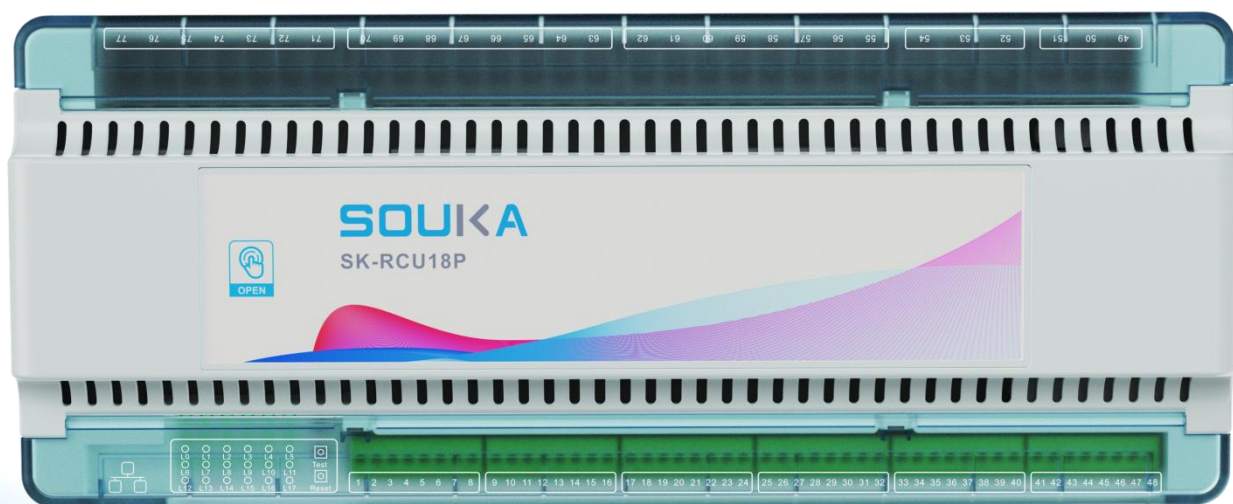


Product Datasheet

SK-RCU18P Premium 18-way Room Control Unit (RCU)



◆ Product Overview

The unit connects to external networks via a 100M TCP connection, interfacing with the company's cloud backend server to enable remote control, status synchronization, remote upgrades, remote configuration, remote debugging, and other functions. Internal room communication is achieved via an RS485 bus, ensuring orderly control of various connected devices.

◆ Product Main Features

- Built-in DC 12V switching power supply with wide voltage input (AC 85V-277V), no-load power consumption < 0.3W, over-voltage and overload protection, certified with 3C/CE/UL etc.
- Interfaces include 17 channels of 220V/10A high-power circuits, 1 channel of 220V/30A AC output, 10 channels of dry contact input, 6 channels of backlight output, and 2 channels of RS485 bus communication.
- Supports expansion with 6 additional high-power circuits and various dimming modules, plus 8 additional low-voltage dry contact points.
- Utilizes high-surge-resistant, moisture-proof relays with a mechanical life exceeding 100,000 cycles.
- Main control chip is a Freescale MKE automotive-grade ARM series chip, offering low heat generation, fast processing, and long service life.
- Backend control system adopts a B/S architecture, allowing information viewing and backend modification/debugging on mobile platforms. Front-desk computers only require a web browser (no software installation) for quick room status monitoring.

◆ Main Technical Parameters

Functions and interface parameters	
Built-in DC 12V switching power supply	AC Wide Input Voltage: 85V ~ 277V, 50/60 Hz
	No-load Power Consumption: < 0.3W
	Provides power for the internal circuitry of the main unit and can also supply 12V/1A output for external devices.
	Features over-voltage and overload protection.
Ethernet Port	Certifications: 3C, CE, UL, etc.
	1 x 100M RJ45 Port
TCP protocol for network connection	
RS485 Bus	2 channels for internal room communication
High-Power	17 channels of 220V/10A high-power circuits.

Circuits	1 channel of 220V/30A AC output.
Dry Contact Input	10 channels.
IO Output	6 channels.
Expansion Capability	Supports expansion with 6 additional high-power circuits and various dimming modules.
	Supports expansion with 8 additional low-voltage dry contact points.
Supported Peripherals	485-based devices such as thermostats, IR blasters, switches, motors, smart control panels, smart voice assistants, etc.
	Can support up to 128 switches, compatible with 485 switches and dry contact switches operating within the same system.
Management Functions	Room Console: Centrally monitors basic room information (room number, status, type, AC mode, service info, messages), main unit status, and other devices; enables remote control.
	Control Overview: Real-time status check of each RCU, including lights and AC.
	Room Type Management: Create and edit room types, manage floor plans and device naming, configure the smart control panel interface.
	Room Management: Manage room creation, grouping, and centralized control of bound devices.
	Guest Room Management: Batch processing of room parameter settings (mainboard, room type, IP/MAC address, etc.); configure room status, keycard delay, seasonal mode, etc. Supports import/export. Real-time device control based on room type. Preset AC modes based on room status, set scene modes by room type, and assign them to specific rooms.
	Doorplate Management: Manage doorplate devices, support import/export, batch upgrades, and upgrade package management. Supports custom doorplates, setting display content, recognition duration, and volume. Register guest info, view information and door opening records.
	Media Asset Management: Upload and manage multimedia resources with flexible storage path adjustment.
Physical Parameters Specifications	
Chassis Dimensions	287*117*68mm

Operating Temp./Humidity	-10℃-45℃、40%-70%
Storage Temp./Humidity	-40℃-70℃、40%-95%

◆ Product Interface Diagram

