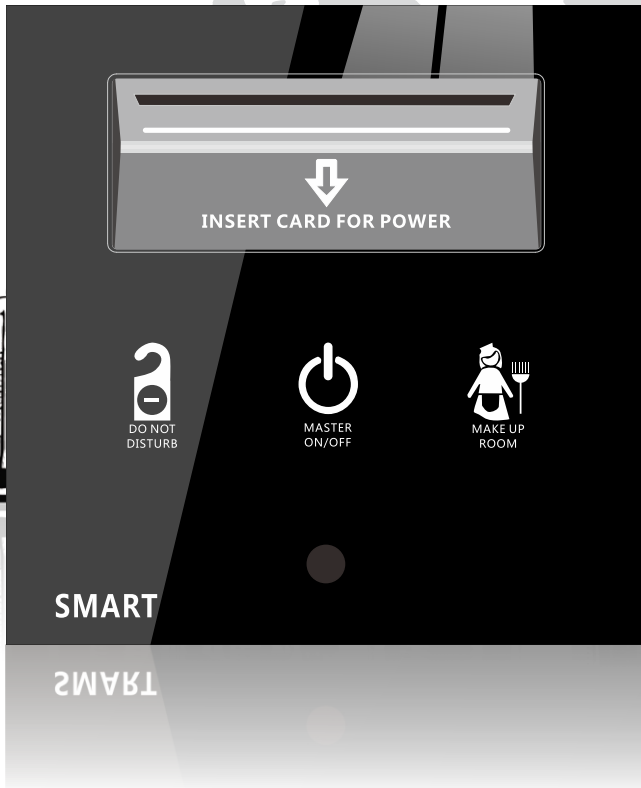


# SMART-HOTEL

## G4

Hotel RMS Controls



# Company & System

Smart Group has Developed an advanced online/ offline Smart Hotel Guest Room Automation and Energy Conservation Systems for the global hospitality Industry. The wide range of devices and the modular setup of the system provides solutions ranging from the most prestigious luxury projects to specialized serviced

Properties. The philosophy behind the Smart-G4 room management solutions is driven by social responsibility towards the environment, which with equal importance increases the return on investment of Our Clients and hotel operators by optimizing the energy consumption Of their properties. Increase Comfort, and add luxury. All devices have been designed in order to give guests a simple and intuitive use of this advanced system, whilst using sleek, state—of—the—art cutting edge technology.

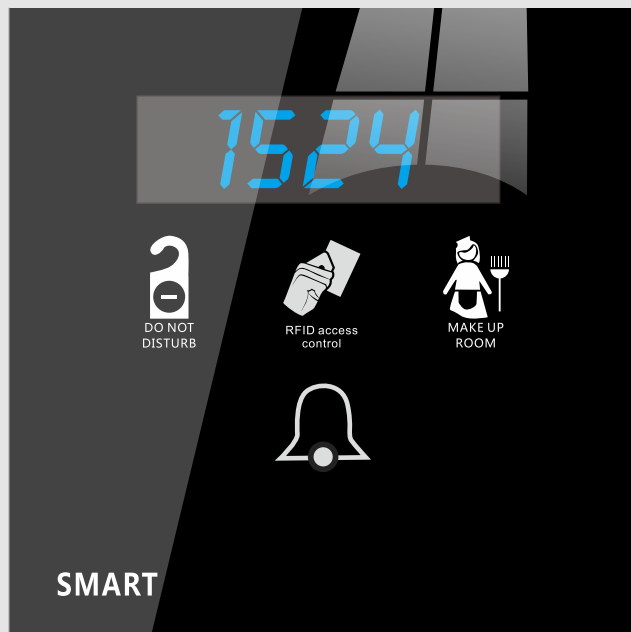
The product range offers highly innovative solution for modern hospitality industry:

- Advanced Energy Management
- HVAC, humidity and air quality
- RFID, control room access control, Occupancy detection
- In Panel Presence and occupancy logic, for Energy saving
- Room Number Signage and all touch Panels
- Lighting, Dimming, Scenes, Moods, and service Request
- Full Moonlighting abuse protection



# SMART-HOTEL

## G4



# Features

The SMART-G4 room management system is a well-rounded concept that starts from a modular system design in which clients can select the features, according to the hotelier's standards, starting from our core system and upgrading features and devices up to our premium line. Our industry leading feature set has been one of the main decision drivers for many of our satisfied clients and operators.

The main features of the online SMART-G4 RMS are

- RFID access control
- RFID keycard holder for advanced energy saving
- HVAC and humidity control
- Event based energy management
- Presence and metering sensors
- Lighting and dimming control
- Curtain control
- Guest service requests
- Access control of back of house and elevators
- Client/server application
- Mobile and tablet enabled guest and staff applications
- and much more



# Added Features

## Multiple AC Types

The Smart-G4 Hotel RMS has added unique new flexible features to control the following types of Hotel HVAC and climatic control Needs like:

- Split or Cassette AC control by Infra-Red (IR)
- FCU/AHU
- 0-10v VAV
- VRV and VRF
- Modbus Links
- Special RS-484 Direct Bridges

## Integration to Any Other System Key Card Holder

The Smart-G4 Hotel RMS has added unique new flexible features to enable the easy integration and maximum energy saving even if third party system duplicate and valid room card is inserted in Key Slot.

The smart-G4 integrates direct Via dry links to its Most Advanced Energy Aux2.



# Furnished Apartments Solution

## Furnished Apartments Logic

The Smart-G4 Hotel RMS has created advanced solution for furnished apartments with only one card holder slot and multiple Split IR controlled, FCU/AHU or other that works uniquely with easy and flexible logic programming as per Property Operator and owner's Needs. Here is some examples:

- If Card is Removed all Air-conditioning Units are de-energized to off status, AC will not be able to operate again unless Valid card is inserted in slot
- At Midnight, any AC with Temperature below 24c, to set at 24c, if off remains off, if above 24 remains as is.
- Once card expires its validity, the system is de-energized totally to off mode
- And many more flexible actions

## Campus Rooms

The Smart-G4 Hotel RMS has expanded to serve campuses like university and labor camps. As it was noticed that the residents of those rooms ignore to energy save and water save, thus the Smart-G4 has created a unique Package that is very affordable and breaks even its cost totally in few weeks. Such solution works as per following example:

- If No One in Room for more than X minutes, energy save and water save
- If People inside room, or at any time people are detected inside, then serve normal
- If Window is opened switch off AC. To switch AC on again must first open room door then close it to enable ac again
- At Certain Time, Can Disable AC while enabling power and water and So on.



# IPTV & MediaSign

## IPTV and on TV control

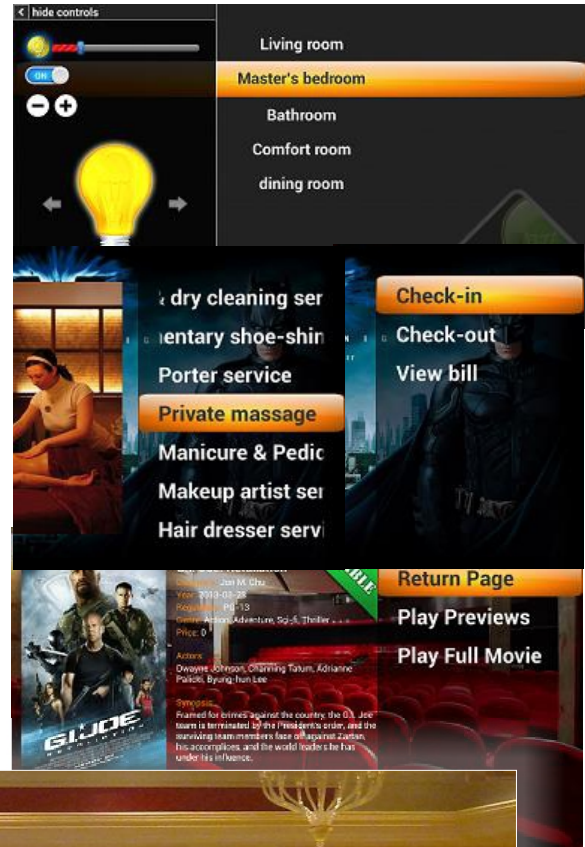
Several Video on demand and IPTV technology providers (e.g. Net2Stream®), has fully integrated Smart-G4 RMS controls to their solutions. Now Any Guest can enjoy watching TV, check Hotel activities, cameras, events, Browse Internet, Watch their Paid Video programs, and control their room systems Freely and directly on TV.

Many IPTV providers today support Smart-Hotel G4 SBUS Technology. Some has more Features while other has More advantages.

Guest can order his room service direct on TV, can extend his reservation, check his bill and more.

## Mediasign

An added advantage to enable hotel operator distribute contents around the hotel with prompt update on events and offers or happenings. Guest can enjoy looking at the benefits while riding elevator , walking in corridors or refreshing in Toilets or other public places.as per hotel needs.



# Added Security

## **Moon Lighting and unauthorized Usage**

The Smart-G4 Hotel RMS has added an innovative feature that enable alarming management/owners in case any of the units is utilized while it was not registered officially as sold in the PMS system (Moon Lightening) . Such monitoring and reporting happens if the unauthorized person is inside the room or attempts to open the door to leave after more than 10 minutes passed on employee card opening of the door. The monitoring and Trigger reporting happens based on any of the following:

- If User open Lights
- If user open water tap or shower
- If user starts or stops ac
- If user touch any wall panel
- If user move in the space
- If user open curtain or window
- And so on.

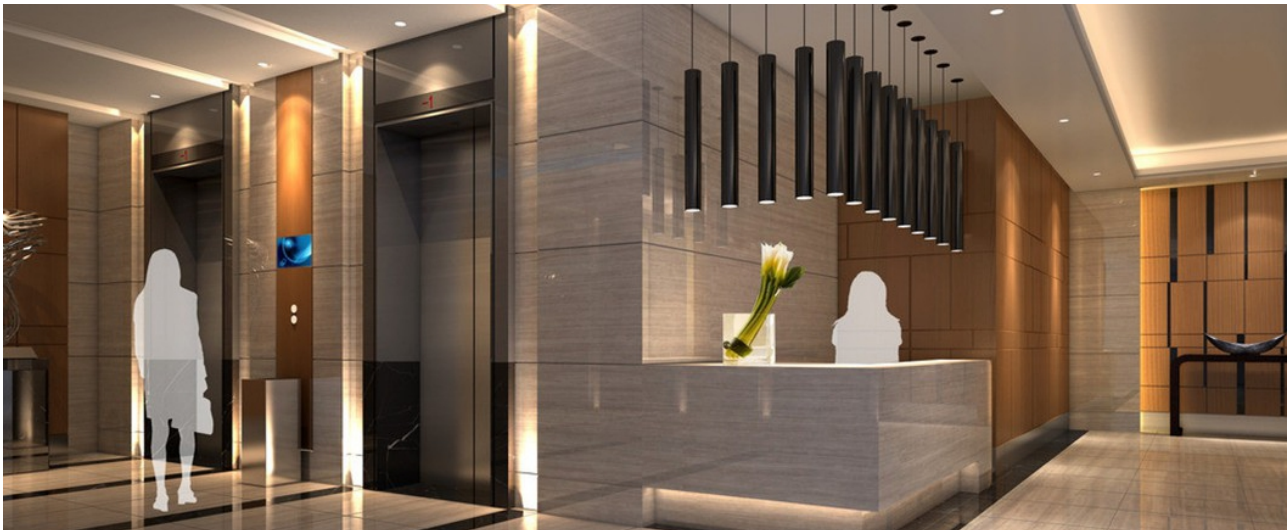
The same also can be activated to Alert of Misuse in case room is Sold to a guest, but staff card is used to activate room but room door is kept closed against rules of the house.

## **Fire Alarm Door Release sequence**

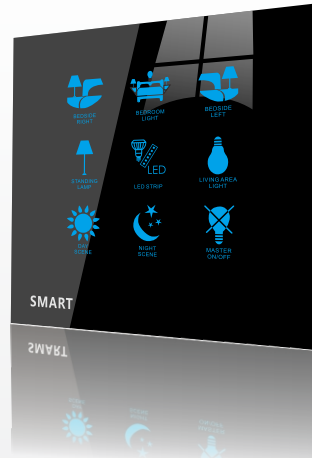
The Smart-G4 Hotel RMS has added sequential online function that enables the Engineering and Security or fire marshals to release all doors for easy evacuation confirmation after fire alarm is confirmed as legitimate. The door release activation is protected by special Key or break glass lever that is located at fire marshal central.

## **Water Conservation Added Feature for Green Leed**

The Smart-G4 Hotel RMS has added unique feature that only enables the flow of water based on the assigned daily free quota per guest. Any additional water usage might be blocked or charged extra as per hotel rules.







RFID access control



RFID presence & motion detection



HVAC control



GO Comfort



Lighting control



Dimming control



LED dimming



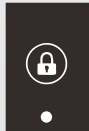
0-10V Controls



Mood lighting (DMX)



Moon lighting Upuse monitoring



Guest App Control & Access Control



Energy Saving & Metering



Logic



Security



System Watch Dog



Service



Energy Management



Mood & scenes



Wired & Wireless bedside consoles



Refill Minibar



Water Usage Management



Curtains / Drape control



Bathroom alarm pull cord



Make up room



Do not disturb



Laundry pick up



Butler call/ Room service

# EnergySaving

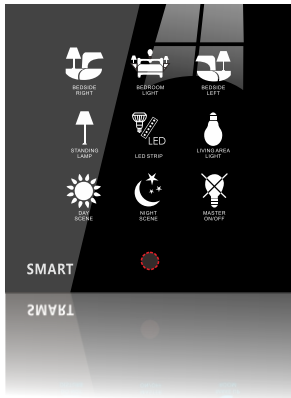
Hoteliers around the globe have positioned energy saving as a top priority of their environmental policies, as part of their corporate social responsibility. By installing the room management system in a property, the hotelier gains online monitoring and control of the major utility consumers within the guestroom, which statistically account for 70- 80% of the total utilities consumption of a property. The R&D at SMART-G4 has developed highly advanced energy saving logics, based on the interaction of various guest presence sensors within the room, along with the actual room status from the front office (PMS) and the building management system. The logic includes day/ night and seasonal settings, multiple temperature set points based on the occupancy and short-/long-term vacancy of rooms. This interaction allows a seamless automation of

procedures, minimizing staff interaction and optimizing energy consumption based on real-time status of the room. The hoteliers can now give their guests the opportunity to take part in the green initiative by selecting the ECO comfort® setting on the thermostat. ECO comfort® is a customizable setting that uses a more environmentally friendly HVAC algorithm with minimum impact on the felt temperature.

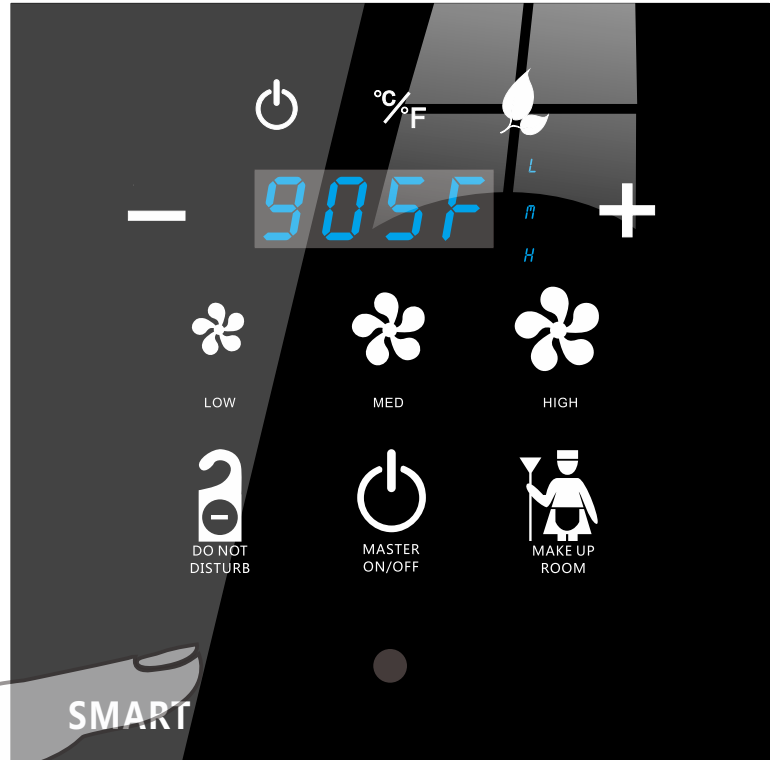
The smart-G4 Hotel RMS also logically detects real occupancy even if second valid guest card (Wife card) is inserted in keycard slot while room is vacant. and Automatically adjust to save energy accordingly in special way and methodology that help avoid any mistakes.



# Occupancy Sensors



Motion Detection



Motion Detector inside All Room Panels with added Occupancy Logic and Panel Usage Logic which help determine accurate room occupancy regardless of if valid card is still inserted in the key card holder slot.

The logic also help report unauthorized usage of room for both security and moonlighting unauthorized rent out that is not registered in the PMS system officially.



# Guest - Hotelier Benefits

The Hotelier cares about guest satisfaction index, socially responsible use of resources, return on investment, quality of service and high levels of staff efficiency. The SMART-G4 room management system helps to improve all of the above.

It starts with the flexibility of the system infrastructure, which leverages on the existing structured network of the property, avoiding a proprietary separate network infrastructure. The TCP/IP network guarantees high scalability and real time actions with third party interfaces. The online interaction with the property management system allows an automated management of the guestroom based on its actual occupancy status, optimizing the energy consumption by eliminating unnecessary utilization. The engineering department has the ability to remotely diagnose and maintain guestroom controls and the equipment connected to it, therefore anticipating failures and minimizing the number of complaints from guests.

The user interfaces on our thermostats and guest service panels utilizes human friendly designs with ease of usability. Large internationally recognized icons completely avoid the use of small descriptive text, so that the guests will immediately familiarize with the intuitive features of the HVAC, lighting and guest services. Guest security and privacy are greatly enhanced by the communication of the electronic door locking, the keycard holder and the room safe, with features such as online deletion of lost (master) keys, online extension of expired keys and many more.

The hotelier knows at any time if the guest is in the room, asked not to be disturbed, or requested for cleaning. This allows the hotelier to attend to guest requests much faster.

More than 15 Added Service request easy panel that help hotel to analyze the service level needs and service time

Easy reporting of Room ready and Room maintenance needed or Laundry picked can be achieved by house keeping staff simultaneously using smart-G4 room panels



# Guest panels

Wall mounted, wired and wireless

The product range of guest panels also includes our proven tabletop guest panels, which today are installed in thousands of international guestrooms and allow intuitive image based control of the room management system. Up to 15 functions can be controlled on one wired or wireless panel.

Feature set:

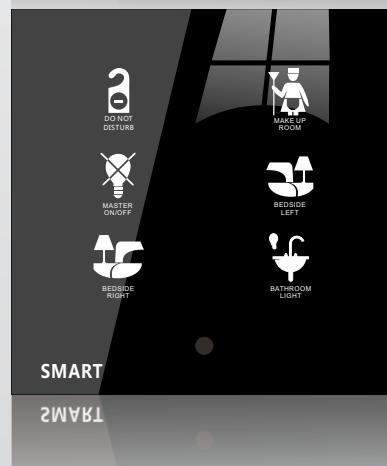
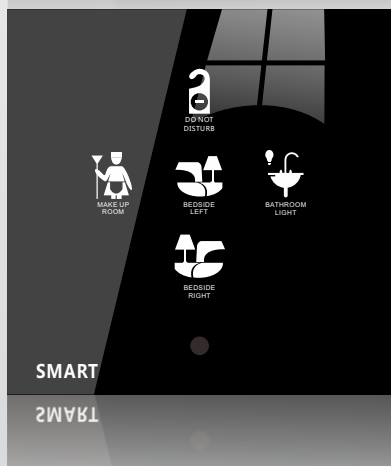
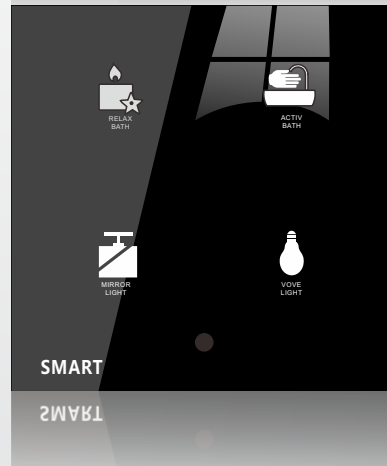
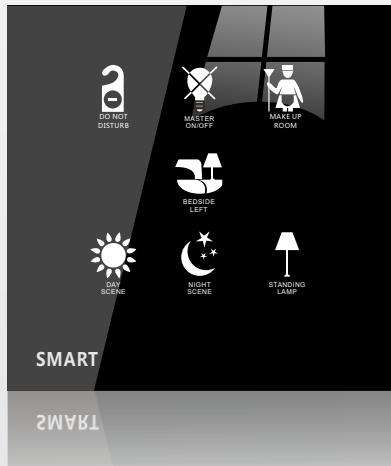
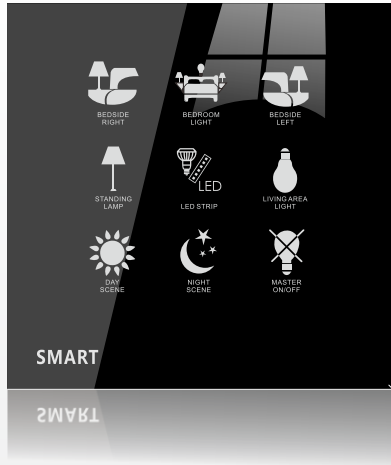
- Temperature set point up/down
  - Fan speed/mode
  - Lighting on/off
  - Dimming up/down
  - Lighting scenes
  - Curtains open/close
  - Night light
- Do not disturb
  - Make up room
  - Butler call/Room service
  - Laundry pickup

The latest release, designed for suites and residential concepts, is the Android or Windows based touch panels including audio/video intercom functions and web based services, on top of the complete feature set known from the other panels.

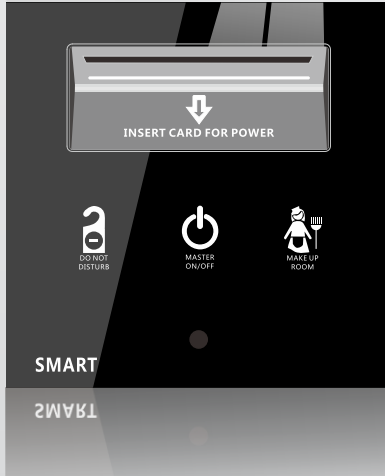
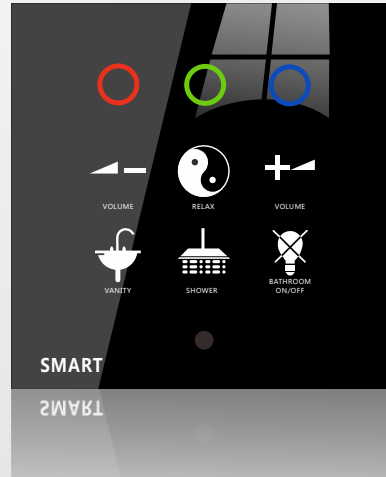
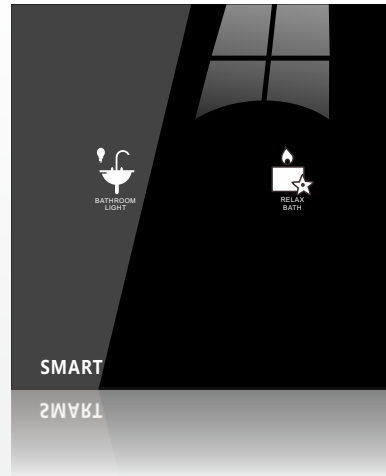
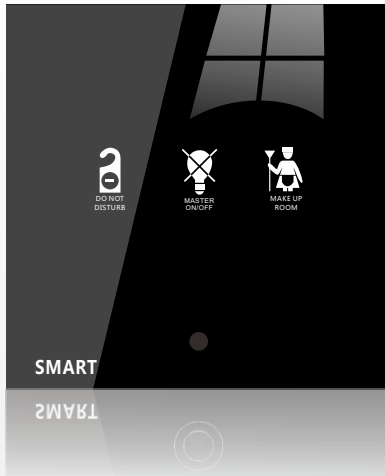
The guest application for iOS and Android is based on the concept of Augmented Reality and allows the guest to interact with the room equipment intuitively.



# MIL Series



# MIL Series



# More Panels



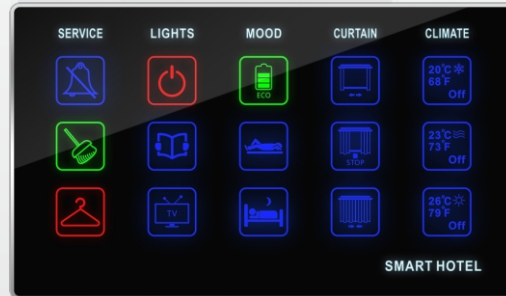
2VW2NWC



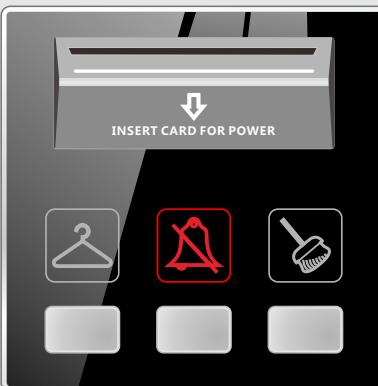
night



SMART HOTEL

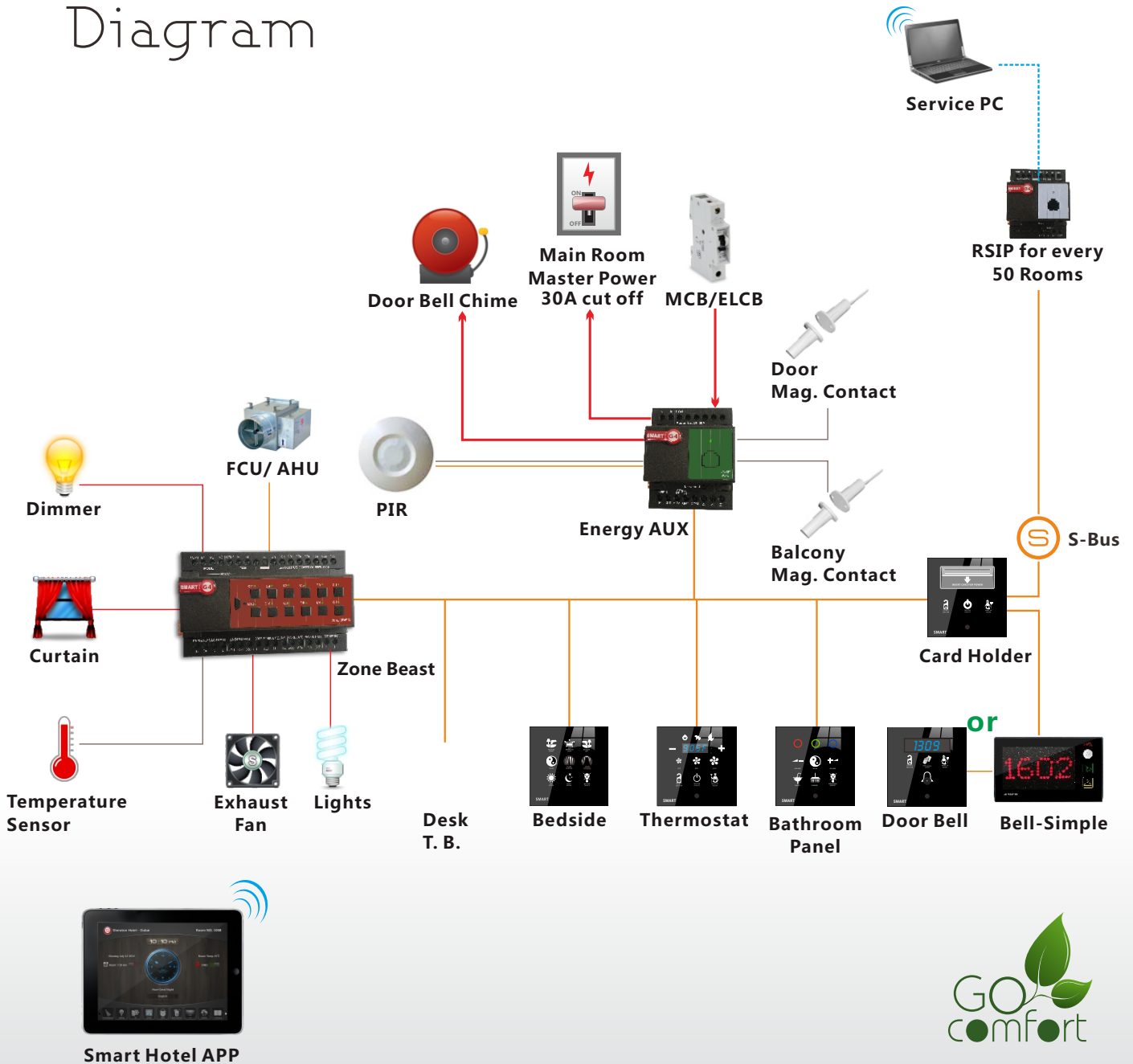


SMART HOTEL





# Diagram



# Advantages

- Energy Preset & Handling**
- Occupied
  - Vacant
  - Engineered
  - Human Select
  - Unsold
  - Balcony open

- FCU/AHU/VAV Control & Handling**
- Unsold
  - Vacant
  - Occupied
  - Balcony open

- Room Moods Simplified**
- Wake up
  - Sleep
  - Read
  - Dress/wash
  - Relax
  - Watch TV

- Security**
- Door Alerts if Forgotten open
  - Window/Patio Forgotten open
  - Unauthorized Presence
  - Moonlighting

- Comfort & maintenance**
- Smart Temp Compensation while sleeping
  - Fresh Air circulation in Bath and room if stagnant
  - Device Status Watch Dog.

- Service Request & Display**
- DND
  - MUR (Clean)
  - 15 Service+
  - Laundry
  - Please Wait

- Motorized Curtain Control**
- Open
  - Stop
  - Close

- System Operatability**
- Online
  - Stand Alone
  - Offline

- User Friendly Interface**
- Bell
  - Door Access
  - Room Number
  - On TV Control
  - LED Back lighted
  - Service display
  - Smart Phone App

- Metering & Logging**
- HVAC USAGE
  - Lights Usage
  - Water Usage
  - Guest Habbits
  - Guest Profile
  - Estimated Usage
  - Activity Logging



SAVER



W.DOG



SECURE



LOGIC



ENERGY



SERVICE



COMFORT

# Flexibility ,Design & Customization

Besides a compatibility approach to hardware and software, SMART-G4 as a single source supplier, displays a flexib approach to the cosmetics of design and customization. We understand that every hotel operator has its corporate design standards and therefore we offer a wide variety of materials, colors, styles and custom-design possibilities, for hotels of every size, style and vintage.

All bedside panels use touch technology and are available as wall-mounted, tabletop or wireless versions with 100%

customizable features and icon designs, according to the specific project requirements.

The corridor panel with built in card reader, door bell and room number signage is combining these typically separated components in order to provide the hotel corridor with the sleekest possible design. The room number can be displayed in any font and color, with or without LED backlighting.

The Smart-G4 Hotel RMS has changed the abilities of almost all devices to enable it to be used as stand alone, offline, and online. Here are some examples:

- You do not need to buy all the system to get the energy saving target. Only one device can help you achieve that.
- You do not need to buy whole system to get service management, one or 2 devices would help you to achieve that.
- and so on.



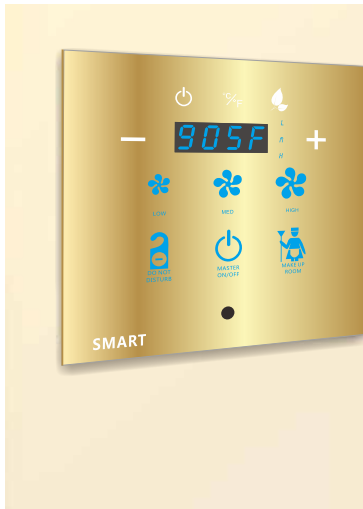
# VERSATILITY



# Lighting Control

With over 20 years of experience in building automation and lighting control, our range of controllers are capable of switching and dimming most available types of lighting loads, including direct interfaces to industry standards like DMX, SBUS, Modbus and KNX. This design flexibility of the lighting philosophy of a guest room, paired with the use of the new glass switch range, and even matching Sockets and outlets, media Hubs, will result in intuitive control over the lighting in the room for the guest, either by predefined scenes or by individual circuit control. This immediate understanding of the lighting features, temperature and service requests is one of the key advantages that has convinced many international operators, clients and consultants. The sleek surface of the new glass switches offers the user from 1 to 12 control buttons, where each of the buttons uses a large, internationally recognized icon.

Clients can choose the icons from our wide portfolio of existing icons or work with our designers to create their individual corporate set of icons. Furthermore the flexibility of the new glass switch range allows our clients to choose the color of the glass panels, therefore matching them with the hotel interior design. Besides a large pre-programmed feature set, the programmable logic can define the function of each button and meet nearly any conceivable project requirement. All buttons are equipped with dimmable LED backlight, ensuring best visibility and ease of recognition at all times of day and night. The new glass switch range achieves design harmony within all wall-mounted devices and is therefore an ideal replacement for conventional switches.



# Hotel Controls

## Other Hotel Areas

only, Smart-Hotel G4 has Expanded to cover all other front and Back office needs and More. Today we can have one stop shop for all the following as example:

- Lobby Lighting, HVAC and BGM
- Public areas Lighting, energy saving, Signage Boards content management
- Ball rooms and Meeting Rooms Multimedia, Climate, and lighting control
- Facade Architectural Lighting
- Parking management
- Shuttles or Taxi Call Systems
- And Many More

## How energy consumption is calculated and reported?

The Smart-G4 Hotel RMS has added energy monitoring and calculating module that enables the calculation of the following examples:

- Lights Usage and wattage
- AC chilled water Usage and Fan usage separately and wattage
- TV and Curtain Usage
- Charging of Mobile, Laptop, using of Coffee maker, Iron estimation
- Estimated average energy consumption of Refrigerator (Minibar).



# How To?

## How Services are reported and monitored?

in Smart-G4 Hotel RMS has a standard feature to enable swift reporting of service rendered to management using room wall panels. Here are some examples:

- housekeeping staff can report the room is cleaned and ready direct into system by long pressing on clean room (MUR) button for 3-5 continuous seconds
- Hotel Staff can report laundry is picked by long press and hold the Laundry Button similarly
- Hotel Staff can report a request for Engineering to come and check malfunctioning, broken or needed guest issues by Pressing and holding the DND button for long seconds until it blinks.

## New Hotel Server and Apps towards smart City

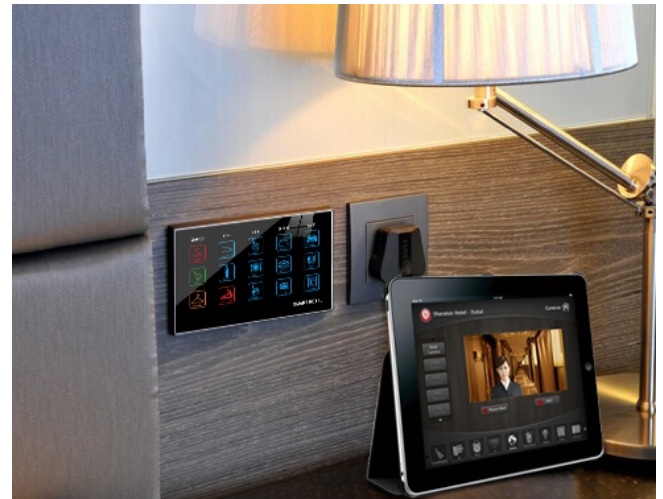
The New Servers and Apps that are provided by SMN as G4 Value added partners shall enable many features which contributes one step towards smart-city, here is some of the features:

- Guest can check in, out and open door direct from app (canceling need for cards or queuing)
- Guest can create and save his desired moods and RMS preferences like temperature during day and nights ++ for future auto implementation and fast access
- Guest portfolio allows him to check globally at any hotel chain and transfers his likings of food, drink, services to the new hotel with easy AI update.

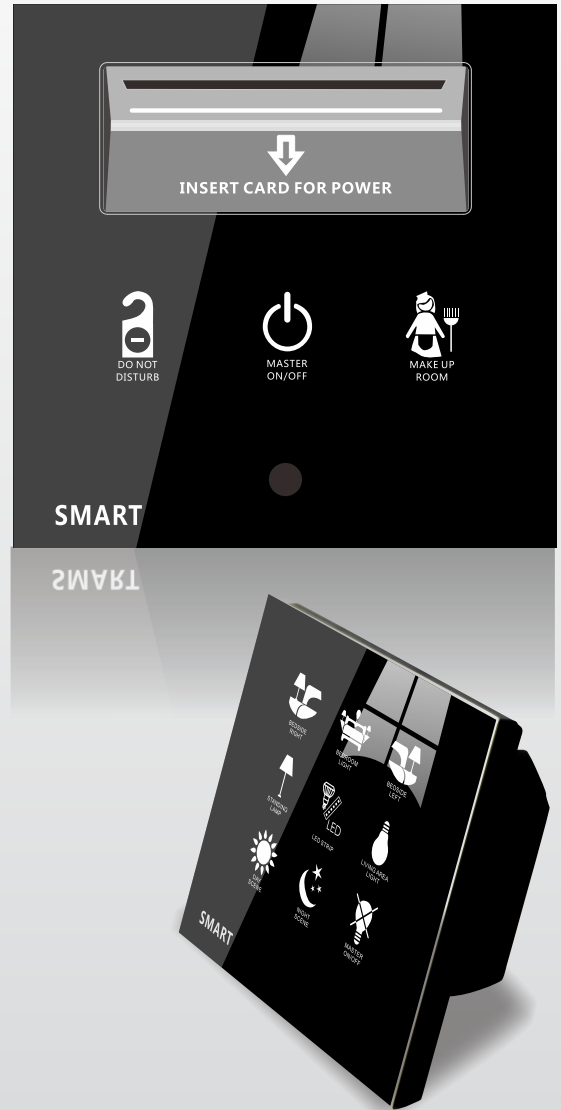
## What Software and hardware Modules Smart-Hotel G4 can Provide?

Smart-G4 can provide the following software modules:

- Hotel System Configurator and engineering module
- Hotel Devices Monitoring Watchdog module
- Hotel front office Guest Card Management module
- Hotel Energy Monitoring Module
- Hotel Security and Log Monitoring Control
- And More
- Smart-G4 can also Provide Hundreds of different Modules and Panels that help in the following Controls
- Lighting, color, moods, scenes
- Temperature control of air, water and indoor climate
- Audio Visual Controls and distribution
- Access door and Garage Management
- Advanced service management and data analysis
- Metering of BTU, GAS, Water, Electricity, Diesel and fuels.
- And much more



# Elegant Easy User Interface







***SMART-HOTEL***

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[www.smartg4control.com](http://www.smartg4control.com)  
[fm@smarthomegroup.com](mailto:fm@smarthomegroup.com)



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