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# Smart Hotel System

Professional & Innovative

## ORBITA TECHNOLOGY CO.,LTD

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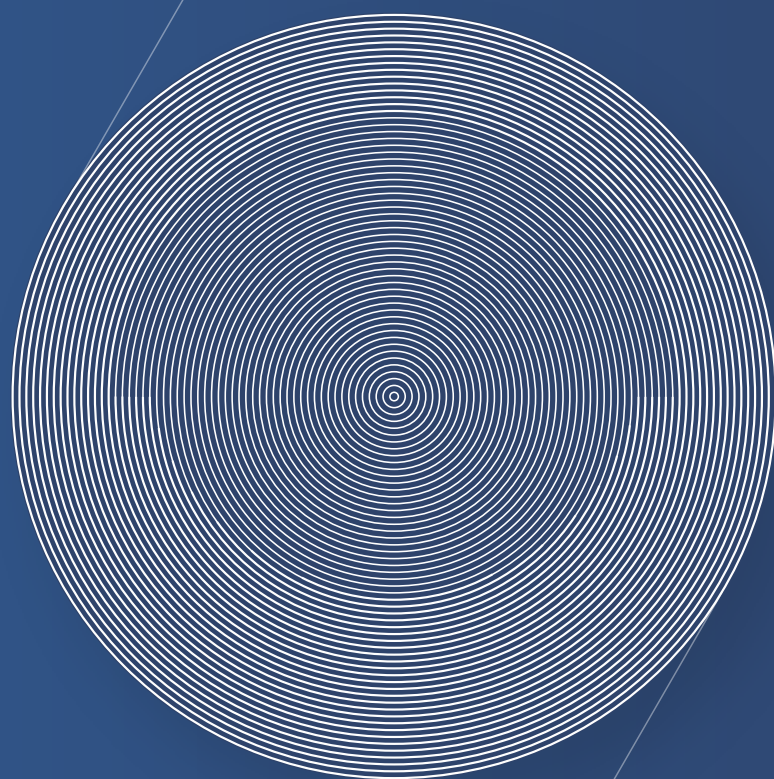
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# CONTENTS

<b>01</b>	Company Profile .....	Page 01
<b>02</b>	Company Development .....	Page 03
<b>03</b>	Certificate .....	Page 05
<b>04</b>	ORBITA Smart Hotel System .....	Page 07
<b>05</b>	Smart Hotel Solution .....	Page 13
<b>06</b>	Hotel Smart Switch .....	Page 21
<b>07</b>	Reference .....	Page 31



# Company Profile

Orbita is a reputable hospitality products manufacturer with ISO certified 46,000 square meters garden factory, established to offer the best quality products with professional and effective service to our customers.

Orbita series of products including hotel card locking system, hotel in room safe , hotel minibar, touch screen switch, hotel in room telephone, cabinet locker, smart hotel room system and other hotel in room accessories , are products of years of experience integrated with advanced technologies from Siemens , Dallas, Atmel, Philips etc. Orbita locking system certified by Opera Fidelio and other popular PMS system, has just enabled Orbita products to a wide range of compatibility.

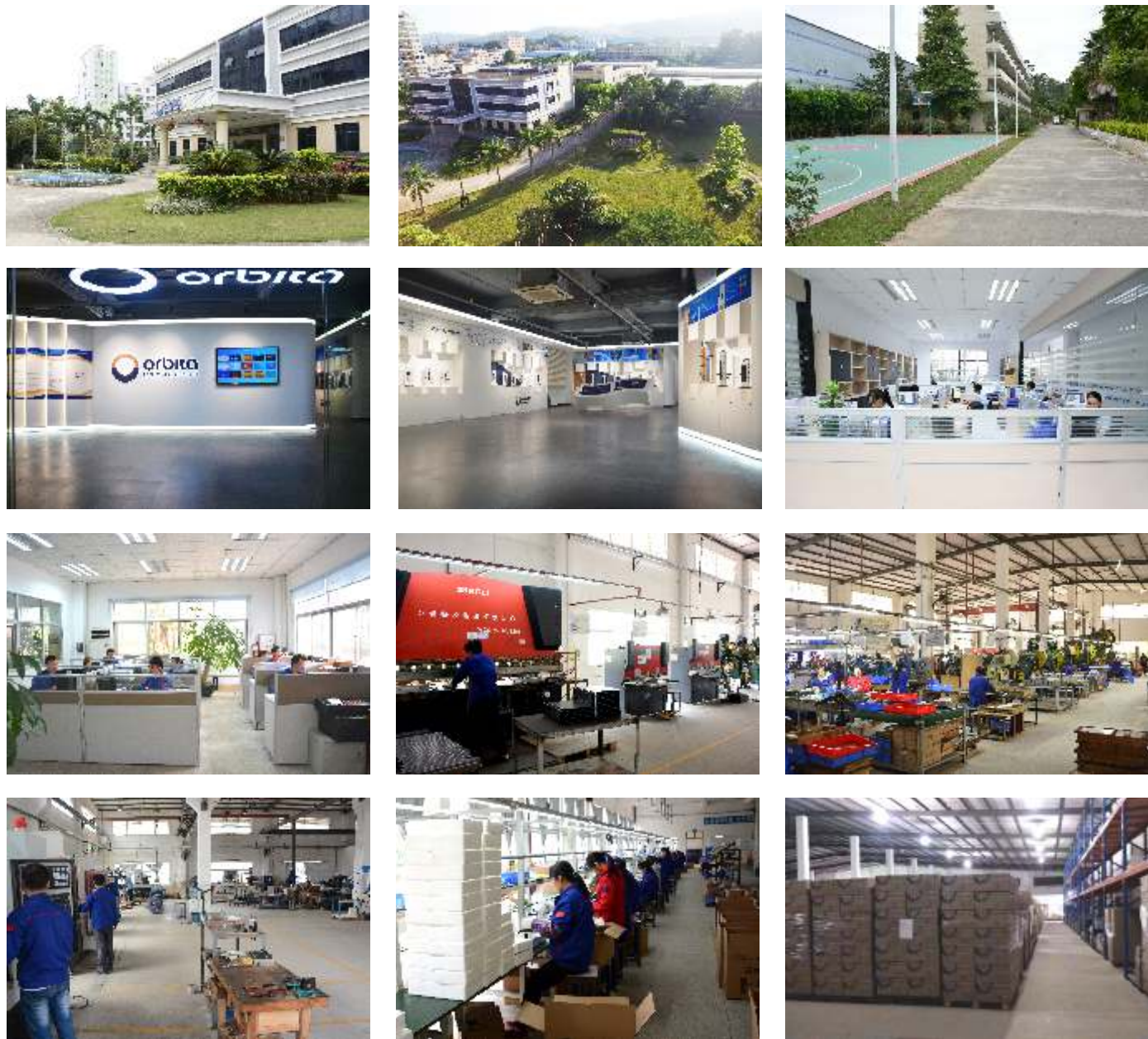
In fact, all of ORBITA products are CE, FCC, RoHS marked and ORBITA is one of the few brands in this industry that passed 800,000 times BHMA standard circling test. Regional standard like SASO, SONCAP, SIRIM are also available with all Orbita products.

More than 20,000 hotels, service apartments, resorts, university dormitories, hospitals and cruise ships covering 120 countries in the world are using Orbita card locks, digital safes, minibars, touch screen switches and other satisfactory hotel intelligent accessories. Our customers include most popular international hotel management groups such as Accor, Marriot, Carlson, Hilton, Starwood, Intercontinental, Kempinski, Crow Regency and other regional hotel management groups. Moreover, Orbita is also offering OEM & ODM services for many leading Europe and American brands in this industry.

ORBITA believes that every customer is a customer for life, manufacturing products of fine quality with our experience and knowledge is our source of pride and customer's satisfaction is our only criterion in service.



## Production Base





# Company Development



**2004.11.08**

Orbita ShenZhen Established.

**2005**

Signed strategic cooperation agreement with Al-Muhaidib and entered Middle East market.

**2006**

Products passed CE,FCC.

**2007**

Export value exceeded 2 million US dollars.

**2008**

Adapted ERP to better management.

**2009**

Product passed En 14846 European standard certification and 200,000 times cycle test.

**2010**

Factory adapted ISO9001/2008 and established ORBITA Thailand.

**2011**

ORBITA lock software interfaced with Fidelio Opera PMS system.

**2012**

Hotel references exceeded 5000 projects,ORBITA became top 3 Chinese brands in international market.

**2013**

Established ORBITA Vietnam,ORBITA Brazil.

**2014**

Invested 46000 square-meter garden factory and created the biggest smart lock production capacity in China.

**2015**

Established Dubai office,Cambodia office.

**2016**

ORBITA ZigBee wireless hotel lock launched, Entered China domestic market.

**2017**

Signed agreements with Vienna, Jinjiang Group, Listed as China Hi-Tech Enterprise. GRMS products launched.

**2018**

BLE,NB-IOT lock and biometric lock launched.

**2019**

Entered Wyndham /Mehood /GSHM hotel group vendor list.

**2020**

Established GRMS and Smart home dapartments.

**2021**

Started R&D on ORBITA Cloud Ecosphere involving ORBITA commercial and residential products.

**2022**

ORBITA renewed CE certificate for full hotel lock and residential lock series tested by Intertek based on En14846 (mechanical & electronic test) and En1634 (fire test).



# CERTIFICATES





# ORBITA SMART HOTEL SYSTEM





# ORBITA SMART HOTEL SYSTEM

Delivers a one-stop smart hotel total solution to you

We are committed to provide you with high quality products and services

Serving over 20,000 hotels in more than 120 countries around the world



## PRODUCTS AND SERVICES

Hotel room control systems, customized door plates and switches, hotel locks, hotel room minibar, safes, etc.



# Features of the ORBITA Smart Hotel System

ORBITA smart hotel solutions leverage the power of the IoT, cloud computing, AI and other new-gen information technologies to achieve the smart hotel operations through the automatic sensing and detection of equipment and data transmission and calculation.

ORBITA provides guests with smart products that are energy-saving, safe, convenient and comfortable, so that guests can experience the surprises and warmth brought by smart products and services. Satisfying user experience and word-of-mouth can greatly boost your hotel's occupancy rate and brand awareness.

## 01/ Smart Hotels

Online room selection, online payment, one-tap navigation, 24-hour service,one-tap unlocking, smart control, no-deposit check-out;



## 03/ HVAC management

The HVAC air-conditioning and energy-saving system offers precise programming control of third-party central air conditioning fan coils and solenoid valves to achieve automatic control of room temperature and high energy efficiency. Control modes: remote, local, automatic, and linkage control. Management modes: for-rent, rented, off-rent, for-night, etc.



## 02/ Room services

Please Clean Up, Please Do Not Disturb, Check-out Appointment, Laundry Service, SOS Emergency Call, Networked Door Lock;



## 04/ Smart Hardware

The control of power supply for lights, air conditioners, curtains and other equipment can be integrated via the wireless smart devices, which can collect power consumption data of the equipment at the same time.



# Advantages of ORBITA Smart Hotel Systems

With all-scenario smart hotel products, ORBITA aims to provide customers with the most comprehensive and complete smart hotel total solution. We will keep rolling out better and smarter products to meet the ever-rising standards of our customers.

ORBITA smart hotel systems overcomes the constraints of traditional single-channel booking by broadening the range of booking channels to realize remote booking on portable devices, which brings ease of operation, multiple choice, and increased occupancy rate.

ORBITA boasts strong backstage management and remote supervision capabilities to improve hotel management and service quality, letting guests feel at home and enjoy efficient, humanized and innovative hotel services. ORBITA effectively saves human resources and labor costs; precise and smart control effectively reduces energy consumption, so that your hotel goes up in profits and down in costs.



### All-Scenario Smart Products

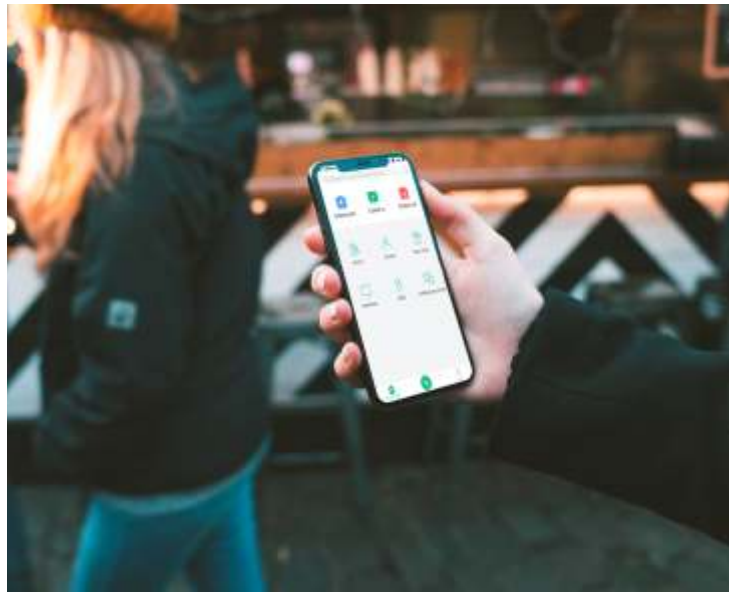
ORBITA smart hotel solutions provide all-scenario smart products including lighting system, environment system, audio and video system, etc., to make customers happy with a smart and relaxing experience.

Our products can be used in lobbies, corridors, hotel rooms, restrooms, spas, etc., and can integrate thirdparty smart devices to bring unlimited possibilities for customers.



### Low-Cost Deployment

With our pioneering wireless IoT technology, there is no need to drill walls for wiring; installation is quick and maintenance easy. Costs are saved not only in the initial preparation and construction, but also in later renovations of the hotel. Wireless technology also allows a high degree of scalability and can easily accommodate more smart devices in the future to keep the hotel's smart operations up to date.



### Mobile App Features

The mobile app opens up a whole new user experience for hotel guests. Depending on the different solutions adopted, guests can handily book and reserve hotel rooms on their mobile phones or other mobile devices. They can also check in and check out on mobile devices such as phones. No more waiting in a queue for check-in and check-out. When guests arrive at the hotel, they can go directly to their reserved rooms and use their mobile phones' electronic keys to unlock the doors. Queueing at the front desk to check in and get your room card becomes history. This new and streamlined check-in experience offers guests better security while saving their valuable time and energy.



# Solution A

## FOR Guest Room Management System

- International hotel management company, mostly suitable for 4-5 stars hotels and resorts
- RCU SWITCH 12V independent power supply, safe and energy-saving
- RCU Host achieve total intelligence for the hotel

At ORBITA, we realize that each hotel has there own speciality for their guests. That is the reason why we provide custom-designed for each hotel project while to provide a holistic solution for each hotel professionally.

### Better Guest Experience

People always expect “a home beyond five-star” from premium hotels. To meet such an expectation, it is great for hotels to invest in hardware apart to providing sincere, thoughtful and friendly services. With such upgraded services, not only the guests can enjoy home-like comfort and 100% considerate services but also hotel can manage hotel rooms in highly efficient. What could be better than such a stay?

### Higher Energy Efficiency

ORBITA provides a reliable and efficient system to replace traditional manual operation. By using sensors, logic modules and controlling devices on the central control system, automatic control remarkably reduce the energy waste of tradotional ways. Meanwhile, the hotel side can also get energy usage report from the system to optimize resource allocation and improve energy efficiency. According to research, the invest in RCU smart hotel solution of hotel can each the break-even balanck just by 2-3 years after opening the hotel, so if you are a hotel owner, what are you wating for?

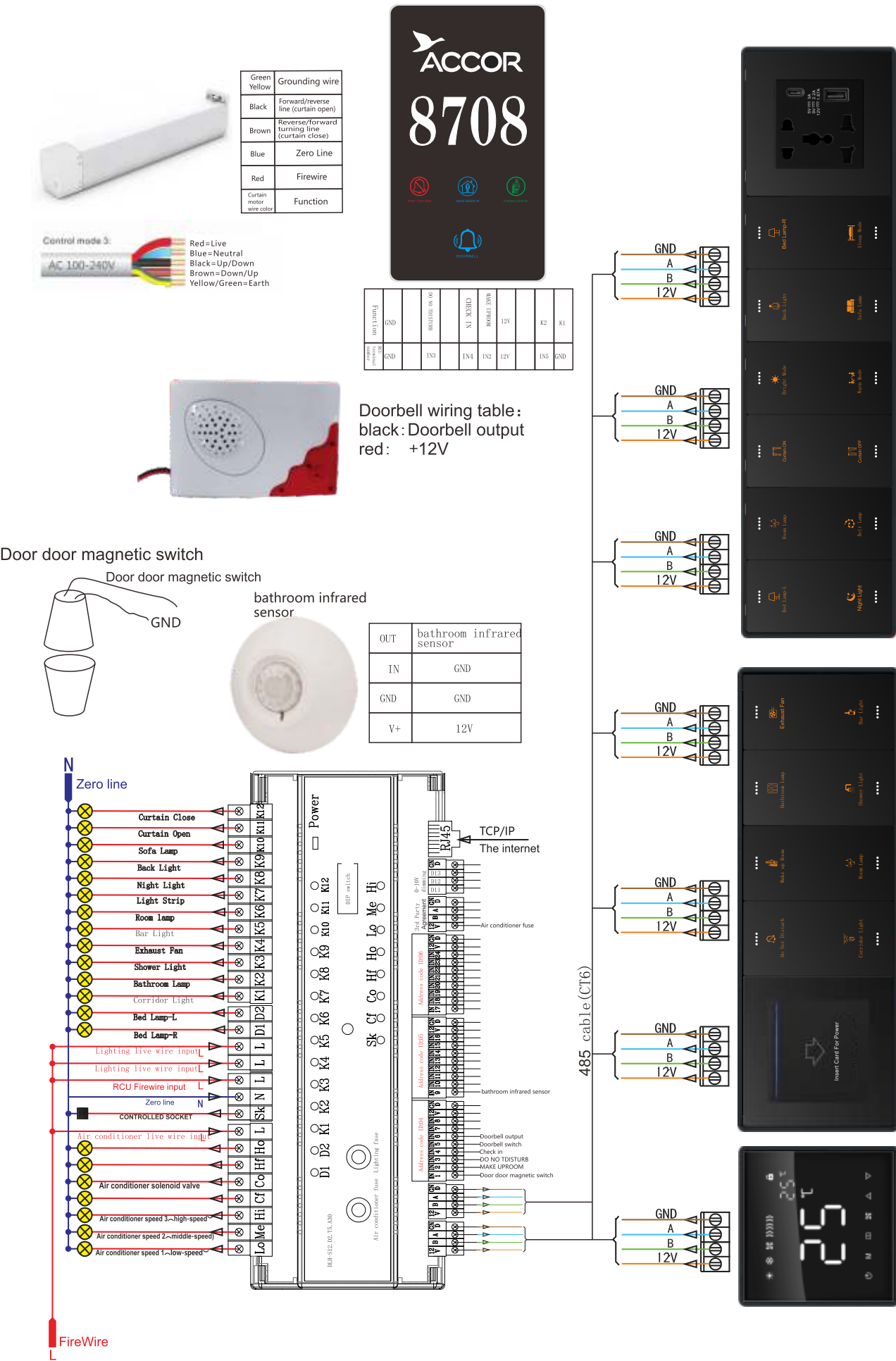
### Lower Management Cost

Various scenes can be programmed by using timing and logic features. Hotel staffs are enabled to easily control the lighting and other appliances. The convinence of management multiple scenes on the PC software, then staff can quickly and accurately respond to guest's demands.

### Double Room



## RCU guest control system standard room wiring diagram



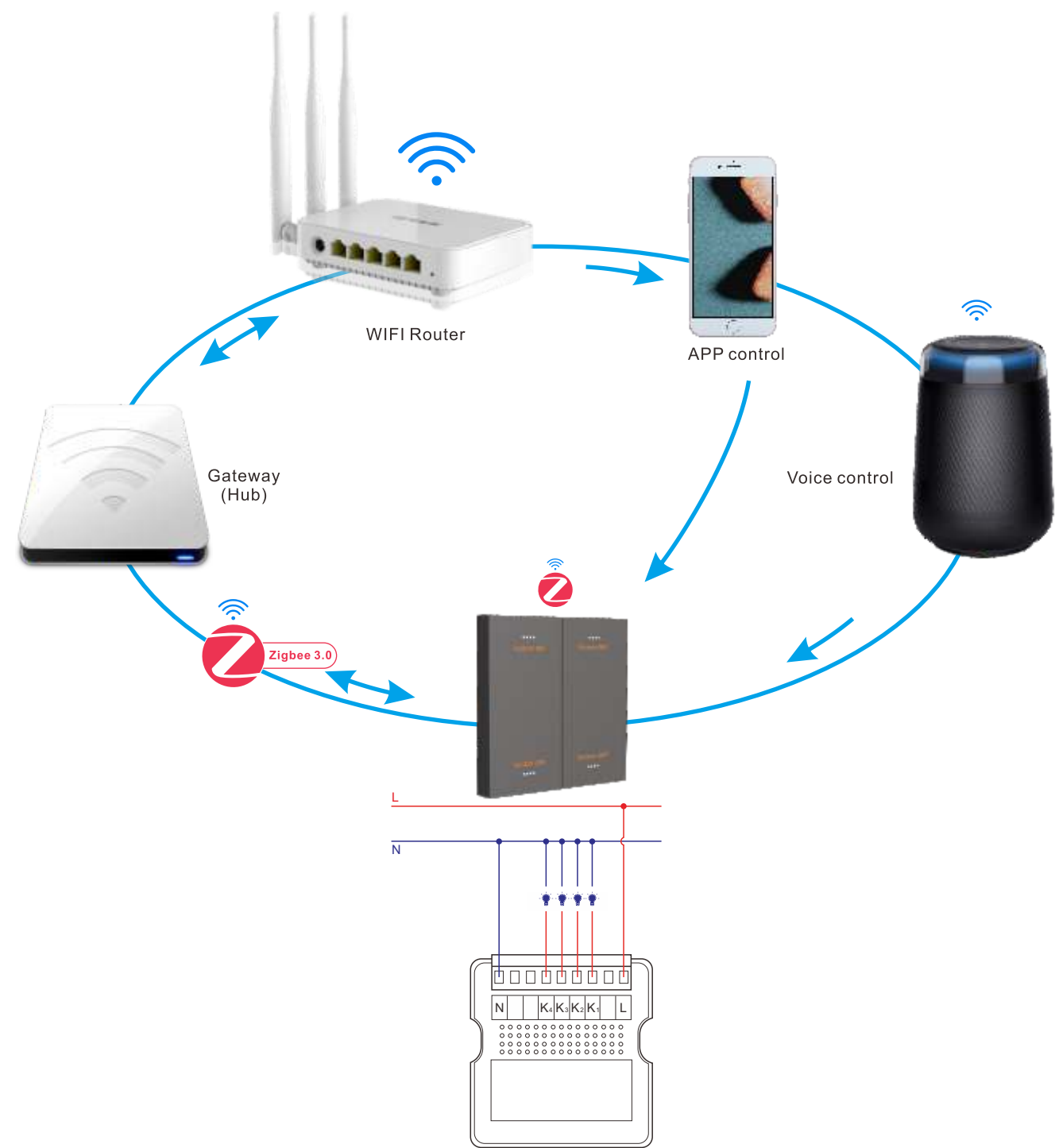
Air conditioner live wire input(TV/electric kettle/hair dryer/table lamp socket)

# Solution B

## FOR Zigbee Switch Smart Hotel

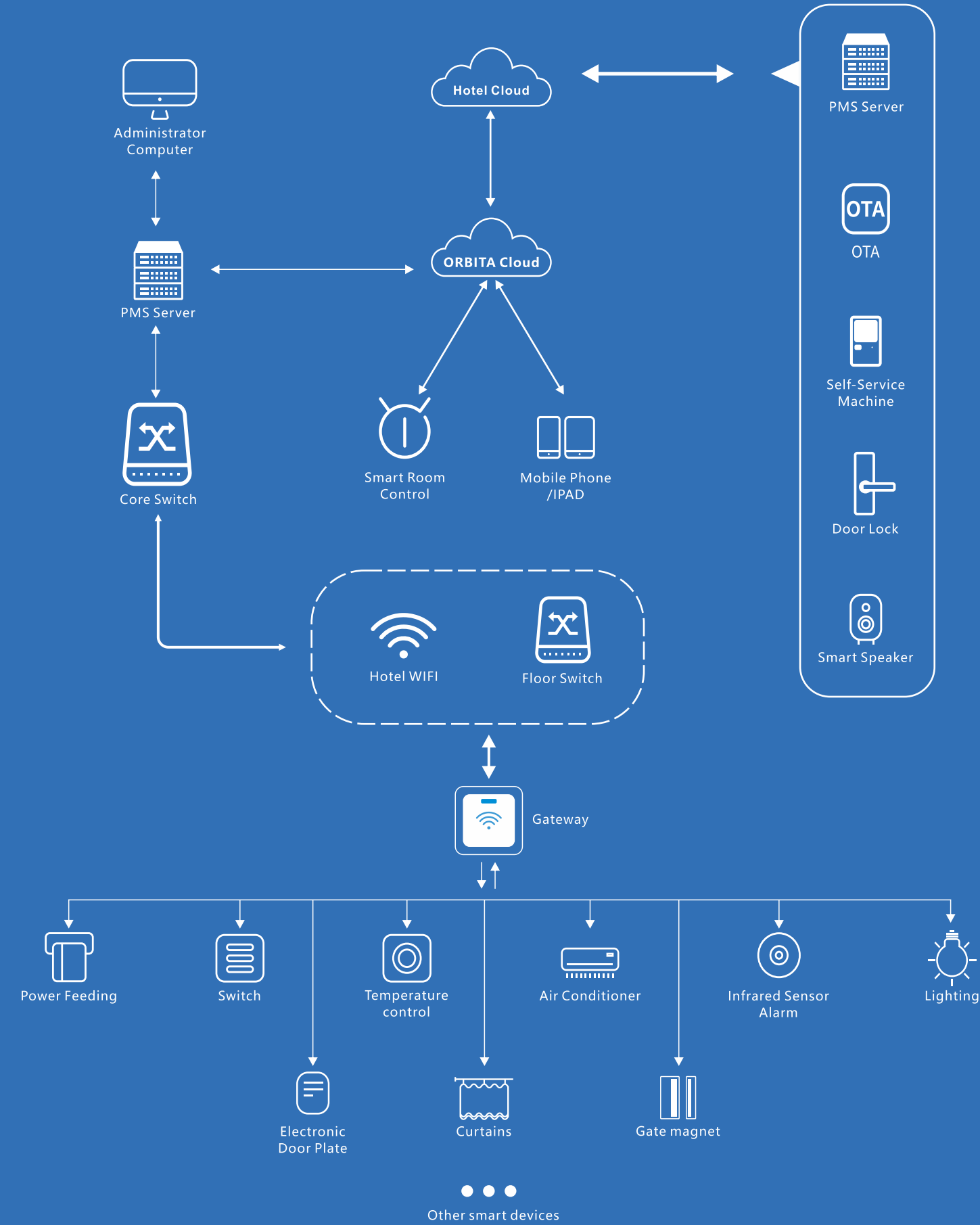
- Mostly suitable for boutique hotel projects, hotel apartment projects.
- Zigbee switch uses wireless connection, easy wiring, easy maintenance and easy management
- Strong scalability, available for TUYA SMART, AMAZON ALEXA smart speakers

ZIGBEE switch, gateway is a special equipment for hotel intelligent control, through ZIGBEE wireless communication technology ad hoc network. Two-way data communication can be carried out, and remote control and management can be supported. It can realize lighting scene, curtain, air conditioning control, support multi-scenario mode operation, intelligent voice control, easily realize the interconnection of intelligent devices in the guest room, and build a completed smart hotel system.



# Solution B

## Zigbee Switch Smart Hotel Topology Diagram





# Solution C

## Rs485 Switch Smart Hotel

- Easy installation, safe and reliable
- Master, dual control, multiple control, scene modes available
- local 220V control, smart guests room also available for small hotels

**Scene Control:** Easily realize humanized intelligent scene control, such as welcome mode, leisure mode, sleep mode, reception mode, romantic mode, etc.

**Welcome mode:** When the guests open the door and enter the room, the porch lights will be turned on and the curtains will be opened automatically.

**Sleep mode:** One switch to control all the lights, each light can be controlled individually.

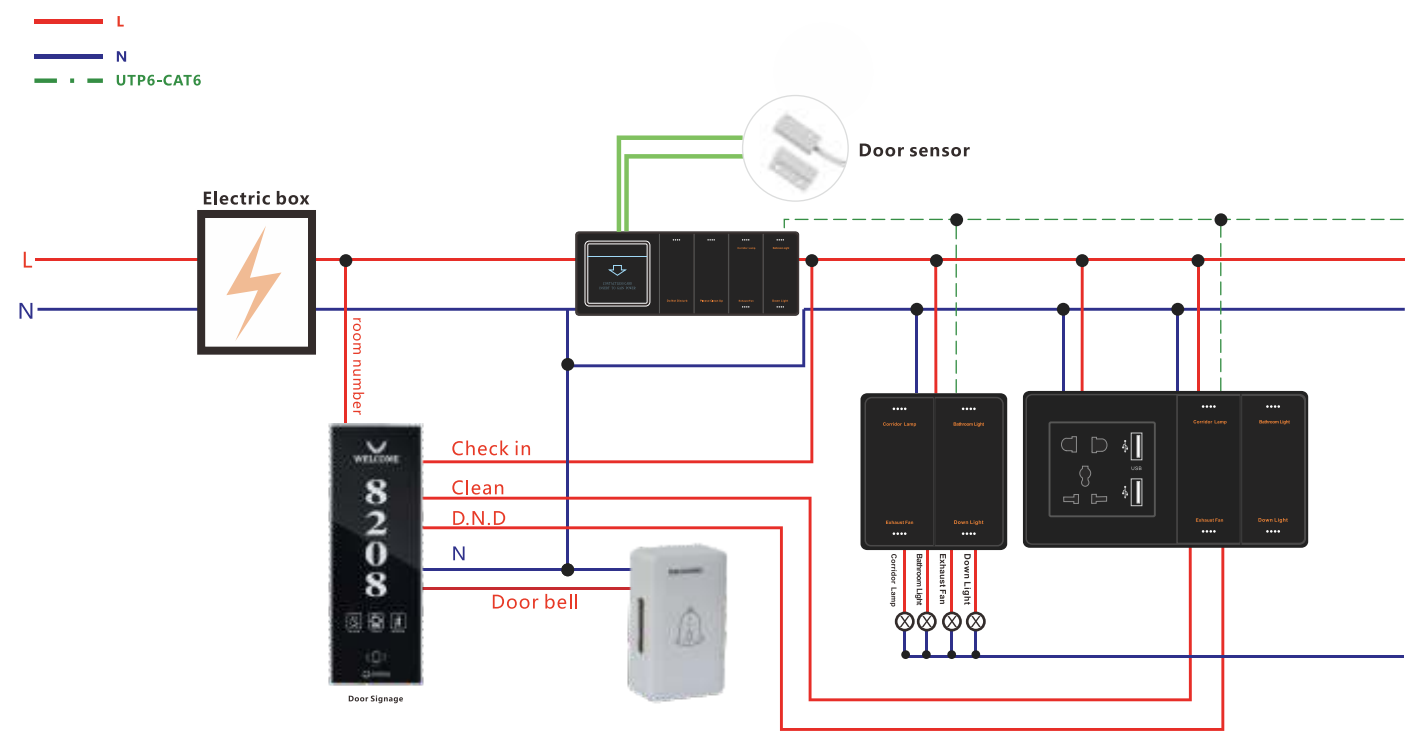
**Smart night light:** When the guest turns off all the lights with one switch, all the designated lights in the room will be turned off and the night light will automatically turn on at the same time.

**Smart door magnetic:** Realize the self-lighting of the entrance porch light, which can be turned off after a delay.

**Smart Curtains:** The windows open automatically after the card is plugged in to get power, the curtains are automatically closed when the card is unplugged, and the curtains are automatically closed after the sleep mode.

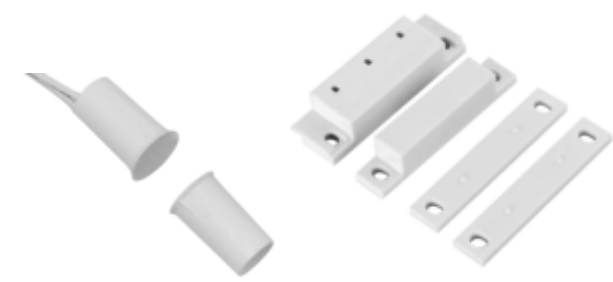
**Smart Do Not Disturb:** After sleep mode, the Do Not Disturb function will be activated automatically, and the door bell will be disabled.

Schematic diagram of high current intelligent lighting control wiring



## Solutions accessories

Gate magnet



Electric curtain



Infrared sensor



Thermostat



# Hotel Room Control Unit (RCU)

Module-Based Host



### Traditional RCU

The basic configuration consists of 2-channel LEO dimming output, 12-channel 10A relay output, 1-channel 30A high-power relay output, 1 set of air conditioner fans output; reserved expansion card outputs, to meet the control requirements for dimming, lighting, curtains and air conditioning in the room; RS-485 port of the host can be connected to strong- and weak-current modules to accommodate scenarios with more circuits or switches.

### Dimensions and Installation Method:

DIN35mm DIN rail mounting  
Installation dimensions: L235 \* W88 \*H66 mm



### DLH Series

The basic configuration consists of 10-channel 10A relay output, which can be used for 2 sets of air conditioner fans or 10-channel lighting control. Hongfa 10A high-power surge relay is used to protect against surge currents generated in the strong-current circuits. 2-channel RS485 for bus communication.  
Standard IO board with weak-current 16-channel input and 16-channel output.

### Dimensions and Installation Method

DIN35mm DIN rail mounting  
Installation dimensions: L235 \* W88 \*H66 mm

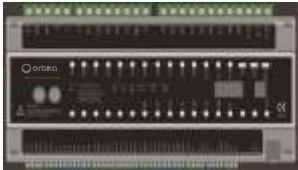


### DLH Series

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Standard IO board with weak-current 16-channel input and 16-channel output.

### Dimensions and Installation Method

DIN35mm DIN rail mounting  
Installation dimensions: L235 \* W88 \*H66 mm



### OBT-DLH-S12.D2.T5.A30

Power input: AC 250V/50-60 Hz  
Power output: DC 12V  
2-channel LED dimming output, 12-channel 10A relay output, 1-channel 30A controlled socket, 1 set of air conditioner output  
Network protocol: TCP/IP  
Input: RS-485, dry contact (output and input using the same network cable): 24 channels  
Dimensions: 235 \* 88 \* 66 mm, DIN rail mounting.



### OBT-DLH-D4.V1-10

Power input: AC 250V/50-60 Hz  
Power output: 4-channel DC0-10V dimming; power of each circuit is less than 100W  
Signal interface: RS-485  
Dimensions: 160 \* 88 \* 66 mm, DIN rail mounting.

# GRMS Software

Guest room management system software is the most important part of GRMS, because whether the guest room control system can achieve intelligent control and reduce the hotel's energy and labor costs depends largely on the guest control system software. Through strong R&D capability while taken advanced Browser/Server system, Orbita GRMS with powerful functions, quick response, easy manipulate, reliable and safety to help hotel truly realize intelligent energy saving management.

### Guest Room Status Display

Orbita GRMS software can display all guest rooms status information(Optional room floor /room number display).It including RCU status, guests room people status(in room or not), guest room service information status(Ask services, MUR, DND, doing laundry, SOS, check out ets). Guest room assist information status(Guest room door, safe box, room card, check cleaning etc) and the AC working status.

### Guest Room Information & Alarm Prompt

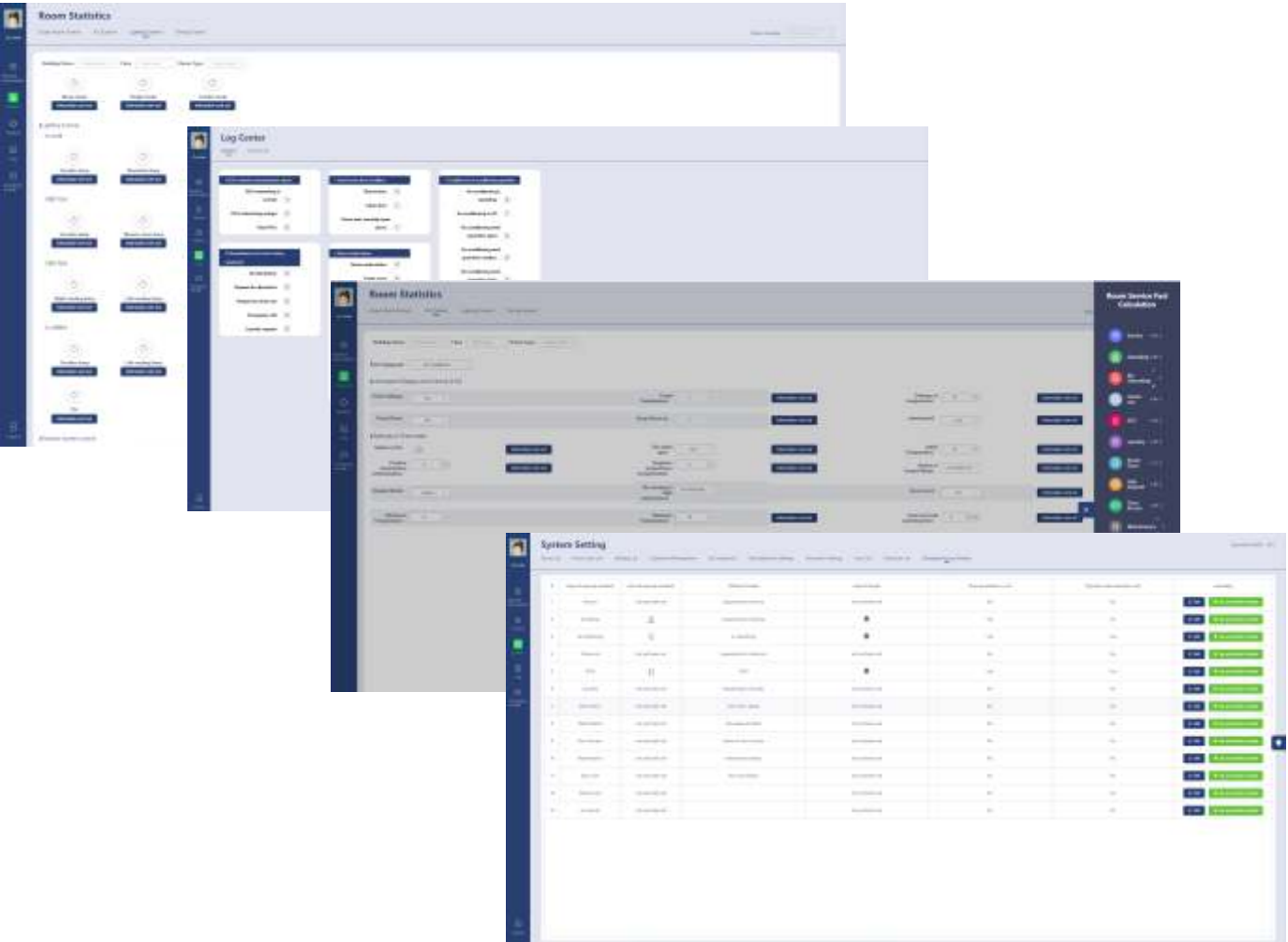
When guest pressed service button inside room (ex. Cleaning), the software will display an information prompt accordingly while recording the room number and the time. The prompt will disappear after hotel services staff finish the services. When guest pressed SOS button or safe box in abnormal status, software will display alarm prompt.

### Equipments maintenance management

GRMS software can detect the equipment information of the guest room in time. When the equipment fails, the software will automatically display the failed equipment location and give an alarm. Maintenance personnel can handle the fault in time while recording feedback result in time, which is convenient for hotel management query and makes the equipment's operation more safer and more reliable.

### History Information Query

GRMS software can query and statistics guest room detail information including check in rates, power consumption, services information, relief of a shift and failed maintenance etc. The hotel can know the guest room status and the staff's working information in detail through.





PC SWITCH G12B

Border colors, icons, and texts are all customizable



Series	Description	Material	Color	Size (mm)	Standard
G12B	Plastic plate Changing background ledlight	PC	Grey	86x86	RS485 :12V/110-250V I/O :12V ZigBee : 240V
			Champagne		
			Black		

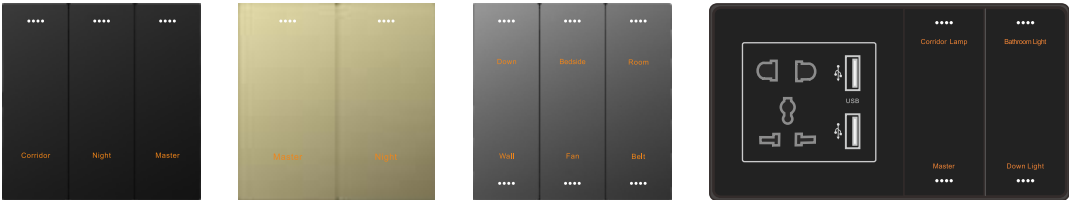
RS485  
modbus

ZigBee

I/O

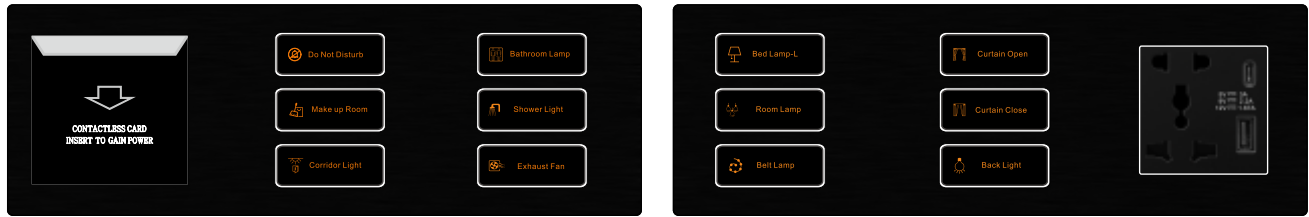
mechanic

PC Switch



METAL SWITCHG6B

Border colors, icons, and texts are all customizable



Series	Description	Material	Color	Size (mm)	Standard
G6B	Plastic plate Changing backgroud ledlight	PC	 Grey	86x86	RS485 :12V/110-250V I/O :12V ZigBee : 240V
			 Champagne		
			 Black		

RS485  
modbus

ZigBee

I/O  
+ -

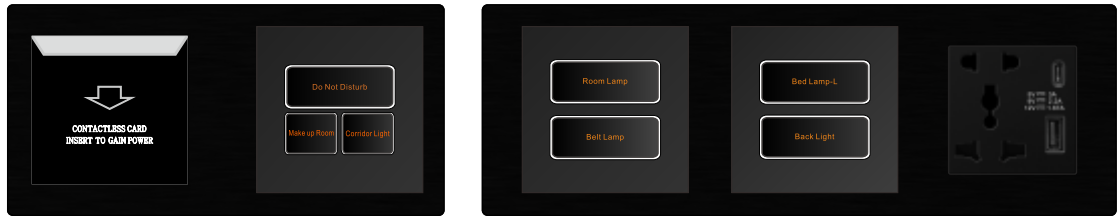
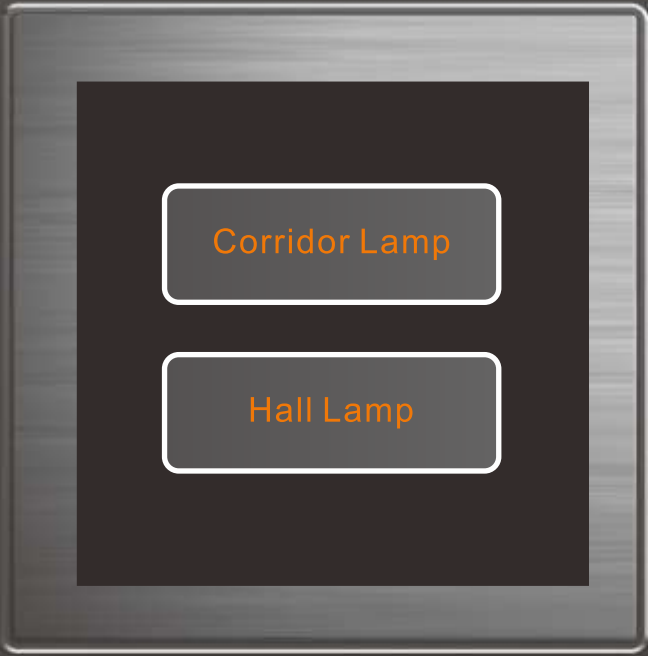
+ -  
mechanic





METAL SWITCH G3A

Border colors, icons, and texts are all customizable



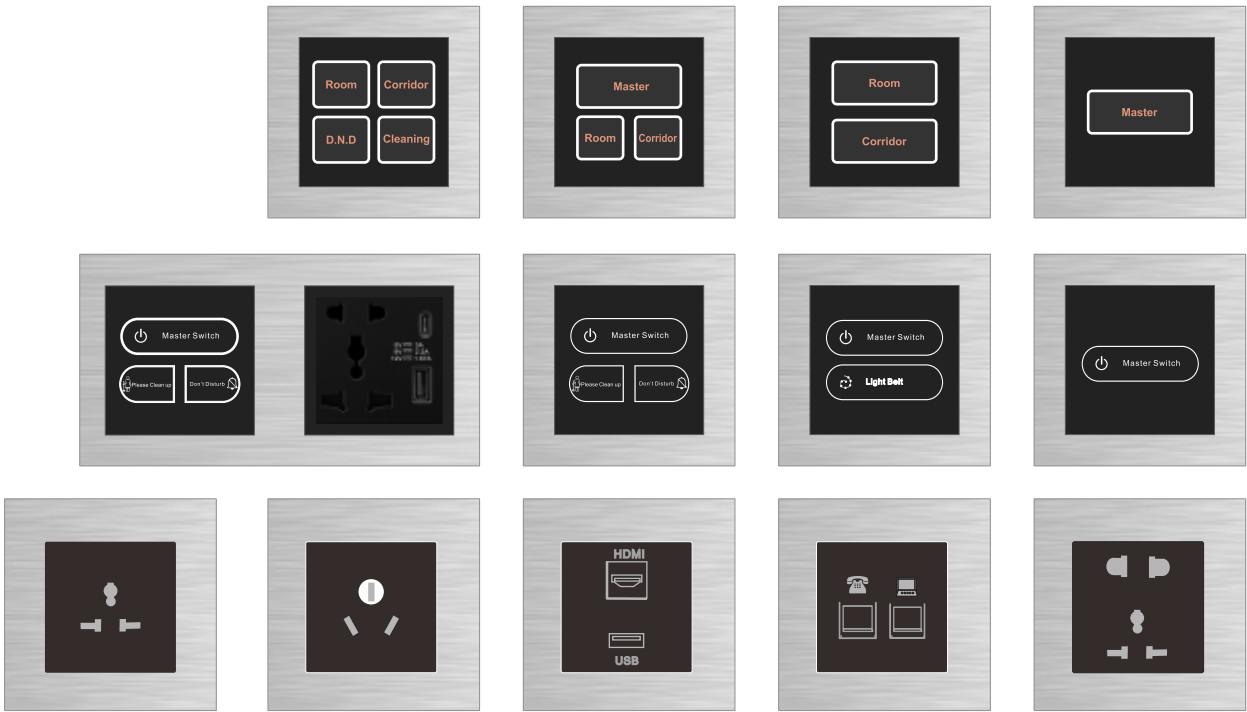
Series	Description	Material	Color	Size (mm)	Standard
G3A	Plastic plate Changing background ledlight	PC	Grey	86x86	RS485 :12V/110-250V I/O :12V ZigBee : 240V
			Champagne		
			Black		

RS485  
modbus

ZigBee

I/O

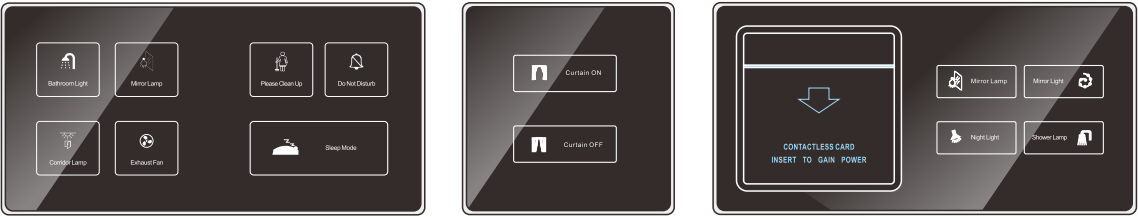
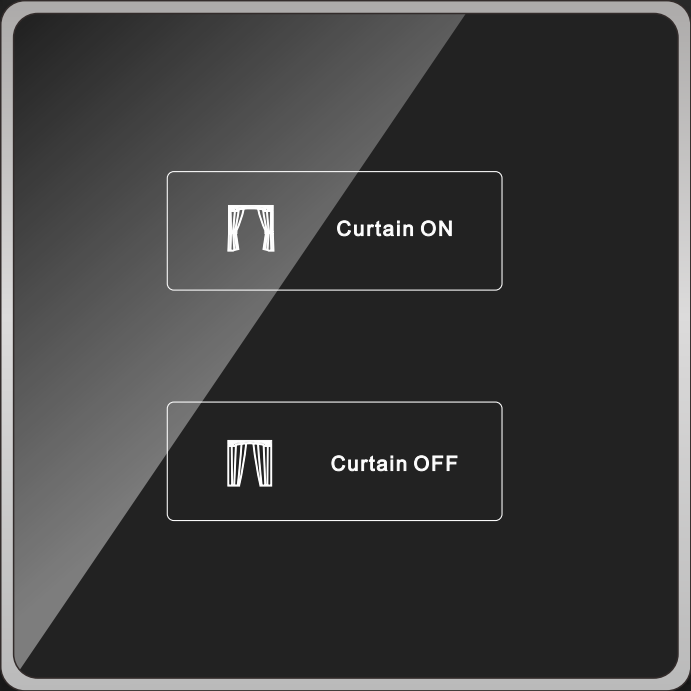
mechanic





# MICRO-ACRYLIC SWITCH C2

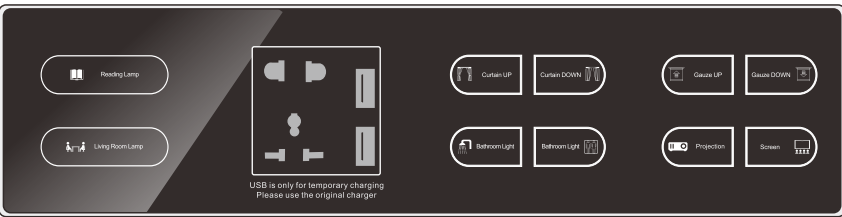
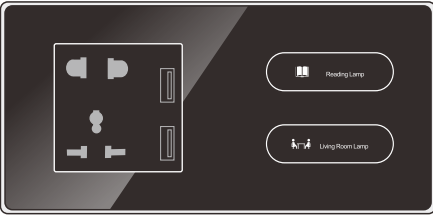
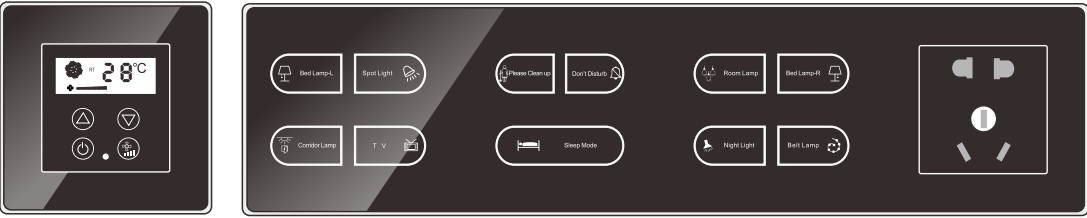
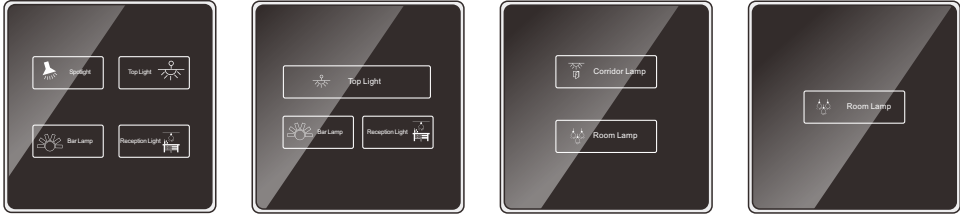
Border colors, icons, and texts are all customizable



Series	Description	Material	Color	Size (mm)	Standard
C2	Plastic plate Changing background ledlight	PC	Grey	86x86	RS485 :12V/110-250V I/O :12V ZigBee : 240V
			Champagne		
			Black		

RS485  
modbus

I/O  
+ -

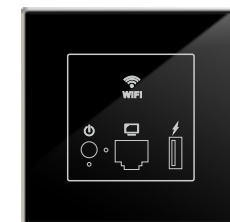




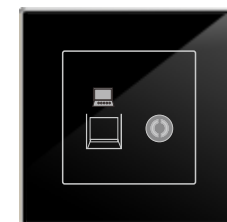


Function panel

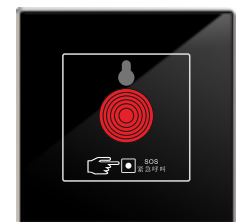
Border colors, icons, and texts are all customizable



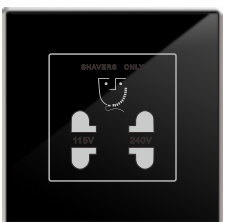
wireless WIFI with 220V or POE power supply



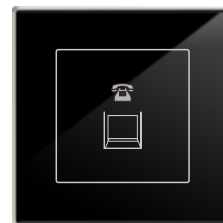
computer+tv interface



emergency call



shaving socket



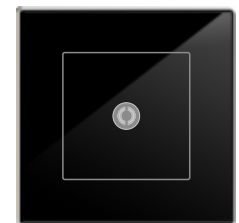
telephone interface



VGA video + 3.5mm headset



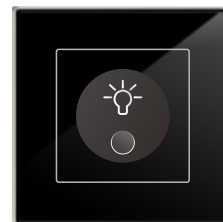
interface computer



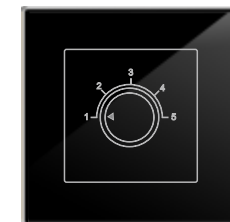
TV interface



switch electrodeless



dimmer



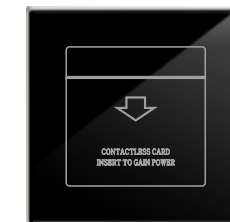
Tune



telephone+TV interface



telephone+computer  
interface

HDMI audio and video  
+USB

card fetching electricity



LED foolflight



background music switch



thermostat/new wind



# References

- 20,000 projects
- 120 countries
- All major Hotel Management Group

