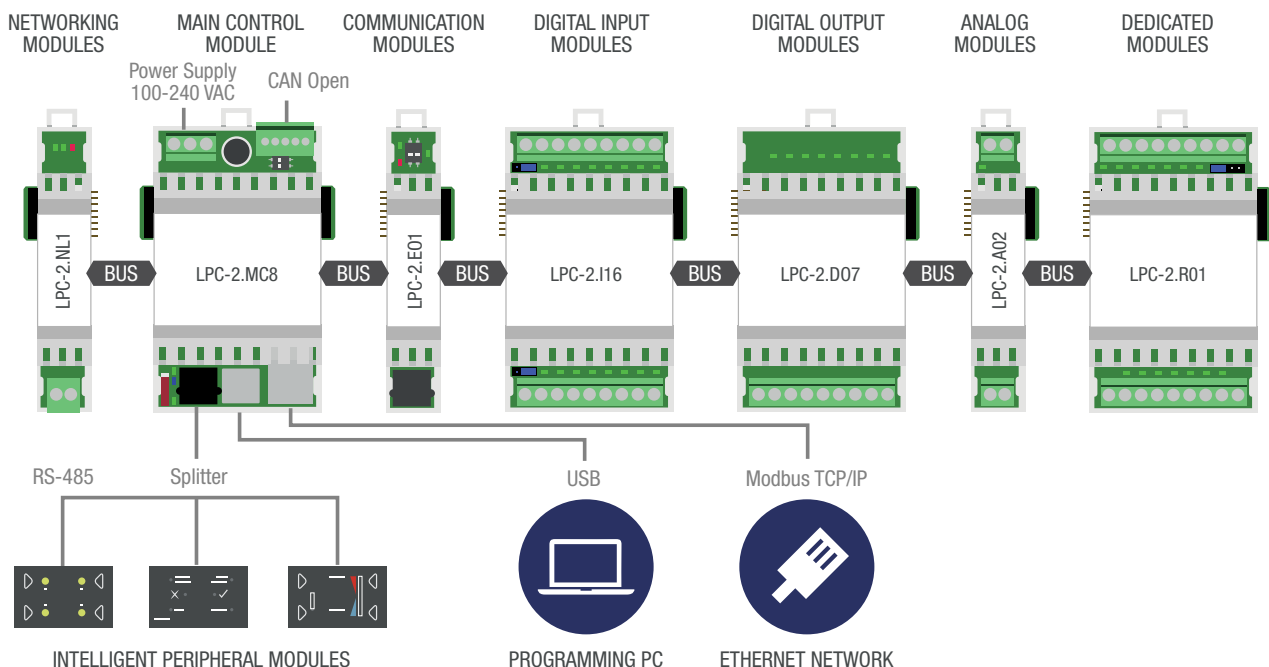
Because equal building automation equipment is used for the entire building, it is easier when it comes to maintenance during the operation of the hotel.

Due to above advantage, Smarteh intelligent building automation system offers unified spare parts for the entire building.

# Hotel Room in Building Management System for receptionist



## Modular configuration with Smarteh main controller LPC-2.MC8





# Smarte Living systems

## PASSION FOR OUTSTANDING TECHNOLOGICAL SOLUTIONS

Smarte is a team of innovators, developers, visionaries and processing equipment manufacturers that can provide a wide range of solutions, from a single controller to an entire turnkey solution. The guiding principle of our work is the passion for innovations in technology. We would like to make our service comprehensive by offering a complete professional and technical support.

Annually we develop and produce thousand of controllers mainly installed in large cruise ships, oil platforms and luxury hotels all over the world.

## SMARTEH REFERENCES

We have developed and produced different room controller equipment for controlling of cooling and heating systems on:

### · some of the most spectacular ships:

Queen Mary 2, AIDA Stella, Carnival Breeze, Europa 2, Mein Schiff 2, Mein Schiff 3, Saga Pearl II and many others

### · oil&gas projects:

USAN, Wind Carrier, Wind Carrier 2, Jasmine, CLOV

### · some big hotel complexes:

Hilton – Singapore,  
Park-Hyatt Dubai – UAE,  
Radisson Blu Hotel Istanbul - Turkey,  
International Hotel Varna – Bulgaria,  
Maestral – Montenegro,  
Hotel Mauripol - Ukraine

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