Kblue
ETH-HOTEL

Hotel management system

ETH-HOTEL system presentation

ETH-HOTEL is a hotel smart management system, designed and built with the best quality standards and using the most recent building technologies to guarantee the highest energy efficiency and operation at minimum cost. The ETH system allows the control of accommodations such as hotels, B&B and guest houses by means of specific components for monitoring rooms, lobbies, restaurants and spa areas.

KBLUE solution enhances guests experience enabling them to create the desired ambience according to the specific needs.

ETH-HOTEL is a flexible solution for every type of building, from small inns to luxurious hotels. Thanks to its modular concept and open communication, it complies with the modern Hotel requirements, satisfying the needs of each client:

- Check-in/check-out

- Room management with service activation based on user identity; thanks to the individual room control function, the system can perform the automatic deactivation of unneeded consumers such as TVs, air conditioning and lights, according to occupancy schedules*

- Individual temperature control for every room, switching to economy mode when window is open

- Management of guests and staff access throughout the entire building

- Automatic control of lighting through brightness and presence detectors

- Alarming (flood, fire, emergency calls) via instant messages, pop-up and email

- Data monitoring system to provide real-time feedback on energy consumption and prevent the occurrence of blackouts

- Security

- Video surveillance

- Interoperability with existing PMS and ERP and integration with other systems (i.e. HVAC)

* *Functions that permit energy consumption optimization and efficient operation.*

The ETH-HOTEL system architecture

The main components of the system, configured according to customer needs, can be distinguished among hotel different areas as follows:

Reception:

- Central control unit with ETH-VIEW-HOTEL software
- Transponder programmer
- Badge transponder

Bedroom:

- Master unit, connected to the central supervision system through Ethernet TCP/IP communication protocol
- I/O expansion modules (input/output)
- Transponder badge reader (out room)
- Transponder badge reader (in room) to activate, for example, room's lighting, loads and air conditioning
- Thermostats

Common Areas:

- Master unit, connected to the central supervision system through Ethernet TCP/IP communication protocol
- I/O expansion modules (input/output)
- Transponder badge reader to manage access room control
- Thermostats
- Intruder alarm
- Alarm and status messages (failures, fire, flood)

The main characteristics of these elements:

PC control unit
A PC that receives and stores all building information and displays them using the ETH-VIEW-HOTEL supervision software.
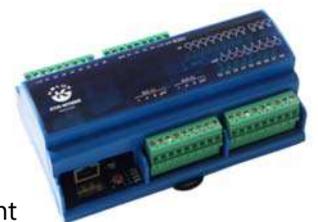
Transponder Programmer
Connected via USB to the PC control, it allows the recording of each card to enable individual access / functions.

ETH-MY88 Room module
The Master unit has analogue / digital inputs and outputs to activate and manage multiple devices. Functions can be standard or fully customized.

Expansion Modules
There are several expansion modules, DIN rail or flush-mounted for housing in tight spaces. Through the RS485 Bus, the capabilities of the Master unit can be expanded.

KB-TASTOUT Transponder Reader (out room)
This transponder reader is installed outside the door of the room and is connected to the Master unit via standard 4-wire RS485 Bus. The badge reader highlights the following features:

- Red Led for DO NOT DISTURB
- Yellow Led for PRESENCE
- Red/Green Led for correct badge reading
- Blue Led for courtesy lighting
- Door Bell Button
- 2 configurable inputs / 4 relay outputs
- Warning buzzer

Blinking of both red leds is used to report active alarms in the room.

KB-TASTIN Transponder Reader (in room)
This transponder reader, connected to the Master unit via standard 4-wire RS485 Bus, enables a diversified management of the room functions, depending on the type of user identified through the badge.
Recognition comes by inserting the badge into the card key holder.
The badge reader highlights the following features:

- DO NOT DISTURB signal, also used by staff to confirm room got cleaned.
- DO NOT DISTURB button
- Badge presence
- Red/Green Led for correct badge reading
- Blue Led for courtesy lighting
- 2 configurable inputs / 4 relay outputs
- Warning Buzzer

ETH-TTERM Touch screen *K*ULT Thermostat
Characterized by an innovative design, KBLUE new smart thermostat can intelligently control the temperature of the room to increase comfort and energy saving.
ETH-TTERM is equipped with a 3" colour touch screen display and a frame with a central cut, making it perfect for modern and stylish projects.
Temperature and humidity sensors are integrated (humidistat module optional).
- Available in white and black
- It can be installed vertically or horizontally
- For wall mounting box (type 503) or drywall

Thanks to its wide display the user can easily set the desired temperature, Fan-Coil speed, air quality and humidity.

RFID cards and badges
It is a card with a unique code that cannot be cloned; it uses standard 125 kHz frequency and it is not subject to demagnetization.
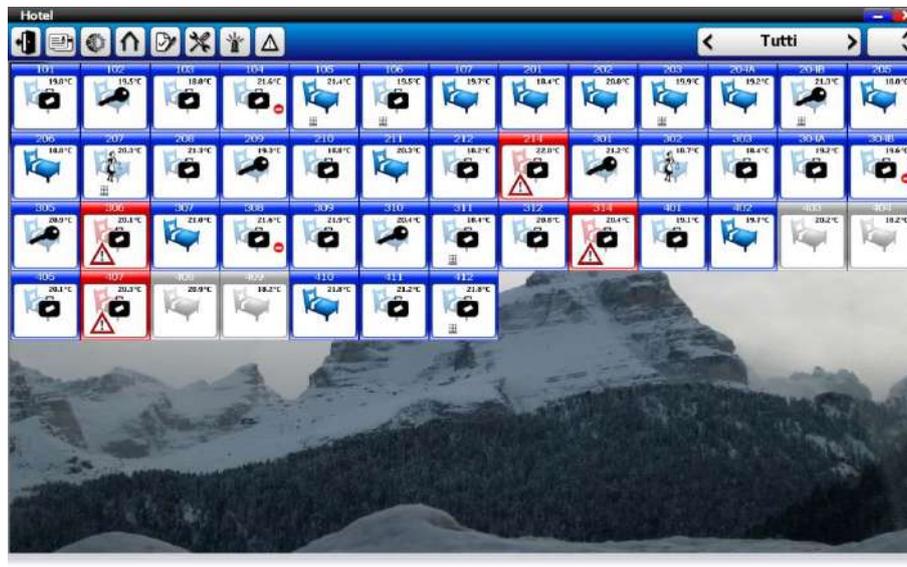Each transponder may be associated with those specific functions that allow the access to one or more areas.

ETH-VIEW-HOTEL supervision and control software

ETH-VIEW-HOTEL has been developed with the aim to give an easy and intuitive way to navigate through the functions of the hotel, giving full control of building devices by means of icons and maps.

Main Page

The main page displays all room through icons; the colour and shape of each icon allows the visualization of several information:

- Room occupancy (free, booked, maintenance)
- Room presence (guest, passepartout, service)
- Temperature
- Other (room clean, to clean, do not disturb)
- Alarm and warnings (electrical failure, fire, flood)

There are below a few examples of icons:

Available room

Empty booked room

Booked room with guest inside and "do not disturb" active

Maintenance staff inside with "passepartout" badge

Cleaning staff inside with open window alarm

Room in alarm with guest inside

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Other pages available in the ETH-VIEW-HOTEL software.

Check-IN Page
Through the check-in page all data and reservations can be recorded.
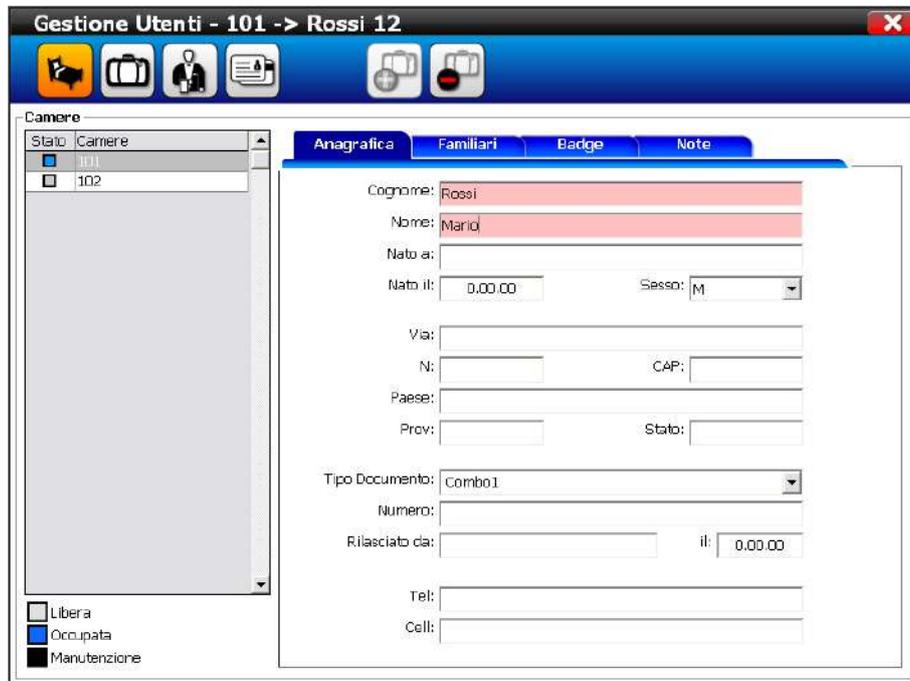
Transponder registration page
Through the transponder registration page all functions can be easily assigned to the badge.

Temperature control screenshots

Thanks to the ETH-VIEW-HOTEL software, control and management of heating and air conditioning rooms system is easy and cost effective through an intuitive user interface and a recognized compatibility with major brands in the HVAC industry.

Power loads management: ETH-POWER software

KBLUE hotel management system helps monitor and reduce energy consumption, in particular of lighting, heating, ventilation, air conditioning and electrical devices; an efficient control of real-time electricity use and operating costs, through load shedding function, can help manage power consumption, resulting in real energy saving and more efficient use of renewable energy sources.
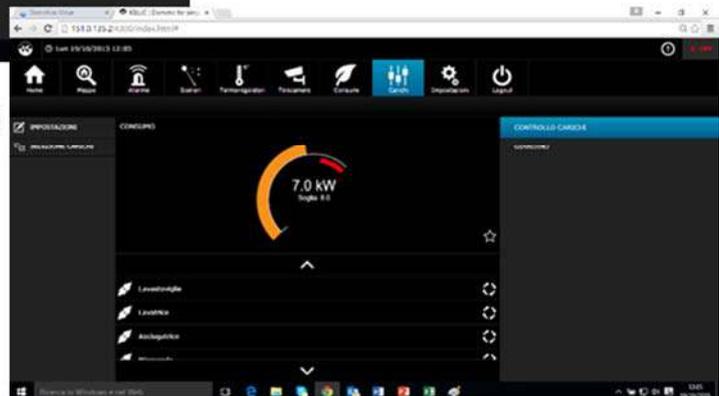
Below some software screenshots
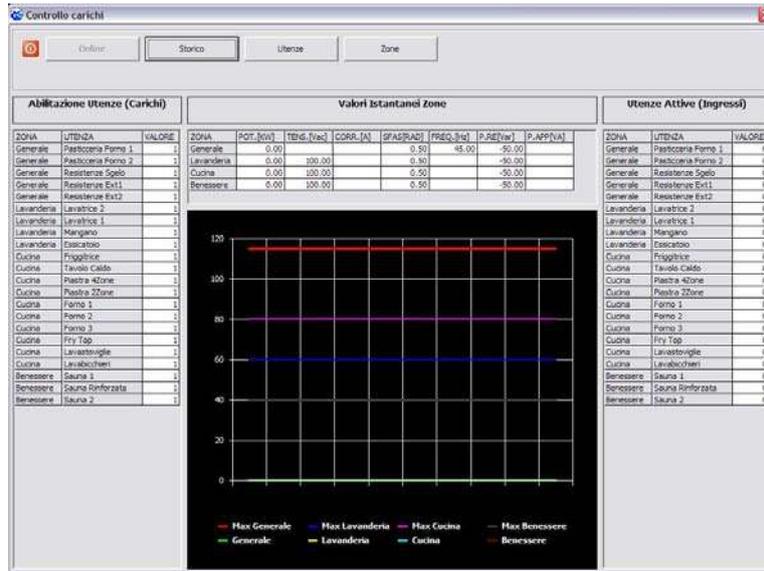
Display of real-time user consumption
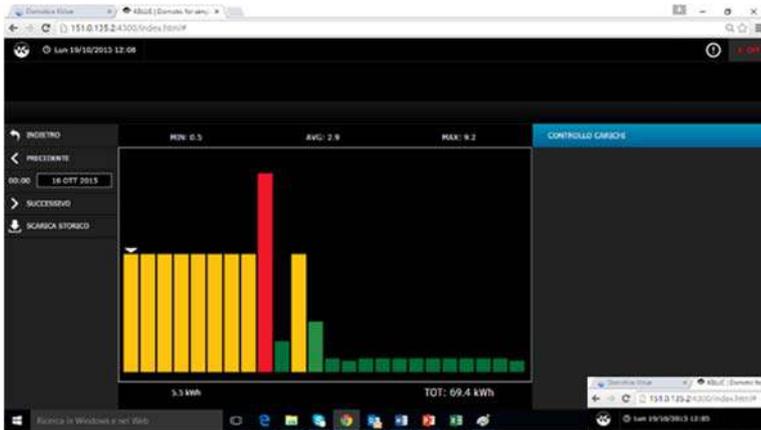
Graphical analysis and monitoring of energy use


Load-shedding priority list

CONFIGURATION

STANDARD CONFIGURATION - ROOM MANAGEMENT

"Basic" bedroom Kit:

- ETH-MY88   Master module - 8in/8out relays
- KB-POW60   Switching power supply 12V 60W
- ETH-TTERM   3" touchscreen thermostat *K*ULT
- KB-TASTOUT   Transponder reader out room
- KB-TASTIN   Transponder reader in room

** Software License and software customization
according to requirements, not included*

Room 34

28.0 °C

42%   26.5

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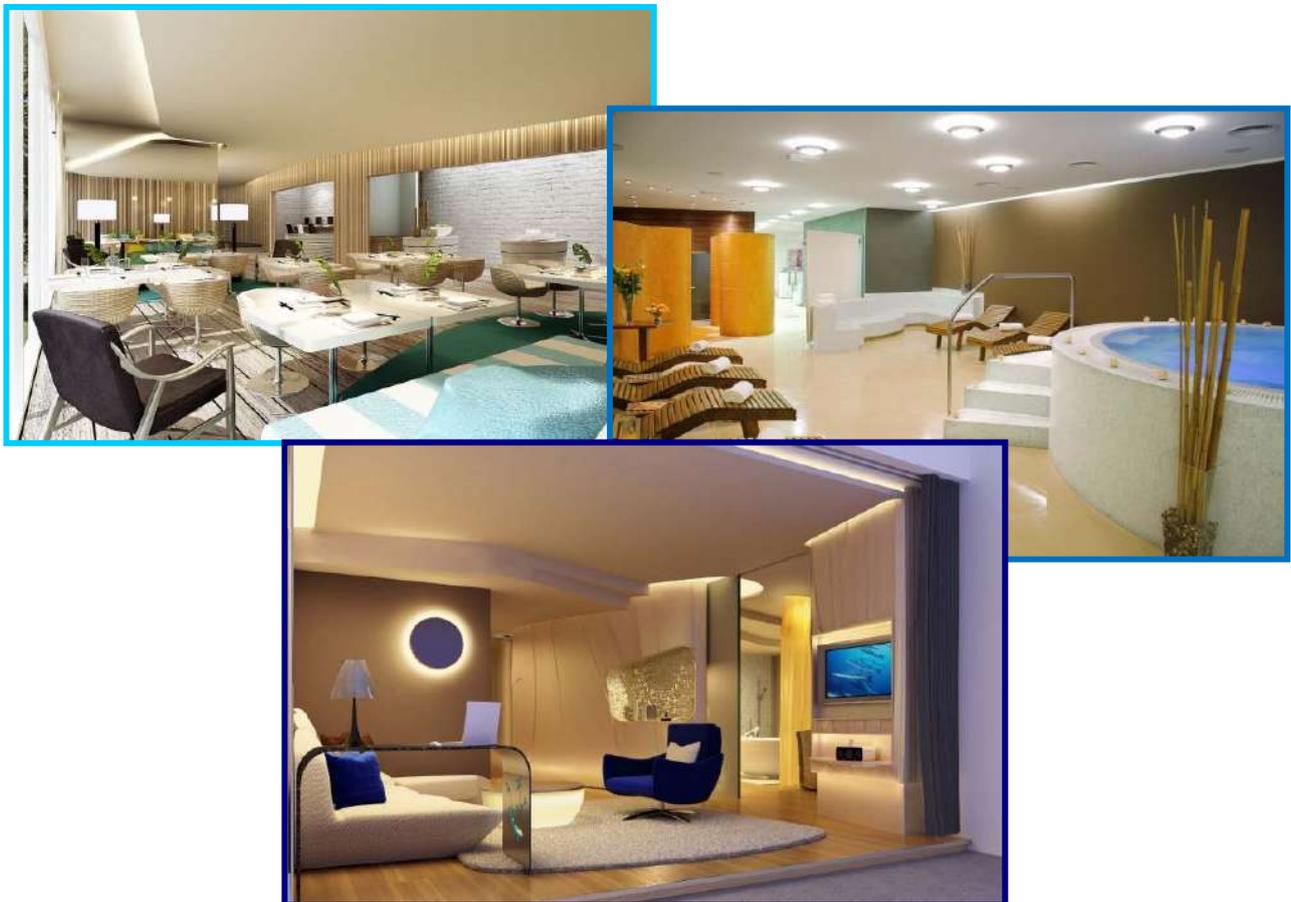
Domotic for Simplicity

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