

DualCore Product Family

One-stop provider for system R&D and device manufacturing
Integrated solutions for smart hotels and smart homes

Contents

- RCU & Gateway

- Switch Panels

- Doorplates

- Smart

Screens

- Motors

- Sensors

01

RCU & Gateway

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RCU Host 1

Product Overview

A highly integrated and reliable guest room control board for monitoring and controlling lighting, curtains, air conditioning, room status, TV and other room devices. With cloud configuration and central processor algorithms, it helps deliver intelligent, comfortable and energy-saving operation.

Features

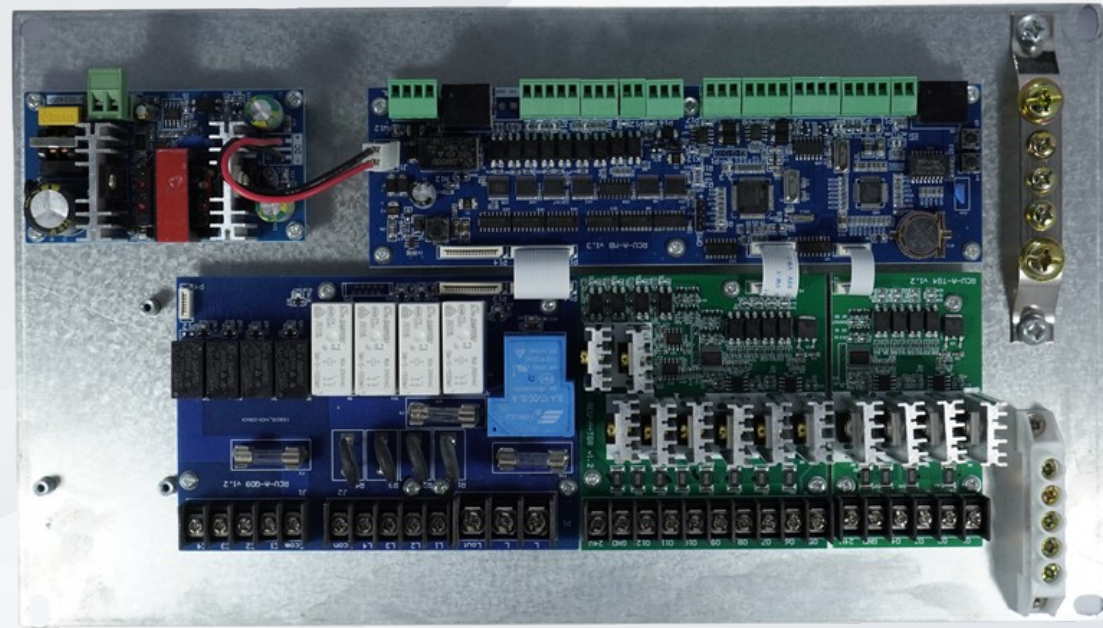
Highly integrated input and output control interfaces;
Built-in hardware watchdog for automatic recovery and maintenance-free operation;
Proven in large-scale hotel deployments with long-term stable operation;
Modular hardware for flexible combinations and high utilization;
DualCore Cloud support with a complete backend system and remote cloud configuration.

Hardware Configuration

- 1、 12-channel 24V PWM dimming
 - 2、 13 high-voltage outputs, including 4 x 16A and 1 x 30A high-power outputs; expandable with 13 additional high-voltage relay outputs as required; 1 low-voltage relay output;
 - 3、 4 low-voltage doorplate backlight outputs, 8 dry-contact inputs;
 - 4、 2 RS485 bus communication ports
 - 5、 2 infrared transmitters
 - 6、 Local storage of AC and TV IR codes without external devices;
 - 7、 1 x 10/100M Ethernet port with automatic cloud connection;
- Working power: 220VAC;
Main chip: Cortex-M3 series; gateway: 100M/10M adaptive TCP network communication.

Software Configuration

Group management and permission assignment;
Store management;
PMS integration;
Room type management, room management, network configuration, remote OTA and building configuration.
Full device monitoring for hotel rooms;



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RCU Host 2

Product Overview

A highly integrated and reliable guest room control board for monitoring and controlling lighting, curtains, air conditioning, room status, TV and other room devices. With cloud configuration and central processor algorithms, it helps deliver intelligent, comfortable and energy-saving operation.

Features

- Highly integrated input and output control interfaces;
- Built-in hardware watchdog for automatic recovery and maintenance-free operation;
- Proven in large-scale hotel deployments with long-term stable operation;
- Modular hardware for flexible combinations and high utilization;
- DualCore Cloud support with a complete backend system and remote cloud configuration.

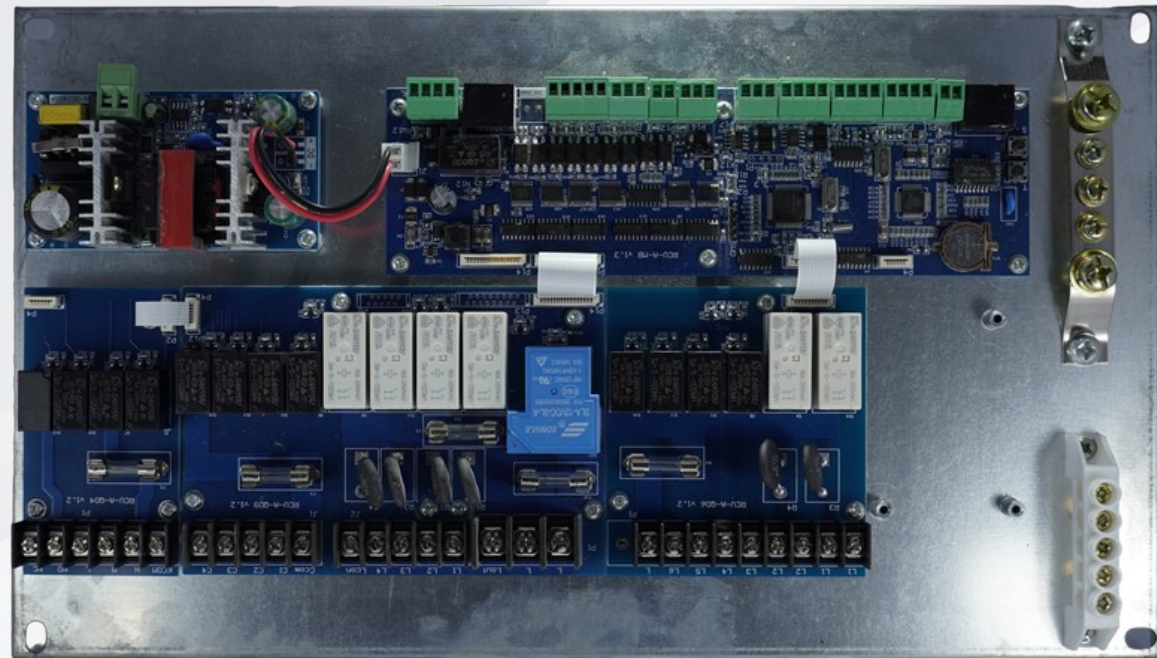
Hardware Configuration

- 1、23 high-voltage outputs, including 6 x 16A and 1 x 30A high-power outputs; expandable with 13 additional high-voltage relay outputs as required; 1 low-voltage relay output;
- 2、4 low-voltage doorplate backlight outputs, 8 dry-contact inputs;
- 3、2 RS485 bus communication ports
- 4、2 infrared transmitters
- 5、Local storage of AC and TV IR codes without external devices;
- 6、1 x 10/100M Ethernet port with automatic cloud connection;

Working power: 220VAC;
Main chip: Cortex-M3 series; gateway: 100M/10M adaptive TCP network communication.

Software Configuration

- Group management and permission assignment;
- Store management;
- PMS integration;
- Room type management, room management, network configuration, remote OTA and building configuration.
- Full device monitoring for hotel rooms;
- Batch data statistics



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Gateway Host 3

Product Overview

A highly integrated wireless control gateway that connects Bluetooth wireless communication, RS485 bus, switch signal control and cloud networking in one multifunctional controller.

Features

Highly integrated with input/output control interfaces, Bluetooth wireless interface, RS485 bus interface and Ethernet interface;
Built-in hardware watchdog for automatic recovery and maintenance-free operation;
Modular hardware supports flexible combinations with relay, dimming, infrared and voice modules;
Supports DualCore Cloud, complete backend management and remote cloud configuration.

Hardware Configuration

3、 1 low-voltage backlight output, 7 switch signal inputs;
4、 2 RS485 bus communication ports
5、 2 infrared transmitters
6、 Local storage of AC and TV IR codes without external devices;
7、 1 x 10/100M Ethernet port with automatic cloud connection;
Working power: 220VAC / 12VDC;
Main chip: Cortex-M3 series; gateway: 100M/10M adaptive TCP network communication.

Software Configuration

Group management and permission assignment;
Store management;
PMS integration;
Room type management, room management, network configuration, remote OTA and building configuration.
Full device monitoring for hotel rooms;
Batch data statistics.



02

Switch Panels

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Smart
Series



Large panel, clear tactile feedback, backlit text and status indicators. Rich configurations with a rigid aluminum alloy frame. Supports high-voltage and low-voltage solutions.

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Brushed Aluminum Series



Brushed aluminum panel with toggle switches, hollow engraved labels, backlight and status indication. Rich configurations for low-voltage solutions.



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Electroplated aluminum panel with silent buttons, backlit labels and color status indication. Rich configurations; rotary thermostat available for low-voltage solutions.

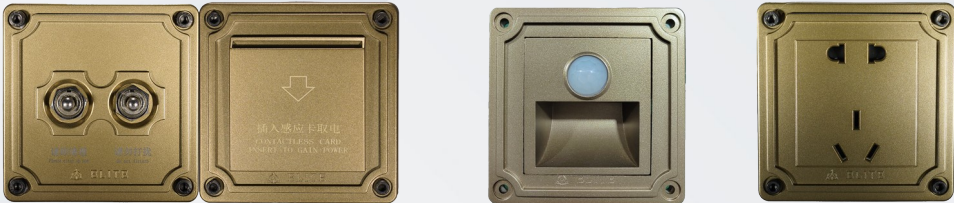
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Vintage style with toggle switches, backlit labels and color status indication. Supports high-voltage solutions.



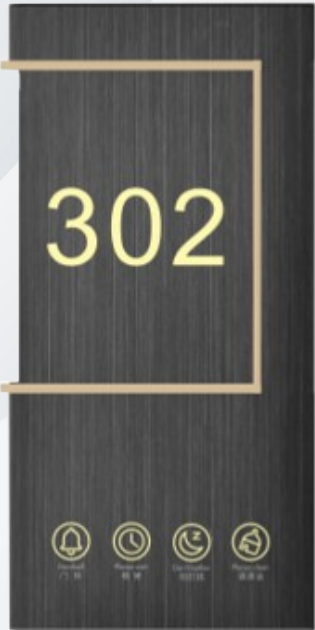
03

Doorplates

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Customizable doorplate styles



04

Smart Screens

AI Smart Screen

4-inch screen in standard 86-type size
for easy installation;

Supports Ethernet and Wi-Fi
connection;

Supports online and local music
playback;

Supports voice control, intelligent
Q&A and chat functions;

Supports external constant-resistance
speakers and built-in speaker.

Controls lighting, curtains, air
conditioning, music and other smart
devices.



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Thermostat Panel
86-type size;
Supports central air-conditioning fan control;
Supports infrared control for air conditioning;
Adjusts power, mode, fan speed and temperature, and displays indoor temperature.



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AI Smart Screen

Screen-plus-button solution;

Supports Ethernet and Wi-Fi connection;

Supports online and local music playback;

Supports voice control, intelligent Q&A and chat functions;

Supports external constant-resistance speakers and built-in speaker.

Controls lighting, curtains, air conditioning, music and other smart devices;

Direct lighting control.

05

Motors

Curtain Motor

Low-voltage dry contact type:
Power supply: 220V or according to local hotel voltage requirements
Connect the up wire to common terminal for upward movement; disconnect to stop.
During upward movement, connect the down wire to common terminal and disconnect the up wire for downward movement.
Reverse logic applies for downward operation.

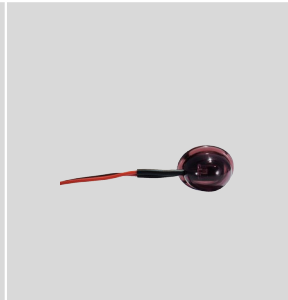
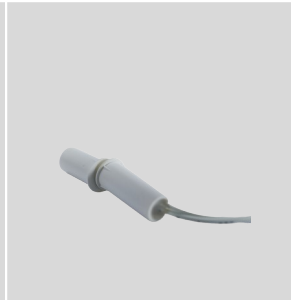
High-voltage trigger type:
Controller requirements for high-voltage motor
Power supply: 220V or according to local hotel voltage requirements
Connect the up wire to live wire for upward movement; disconnect to stop.
During upward movement, connect the down wire to live wire and disconnect the up wire for downward movement.
Reverse logic applies for downward operation.



06

Sensors

Sensors

Image						
Name	Human Motion Sensor	Delivery Robot Charging Dock	Water Flow Sensor	IR Transmitter	Door Contact Sensor	
Application	Detects human movement	Charges the robot	Detects water flow	Sends infrared signals	Detects door open/close status	
Power	12V	220V	12V	12V	12V	
Applicable Solution	Smart Hotel	Smart Hotel	Smart Hotel	Smart Hotel	Smart Hotel	

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THANK
YOU