Simon RCU 2018.2 Edition

simon
LIGHT UP EMOTIONS

SIMON Malaysia
Web. www.simon.com.my

ROOM CONTROL UNIT SYSTEM

RCU

Room Control Unit Sytem

Build An Eco Living Space

simon

CONTENTS

15 Simon Advantage
17 Hotel Solution
21 Host Machine Parameter
27 Assorted Switches & Sockets
47 Multimedia Sockets
53 Sample Projects

What can we bring to hotels?

Smart

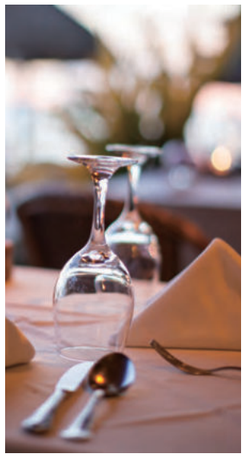
Compatible with mainstream smart terminals, smart phones, tablets, users can view room status and control room facilities anytime, anywhere via intelligent terminal.

Comfortable

Lighting scene is combined with curtains, creating a warm guestroom atmosphere;
Air-conditioning system, central ventilation system, and aromatic system are applied to present a fresh and comfortable environment;
Switch panel is integrated with hotel design style, improving hotel grade.

Intelligent technology and humanized design realizes simple, convenient, and understandable operation.

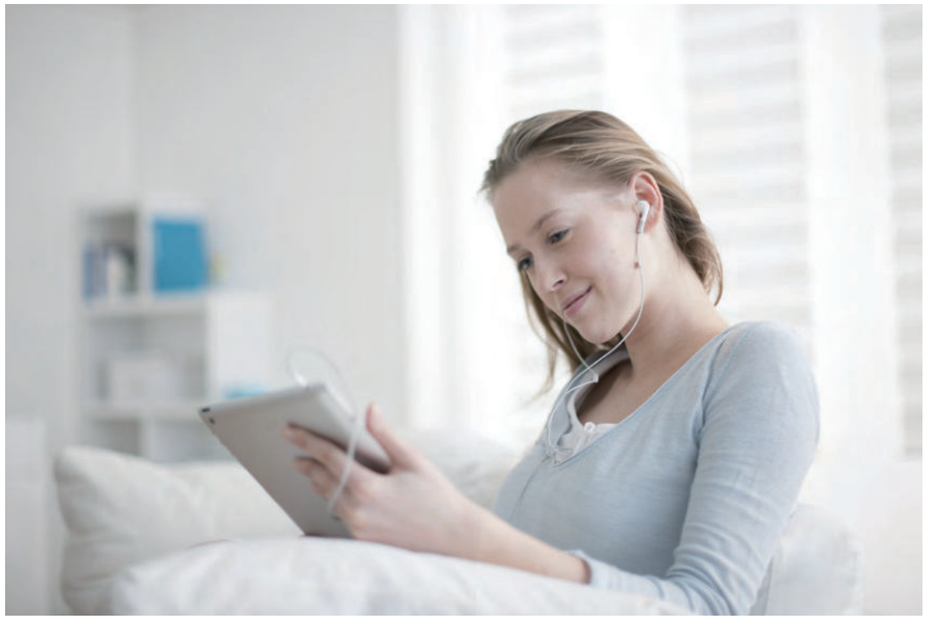
Energy Saving



Reduce energy expenditure and operating cost through the intelligent control of air-conditioning, curtains, and exhaust fans;
Effectively control lighting and avoid waste through plug-in electricity, infrared sensors, door contact, etc.

Efficient

Guest service request (SOS, washing clothes, clearing rooms, check-out, etc.) can be delivered to the customer service center promptly;
Offers efficient services.



simon

What is Simon RCU System

TCP/IP

Networking Advantage

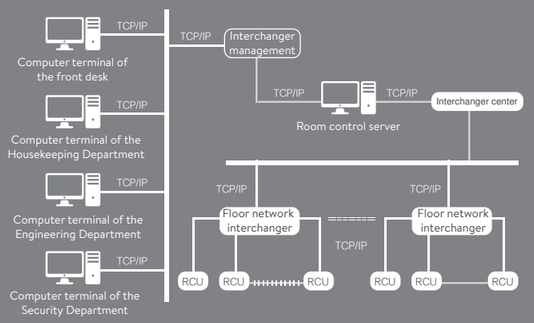
Simon Electric adopts mature and reliable TCP/IP with high communication rate. Any information of rooms, such as SOS or cleaning request, should be transmitted to the hotel management instantly through the full-duplex communication mode.

Communication rate/mode:
The current mainstream switching Ethernet adopts full-duplex communication. It adopts copper wire UTP mode, and its transmission rate is 10M-1,000M, higher than that of various buses.

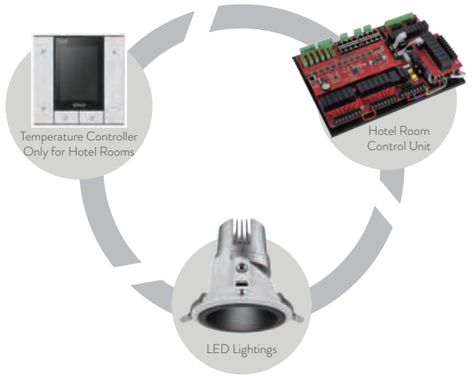
Compatibility:
The Ethernet uses interchanger as the transmission relay, and all communication nodes can be directly connected to the network through the Ethernet. In case of any fault, the interchanger is replaceable at any time.

Interference resistance:
The common Ethernet communication media used by hotels include CAT5, CAT5E and CAT6 twisted-pair cables. The twisted-pair structure can defense external electromagnet interference to a certain extent. Such media are generally used for signal transmission of the weak current system and can meet the anti-interference requirements of hotels.

Troubleshooting:
Damage of any node in Ethernet does not affect normal communication of other devices. Fault detection is quick because the fault node can be checked directly through the system software.



Simon Advantages



Integrated eletrical products for guestrooms

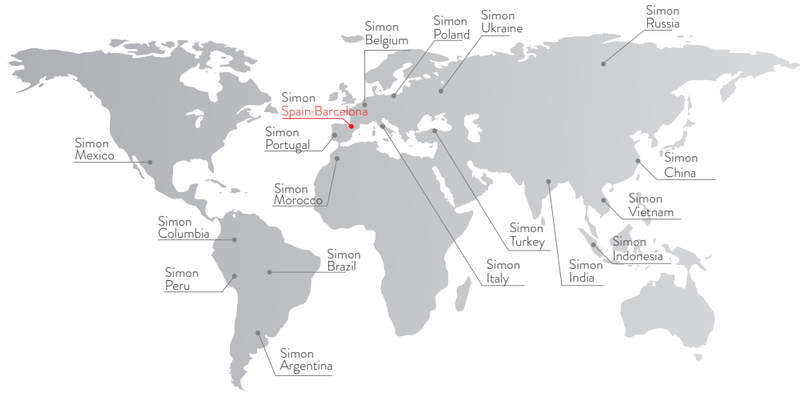
The Simon Guestroom Control System perfectly fits the Simon switches and hotel lightings, which can not only maintain the system stability, but also eliminate the cooperation cycle between the guestroom control system and lighting products.

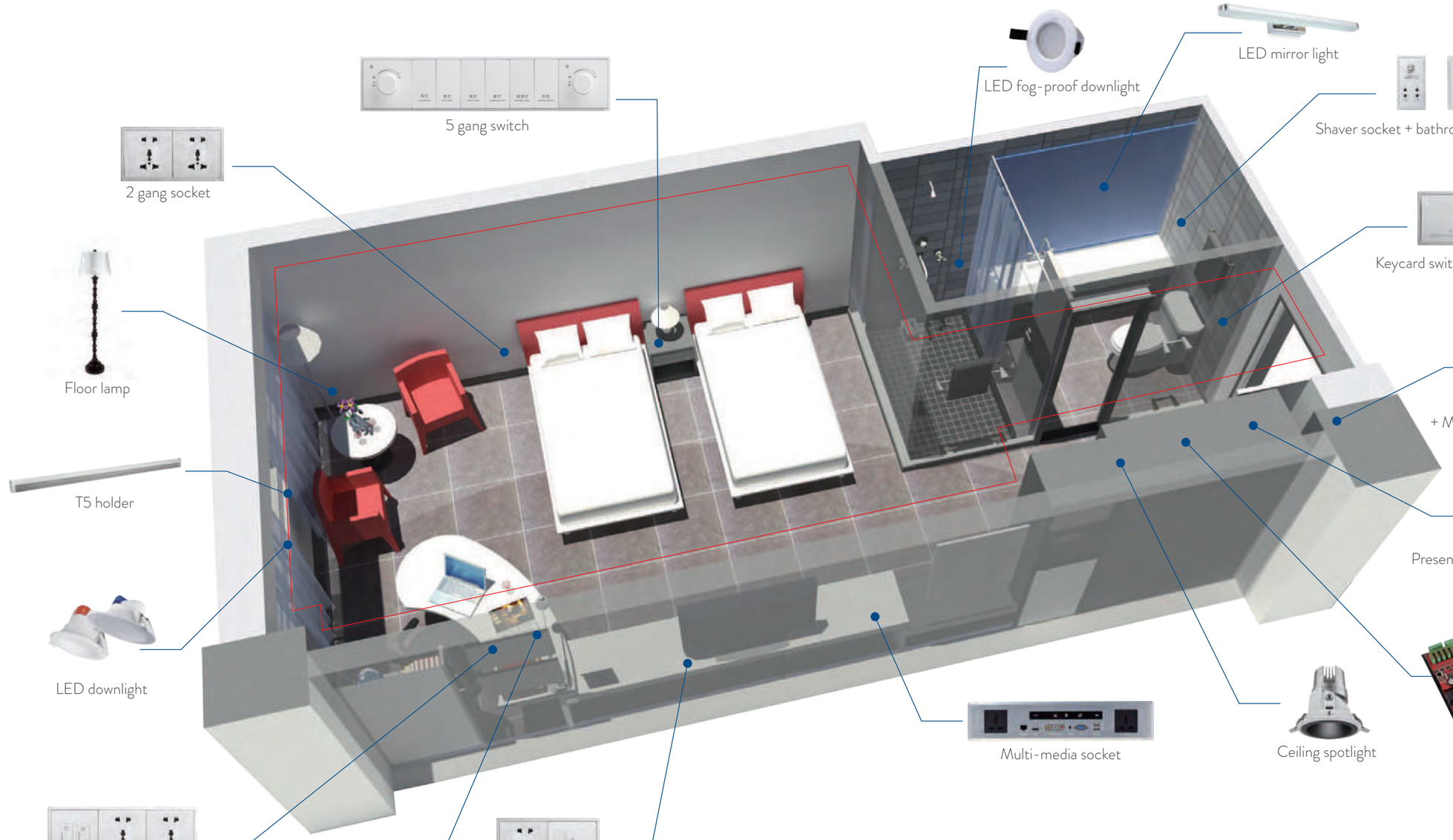
The Collocation of Rockers ---Fitting all kinds of hotel design styles

Simon products are equipped with colorful and diverse rockers made of various material such as metal, glass, wood, etc. Beyond that, personalized customization services are available, which can be perfectly suitable for all kinds of hotel design styles.

Perfect After-sale Service

Simon provides fast,excellent and efficient after-sale service.





5 gang switch

2 gang socket

Floor lamp

T5 holder

LED downlight

Data and telephone socket + 2 gang socket

Desk lamp

Power socket + TV socket

LED fog-proof downlight

LED mirror light

Shaver socket + bathroom lighting control switch

Keycard switch + lighting switch

Do Not Disturb
+ Make Up Room doorbell switch

Presence detector switch for the closet

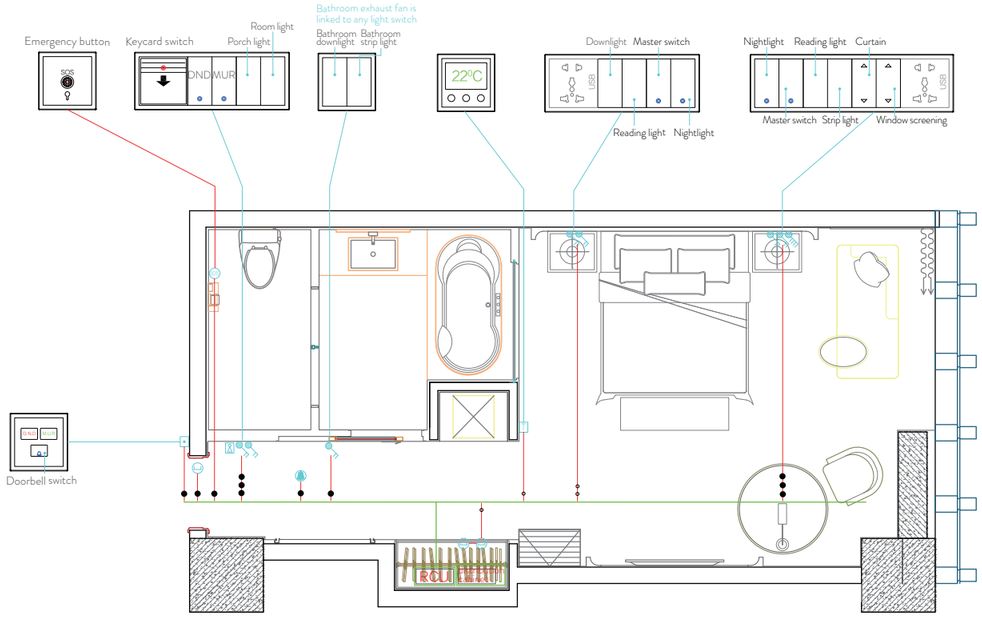
RCU master

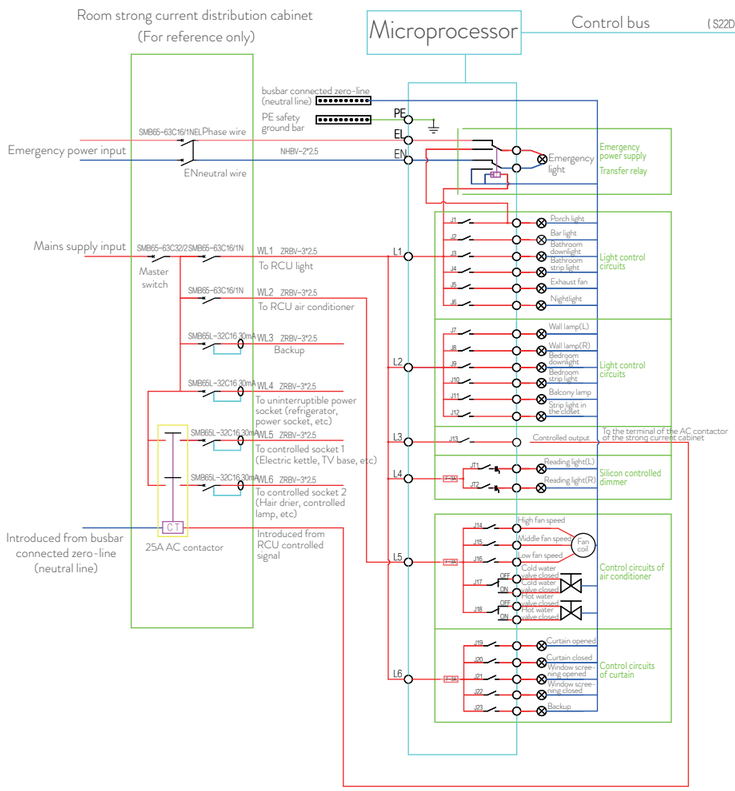
Ceiling spotlight

Multi-media socket

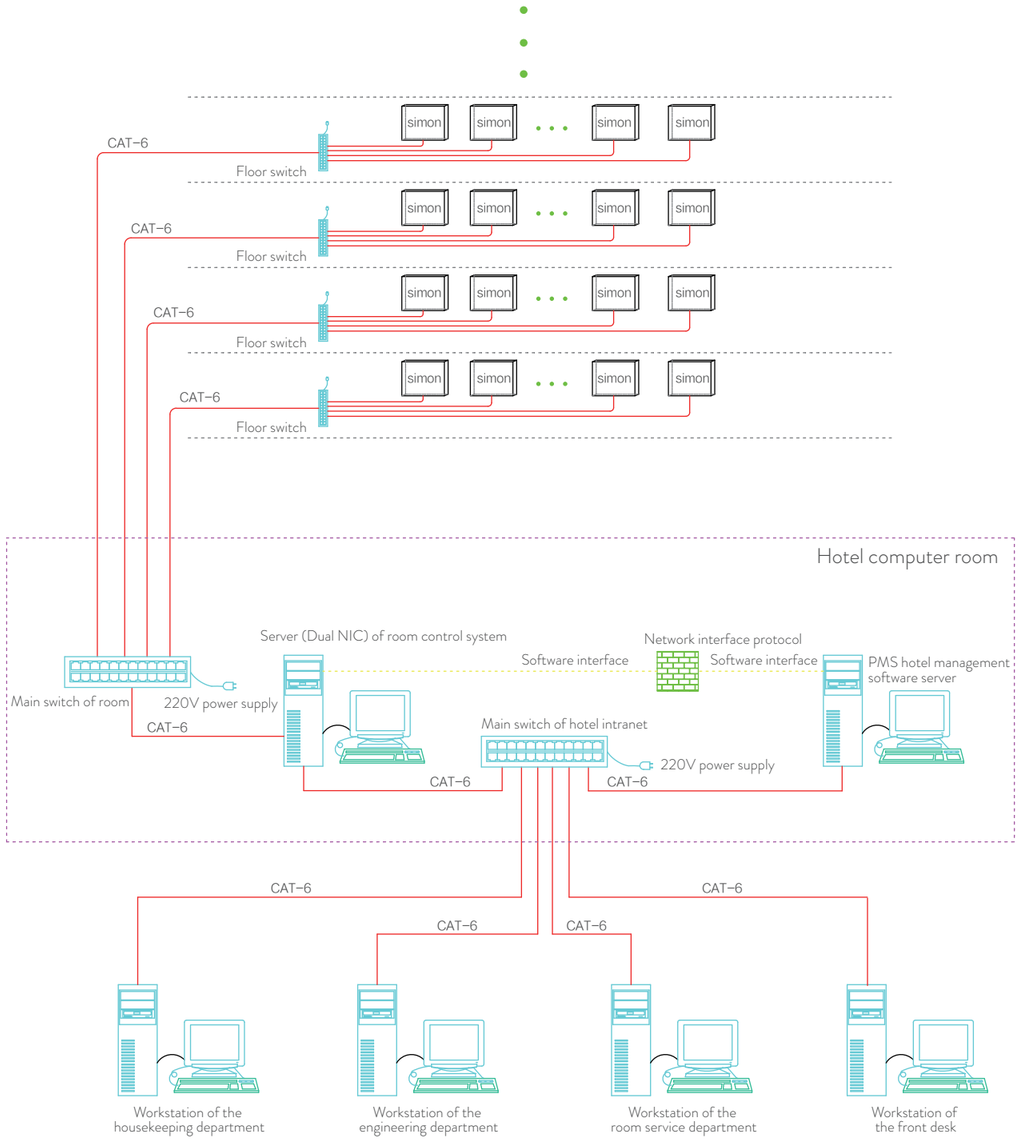
Overall solution map of the hotel

Simon provides one-stop electrical product solutions, including the RCU master, switch sockets of different styles and materials, lamps (such as LED spotlight, downlights and mirror lights) and multimedia sockets. All these products share complete protocol interoperability, which facilitates management and daily maintenance of the hotel and help to reduce cost and improve efficiency.

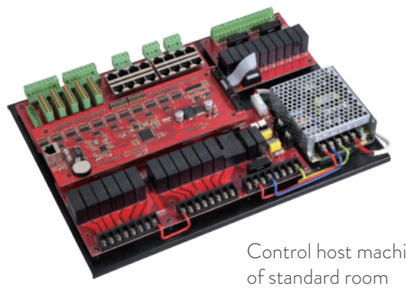




Network topology of the room control system

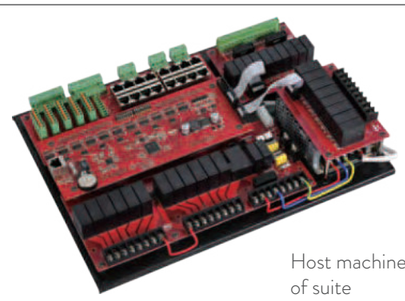


Host Machine Parameters



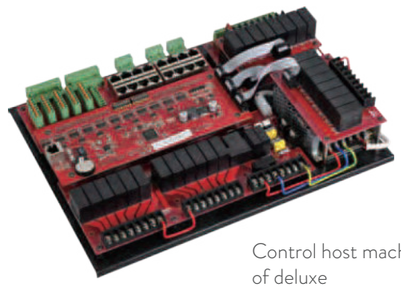
Control host machine of standard room

Serial No.	Product Name	QTY of circuits	Control mode	Remarks
1	Common light circuits	12-channel AC220V	16A relay	
2	Emergency light circuits	1-Channel AC220V	10A relay	For emergency porch light
3	Dimmer circuits	2-Channel AC220V	TRIAC	Various verified lamps
4	Fan coil of air conditioner	10-Channel AC220V	10A relay	Two groups of air conditioning control
5	Controlled power	1-Channel AC220V	30A relay	
6	Ethernet port	1-channel 10M self-adaptive port	TCP/IP	



Host machine of suite

Serial No.	Product Name	QTY of circuits	Control mode	Remarks
1	Common light circuits	20-Channel AC220V	16A relay	
2	Emergency light circuits	1-Channel AC220V	10A relay	For emergency porch light
3	Dimmer circuits	2-Channel AC220V	TRIAC	Various lamps passing testing
4	Fan coil of air conditioner	10-Channel AC220V	10A relay	Two groups of air conditioning control
5	Controlled power	1-Channel AC220V	30A relay	
6	Ethernet port	1-channel 10M self-adaptive port	TCP/IP	

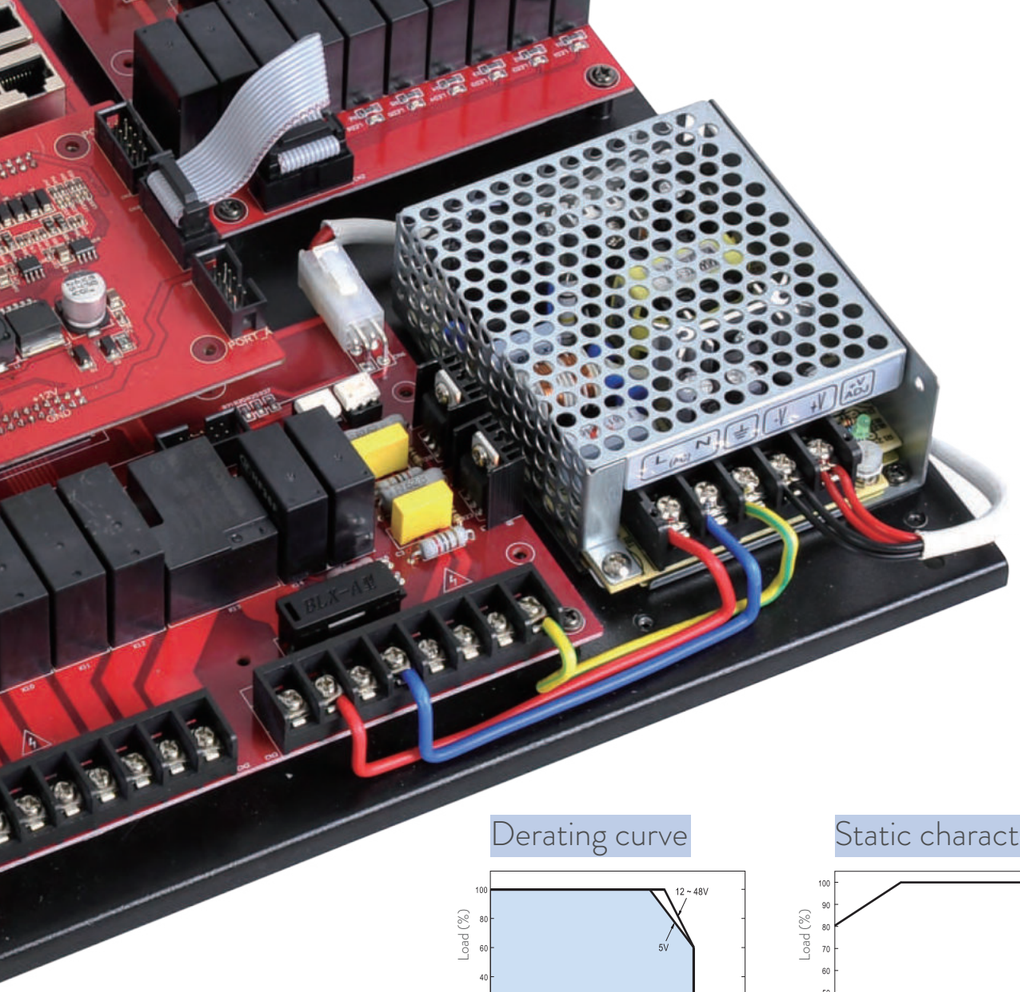


Control host machine of deluxe

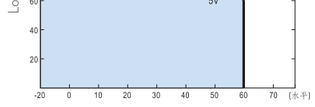
Serial No.	Product Name	QTY of circuits	Control mode	Remarks
1	Common light circuits	20-Channel AC220V	16A relay	
2	Emergency light circuits	1-Channel AC220V	10A relay	For emergency porch light
3	Dimmer	2-Channel AC220V	Silicon controlled	Various verified lamps
4	Fan coil of air conditioner	10-Channel AC220V	10A relay	Two groups of air conditioning control
5	Curtain control	8-Channel AC220V	16A relay	Two groups of curtain control
6	Controlled power	1-Channel AC220V	30A relay	
7	Ethernet port	1-channel 10M self-adaptive port	TCP/IP	

Introduction of the cabinet

Convenient to install, the 90° welding spot knock-off hole, easy to knock off, large wiring space.
Free of key and lock, easy to overhaul.
Sturdy and durable, bending strength of the sides reinforced, electrodusting surface treatment, and 1.2mm thick steel plate.

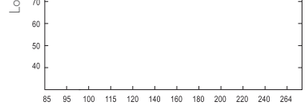


Derating curve



Ambient temperature (C)

Static characteristic curve



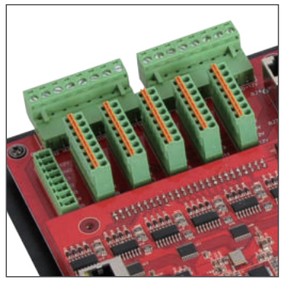
Input voltage(VAC) 60Hz

Power supply—high reliability

Introduction of power supply parameters

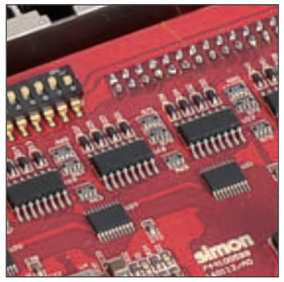
Safety & EMC	Safety specifications	Certified by UL6060950-1, CB(IEC60950-1),CCC GB4943,1;2011
	Voltage withstanding	I/P-O/P:3KVAC IP-FG:2KVAC O/P-FG:0.5KVAC
	Insulation resistance	I/P-O/P,I/P-FG,O/P-FG:100MOhms/500VDC/25 C /70%RH
	Electromagnetic compatibility emission	According with EN55022 (CISPR22) Class B: EN61000-3-2,-3
	Electromagnetic compatibility interference immunity	According with EN61000-4-2,3,4,5,6,8,11, EM55024, EN61000-6-1,class-A light industry standards

High reliability, 100% full-load aging test.
Wide voltage, internationally full-range AC input
Complete protection: short-circuit protection, overvoltage protection and overload protection.
High voltage withstanding, high voltage withstanding standard.
Environmentally friendly, natural air cooling, mute cooling.
Complete certification: EMC CCC CB UL certification.



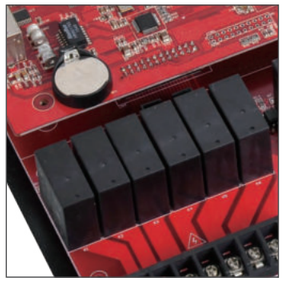
Weak current wiring terminal —quick wiring

Convenient to maintain, quick wiring and plug and pull, free of trouble caused by twisting.
High installation efficiency, higher wiring efficiency than twisting.
Stable performance, stable contact area, long-term stable system operation.



Optocoupler —anti-interference

Input signal isolation effectively to resist static electricity and improves the interference resistance,so reliability of system working can be improved significantly.
The light emitter gives out light when electric signals are applied to the input terminal, the light receiver receivers light and produces light current that flows out from the output terminal. Following this way, the “electricity—light—electricity” transformation is realized.



Relay

Contact parameter

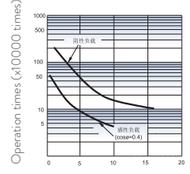
Contact form	1H、1D、1Z
Contact resistor	≤50mΩ(1A 24DVC)
Contact material	AgSnO2，AgcdO
Contact load	Resistance: 16A 240VAC/24VDC 1HP 240VAC TV-8 125VAC (normally open contact)
Maximum switching voltage	277VAC/30VDC
Maximum switching current	20A
Maximum switching power	5540VA / 480W
Mechanical endurance	$1X10^7$times
Electrical endurance	$1X10^5$times (16A 240VAC, resistive load, room temperature, 1s on 9s off, NO terminal or NC terminal). $5X10^4$times (16A 24VDC, resistive load, room temperature).

Remark: The air vent should be opened during electrical endurance testing of the plastic packaged relay.

Features

·20A contact switching ability
·4kv withstand voltage between coil and contact
·Meet the VDE0700/0631reinforced insulation requirement
·Have a group of contact forms: normally open contact, transformation and normally closed
·UL insulation class: class F insulation
·Environment-friendly product (according with RoHS)
·Overall dimensions: (29.0x13.0x26.5) mm

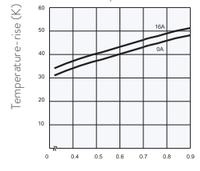
Electrical endurance curve



Contact current (A)

Testing conditions:
NO terminal, resistive load
Solder resist type, room temperature, 1s on 9s off

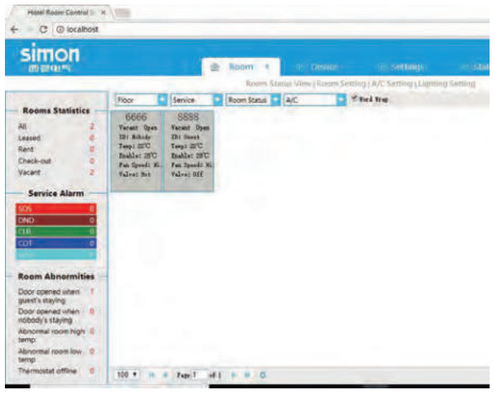
Coil temperature-rise



Coil power consumption (W)

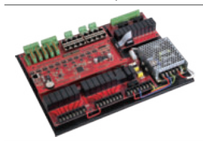
Control on Phone/Pad

Smart Living
Convenient Using
Elegant & Exquisite



Management software-free-installation

BS structure. Free from installation. Easy maintenance and interface. High reliability. .net structure. High stability and smooth running. Complete function: indicate room situation, such as lodger in/out, door open/close, AC running, service information and AC setup.

Product picture	Product code	Description	General feature
	S22D0-0204	Stardand RCU	12-channel 16A relay 10-channel 10A relay 2-channel silicon controlled dimmer 1-channel 30A relay
	S22D0-0205	Suite RCU	20-channel 16A relay 10-channel 10A relay 2-channel silicon controlled dimmer 1-channel 30A relay
	S22D0-0206	Luxury RCU	28-channel 16A relay 10-channel 10A relay 2-channel silicon controlled dimmer 1-channel 30A relay
	S2200-0102	RCU installation box	【500×440×100mm】
	S2200-0401	Surface IR sensor (DC12V)	White
	S2200-0403	Electronic doorbell (DC12V) [ding-dong]	White
	S2200-0404	Door magnetic switch (DC12V) (Five sets) [round, hidden]	White
	S2200-0405	Window magnetic switch (DC12V) (Five sets) [square, surface]	White

List of exclusive switches and sockets for hotels (Module only)

Product picture	Product code	Description	General feature
	S2100-E604	I7 RF card module (DC12V, RS485)	RS485
	S2100-E709	I7 touching-tone temperature controller module for central AC (DC12V, RS485)	RS485
	S2100-E614	Doorbell switch with led indicator (12VDC, 7 wire)	share positive anode
	S2100-E641	1-gang ELV switch module (12VDC/RS485)	RS485
	S2100-E642	2-gang ELV switch module (12VDC/RS485)	RS485
	S2100-E643	3-gang ELV switch module (12VDC/RS485)	RS485
	S2100-E644	4-gang ELV switch module (12VDC/RS485)	RS485
	S2100-E117	1-gang ELV reset switch module with indicator [Flat]	dry contact
	S2100-E127	2-gang ELV reset switch module with indicator [Flat]	dry contact
	S2100-E137	3-gang ELV reset switch module with indicator [Flat]	dry contact
	S2100-E147	4-gang ELV reset switch module with indicator [Flat]	dry contact

Product picture	Product code	Description	General feature
	S1128-E604	V8 RF card module (DC12V, RS485)	RS485
	S1126-E709	V8 button-tone temperature controller module for central AC (DC12V, RS485) (matt black)	RS485
	S1126-E641	1-gang ELV switch module (12VDC/RS485/RCU host controller) (matt black)	RS485
	S1126-E642	2-gang ELV switch module (12VDC/RS485/RCU bathroom mirror lamp) (matt black)	RS485
	S1126-E643	3-gang ELV switch module (12VDC/RS485/RCU host controller night lamp reading lamp) (matt black)	RS485
	S1126-E644	4-gang ELV switch module (12VDC/RS485/RCU host controller night lamp strip) (matt black)	RS485
	S1126-1117	1-gang ELV reset switch module (matt black) [with indicator Flat]	dry contact
	S1126-1127	2-gang ELV reset switch module (matt black) [with indicator Flat]	dry contact
	S1126-1137	3-gang ELV reset switch module (matt black) [with indicator Flat]	dry contact
	S1126-1147	4-gang ELV reset switch module (matt black) [with indicator Flat]	dry contact

Simon i7

Elegant
Simple
Unique
Sophisticated

Temperature controller

Multi-standard socket with double USB chargers

Keycard switch

Dimmer

Presence detector switch

Two pin socket and multi-standard socket

Doorbell switch

USB-HDMI outlet/socket

ELV reset switch

ELV reset switch

ELV reset switch

ELV reset switch

White 2-gang frame

White 2-gang frame

Champagne 3-gang frame

Neon grey 3-gang frame

White 5-gang frame (hotel multimedia control switch)

White 5-gang frame (hotel bedside control switch)

55 mm

V8 SERIES INSPIRATION

Designed from the heart of a Spanish artist, the Simon V8 series is a representation of the most modern western aesthetics. Simon V8 series involve two magnificent styles: Simon V8 Nature and Simon V8 Classic.

The Simon V8 Nature adopts natural pure glass for the frames, which is glittering and translucent bringing an outstanding, elegant and fresh feeling to luxury environments.

Simon V8 Classic inspired by the tradition and history of Spanish culture. Pure metallic frame provide a great strenght and an unique style.

Crystal

Water

Stone

Black Crystal

Classic Gold

Classic Silver

1-gang reset switch

2-gang reset switch

3-gang reset switch

4-gang reset switch

Keycard switch

Multimedia switch

Electronic curtain switch

USB-HDMI outlet/socket

Doorbell switch

Presence detector switch

Dimmer

Two pin socket and multi-standard socket

Stone 2-gang frame

Silver 2-gang frame

Stone 3-gang frame

Silver 3-gang frame

Stone 5-gang frame (hotel multimedia control switch)

Silver 5-gang frame

simon

Introduction on Multimedia Sockets

Simon multimedia socket

With a special conversion function, Simon multimedia socket will convert files of portable equipment of guests, such as digital cameras and laptop computers into high-definition data, and project onto TV via a high-definition cable. Then guests would enjoy photos, videos and music, playing games and even doing business demonstration in the large-screen TV (or audio and video systems) in their rooms. This multimedia socket meets the demands of high-end hotels for cleanliness and appearance, and it is convenient to construct and reduces fault points.

Wireless projection screen

The technical characteristics
Compared to other projection technology, Simon advantage and characteristics

·High signal processing quality
·Good customer experience

·Support Android, iOS, Windows (Win 10 version) systems
·Support mobile phones and tablet computers of mainstream manufacturers
·Free APP installation

·Support remote management on ID change
·Connected with WiFi, multimedia socket will be bound with the projection screen module, thus it will prevent mistaken projection to the next room (patent technology)

High-definition all-in-one conversion

Specific conversion function
The HDMI is coupled to the TV and controls automatic switch and wake-up based on the CEC protocol. It prevents messy wires caused by the complex connection of equipment onto large-screen, and also simplifies construction.

Before use multimedia socket

After use multimedia socket

Support USB play

Support USB play
The USB interface supports TV to play videos and pictures in the connected equipment. The play interface can be controlled by the TV remote control, which improves the customer experience and brings greater use.

Plug and play

Exclusive automatic detection and switching functions
Customers' equipment will be detected as "video source" after plug-in. When disconnected, the TV will automatically switch to TV mode. It simplifies operation and avoids error, thus providing more convenience.

Thoughtful touch control design

Thoughtful touch control design
The touch button indicator light replaces the traditional one and can be switched freely among different equipment, which creates a comfortable and fashionable experience.

Rich audio/video interfaces

Meet the demand of output diversity of portable equipment
Support early interfaces (such as VGA and AV) and the latest interfaces (such as HDMI and Bluetooth).
Guests do not worry about corresponding interfaces, just enjoy the high-quality experience brought by the large screen.

Convenient wireless Bluetooth music

Increase the Bluetooth accessing mode
Guests will enjoy stereo music so long as to activating Bluetooth in mobile phone and connect it to large-screen TV.

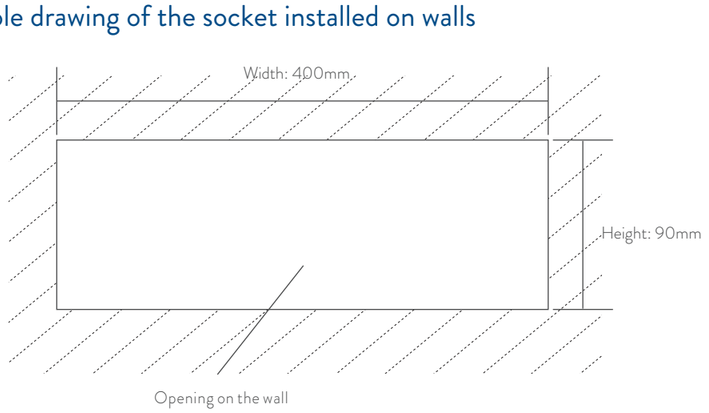
Support USB charging

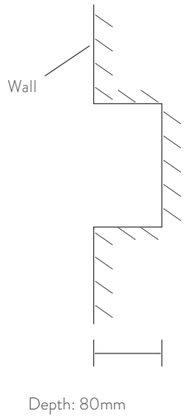
USB charging function
The socket provides large-current charging (5V/2A) and supports smart phones and Pads (including iPad series), thereby removing hotel guests' trouble of forgetting to taking chargers during their travel.

Appearance with brushed metal

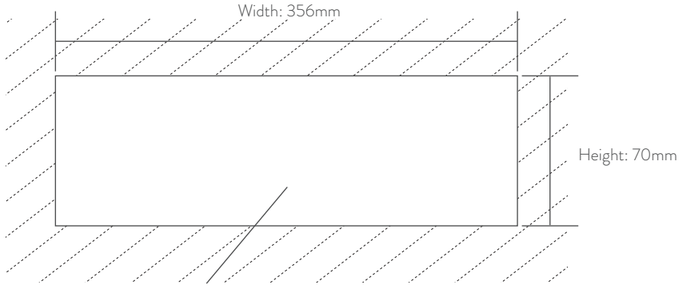
Appearance with elaborate brushed metal
Brushed metal texture, bold and edgy, in and modern, parallel to extravagant starred hotels.

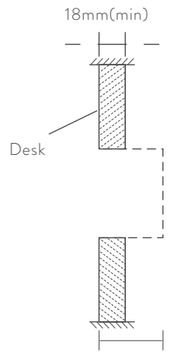
Hole drawing of the socket installed on walls



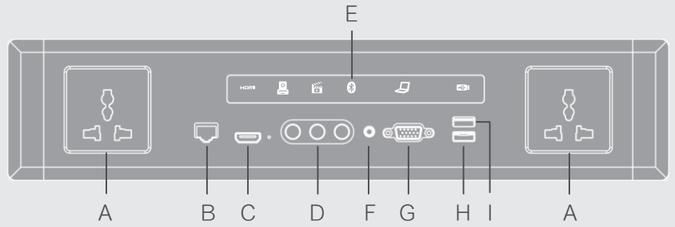


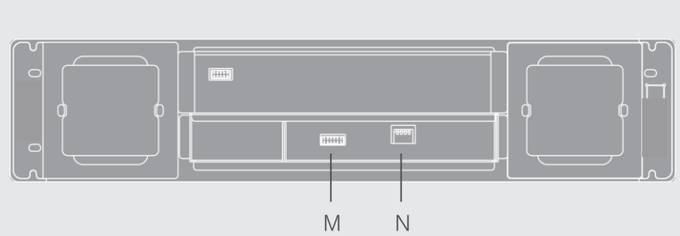
cutout drawing of the socket installed on walls desktops

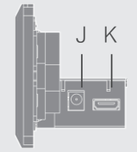




Product code	Basic interface	Name
45E631-01	AV(RCA) interface 3.5mm audio interface VGA interface HDMI interface One USB charging interface One USB multimedia play interface Two multi-standard socket	Multimedia socket (basic model/black)
45E631-02		Multimedia socket (basic model/champagne)
45E631-03		Multimedia socket (basic model/silver)
45E632-01		Multimedia socket (with network cable port/black)
45E632-02		Multimedia socket (with network cable port/champagne)
45E632-03		Multimedia socket (with network cable port/silver)
45E633-01		Multimedia socket (with Bluetooth and network cable port/black)
45E633-02		Multimedia socket (with Bluetooth and network cable port/champagne)
45E633-03		Multimedia socket (with Bluetooth and network cable port/silver)
S0101-E634		Multimedia socket (with Bluetooth and wireless projection screen) (black)
45DH400	390×70×75mm	Exclusive metal flush mounting box
S00DH-0401	382×78×75mm	Exclusive metal flush mounting box for projection







Front panel interface

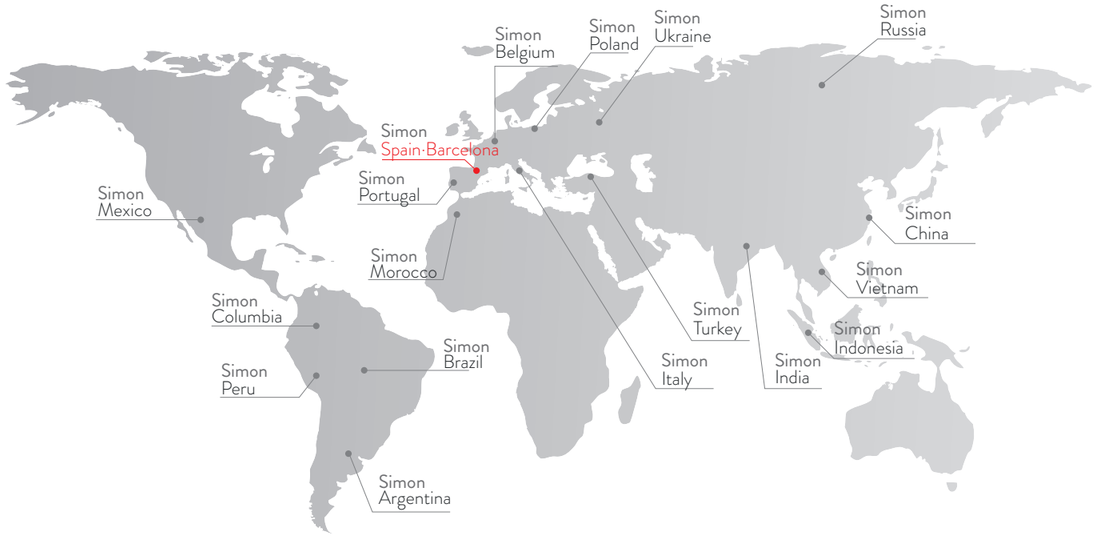
A Power socket
B RJ45 interface
C HDMI interface
D AV interface
E Touch button
F 3.5mm audio interface
G VGA interface
H USB5W2A charging interface
I USB player

Rear end installation interface

J Power adapter
K HDMI interface
L RJ45 interface
M Expansion interface
N Configuration switch

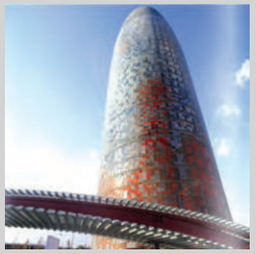
- **Requirements for TV**
  HDMI interface
- **Requirements for power supply**
  AC 100-240V 50/60Hz 0.5A
- **Optional panel color**
  Black, champagne, silver
- **Support FHD 1080P audio-visual transmission**
- **Support the wall-in installation and the furniture-in installation**
- **Cable package**
  3m HDMI cable

Simon in the World



Simon is an industrial group with
100 years history.

Simon is made up of 25 companies
throughout the world, with its headquarters
in Barcelona, in the business of producing
and marketing low - voltage electrical materials,
electronics, indoor lighting based on LED
technology, industrial and urban lighting,
voice and data transmission systems.
Lower thermal output (compared with the standard
reference product)



Torre Agbar, Barcelona, Spain

Kremlin, Moscow, Russia

Barcelona Olympic Stadium, Barcelona, Spain

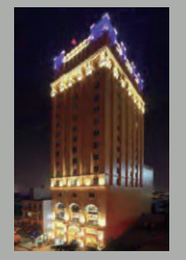
CCTV Building

Beijing V-Continent Crown International Hotel

Hotel JW Marriot

Beijing National Aquatics Center (Water Cube), Beijing, China

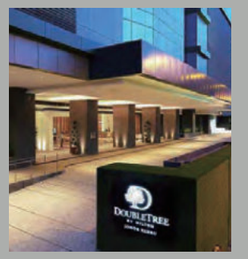
Spanish Pavilion at the Shanghai World Expo 2010, Shanghai, China



Gopatel Hotel, Vietnam

Dolpin Plaza, Hanoi, Vietnam

Micasa All Suite Hotel, Kuala Lumpur, Malaysia



Double Tree by Hilton, Johor Bahru