SOYAL®

Smart Room Control System

Stay safe and easy with SOYAL Smart Room Management System, total solution that priorities safety and design.



WHAT WE OFFER

Anti-Cloning and Anti-Duplicate

We provide anti-cloning and encryption for the whole system to tighten up the security. By this mean, only tags paired to AR-323-D & AR-888-W can have access, other than that we don't even recognize the tags.

Beyond Access Controller

Each product manufactured by Soyal was made for total solution and to offer flexibility. For intense, Soyal main product is access controller but you can found Soyal on other application like offline consumption device, charging device, and many more just by changing its firmware.

No Exclusivity, Open Integration Resources

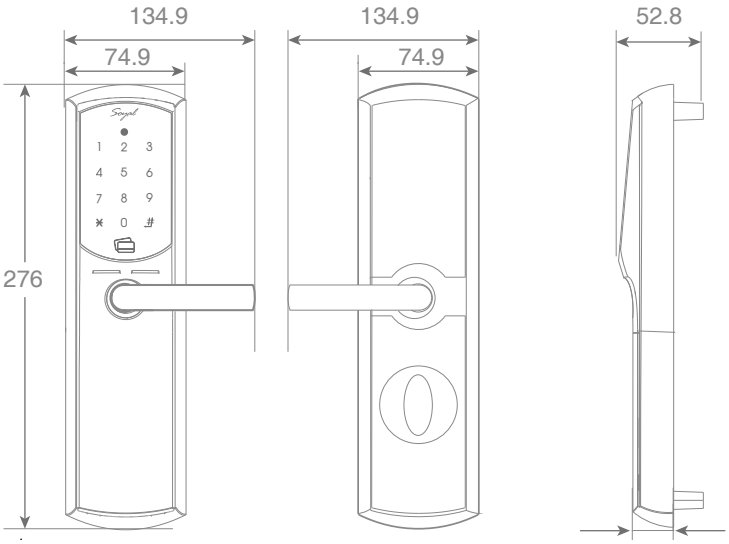
SOYAL provides open resources such as SDK and protocol document that have 'no-exclusivity and open source integration' characteristic, compatible with other system integration. We offer integration with SOYAL software or directly with SOYAL hardware. For web based, SOYAL protocols can easily corresponding to JSON interface that is suitable for Graph-QL and Julia developer.

FEATURE / INSTALLATION(mm)



AR-323-D / Smart Digital Door Lock

- Built-in illuminated touch panel
- Quickly add/delete card by keypad or master card
- Slide down for open door with mechanical key
- Door handle direction is optional by request



(Exterior) (Interior) (Side View)

HOW TO ORDER

AR-323-DR1NXX

- **Frequency** — D=13.56MHz
- **RTC** — R=Built-in RTC
- **Communication** — D=RS485
- **Waterproof** — N=None
- **Color** — B=Black
- **Type** — A= RH/Right Push; B= LH/ Left Push; C= RHR/ Right Pull; D= LHR/ Left Pull







AR-888-W / Card Energy Saver

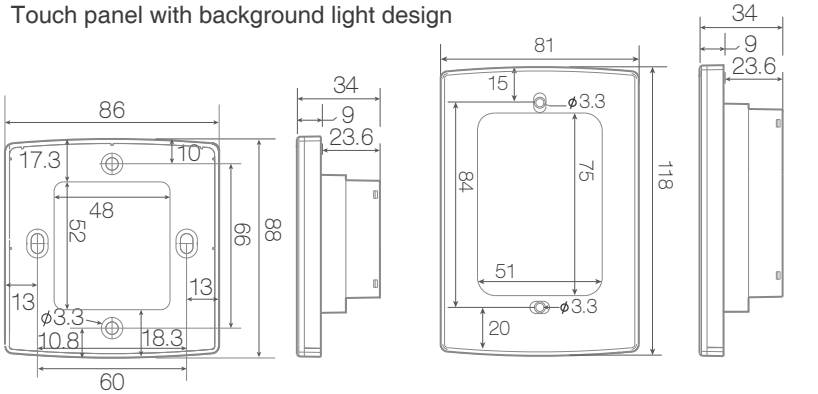
- Integration with stored value system & electric equipment such as air conditioner, TV, light, heater, and digital curtain
- Suitable for energy saver hotel and rental venue
- LED Frame indicator to differentiate access denied(RED) or access granted(GREEN)

AR-888-T / Modbus Smart Switch

- Available with two dimension; Rectangle US type with three LED and Square EU type with two LED
- Programmable with SOYAL or MODBUS-RTU communication protocol
- Retrieve switch status in time and output control function

AR-888-CPI / AR-888-CPO / DND&MUR Switch

- Flush-Mount design for seamless installation
- One set of indoor and outdoor for room services
- Touch panel with background light design



(Front View) (Side View) (Front View) (Side View)

▲EU ▲US

HOW TO ORDER

AR-888-WXR11BX

- **Frequency** — D=13.56MHz
- **RTC** — R=Built-in RTC
- **Communication** — 1=RS485
- **Waterproof** — 1=Weatherproof
- **Color** — B=Black
- **Type** — 7=Rectangle US Type; 8=Square EU Type

AR-888-XXX-XX

- **Indoor/ Outdoor** — CPI=Indoor; CPO=Outdoor
- **Type** — EU=Square EU Type

AR-888-T-XX-X

- **Type** — 68-3= Rectangle US Type with 3 Switch; 86-2= Sqaure EU Type with 2 Switch

SPECIFICATION

AR-323-D/AR-888-W

Specification		AR-323-D	AR-888-W
Power Consumption		<150mA	<5W
Power Supply		9-24VDC	
Communication Interface		RS485/9600 bps (N, 8, 1)	
Frequency		13.56MHz	
Supported Tags		ISO 14443 Mifare Ultralight, Classic, DESFire EV1 NFC (card simulation)	
Crypto		CC Certification: 3DES Crypto comply with EAL4+	
RFID Reading Range		1-3CM	
UID Bits		32	
User Capacity		1024	
Event Log		1200	
I/O		N/A	Input: 4 Digital Input Output: 1 Form C relay + 3 Transistor Output (Open Collector)
Indicator	LED	1 set of Bi-LED	Bi-Color LED Frame
	Buzzer	1	1
Dimension (mm)		276(H)X26(W)X75(D)	US: 110(H)X81(W)X9(D)/34(D) EU: 88(H)X86(W)X9(D)/34(D)
Material	Housing	Zinc Alloy	PC
	Keypad	Illuminated Touch Panel	---
Color		Black	Black
Weight		3.9KG	US: 120g±10 EU: 100g±10
Enviroment	Operating Temperature	-20℃ ~ +65℃	
	Storage Temperature	-25℃ ~ +70℃	
	Operating Humidity	20%~90%	
	Storage Humidity	5%~95%	

For AR-323-D

Lock Type :US

Door Thickness : 40mm ~ 80mm

Opening Method : RH: Right Push / LH: Left Push / RHR: Right Pull / LHR: Left Pull

Unlock Operation :13.56MHz tags, PIN CODE,and mechanical key

AR-888-CPI / AR-888-CPO / AR-888-T

Specification		AR-888-CPI	AR-888-CPO	AR-888-T
Communication Interface		---	---	RS485/9600 bps (N, 8, 1)
Power Voltage		9-24VDC		
Indicator		2 LED	3 LED	US: 3 LED EU: 2 LED
Relay		24VDC/7A , 240VDC / 7A		
Do Not Disturb LED		Low Active / 20mA max	---	N/A
Make Up Room LED		Low Active / 20mA max	---	N/A
Switch button		2 (DND&MUR)	1(Doorbell)	US: 3 / EU: 2 *Programmable with SOYAL or MODBUS-RTU protocol
Dimension (mm)		88(H)X86(W)X9(D)/34(D)		US: 110(H)X81(W)X9(D)/34(D) EU: 88(H)X86(W)X9(D)/34(D)
Housing		PC with Illuminated Touch Panel		
Color		Black		
Weight(g)		100g±10		US: 120g±10 EU: 100g±10
Enviroment	Operating Temperature	-20℃ ~ +65℃		
	Storage Temperature	-25℃ ~ +70℃		
	Operating Humidity	20%~90%		
	Storage Humidity	5%~95%		

PERIPHERALS / ACCESSORIES

HIGH LEVEL SECURITY

- Anti-Cloning Kits



Mifare Encryption

Encoder: AR-725-P
w/Authorization Tags
Software: Mifare Key



Desfire Encryption

Encoder: AR-837-P
w/Authorization Tags
Software: 323D Master

- Expansion I/O Control



I/O Modules

AR-401 Series:
Multiple Channel I/O Module
AR-403 Series: Tiny Digital I/O Module



TTL to RS-485

For external module converter

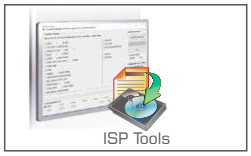
NETWORKING

- Software



File Based & Data Based Interchangeable Software for Access Control, Time Attendance , Status Monitoring and Configuration

701 Server & 701 Client



Firmware Upgrade

ISP Tools

- Signal/Interface Converter
- Large User Capacity & Multi-Door AntiPassback



Isolated USB to RS-485
AR-321-CM

Isolated RS232 to RS485
AR-321-CM-485232

Ethernet to RS485
AR-727-CM / AR-727-CM-IO-0804M (with I/O for Fire Alarm to open all doors)



Multi-Door Control Series

AR-716-E16: 16 Doors IP Control Panel
AR-716-E18: 18Doors Networking Control Panel

STANDALONE

- Room Control System



Modbus Switch **DND&MUR Switch** **Card Energy Saver**

- Necessary



Power Supply

BP-W12-1500 (1.5A)
BP-W15-2400 (2.4A)



Proximity Tags

13.56MHz: Mifare Classic, Mifare Desfire, UltraLight
Tags Selection: Thin Card, Round Keyfob, Square Keyfob

APPLICATION & STRUCTURE DIAGRAM

Have Control and Be Smart



AR-888-T

Set your power switch to electric devices such as air conditioner, lamp, heater and digital curtain with or without timer. All setting is programmable with SOYAL and Modbus-RTU protocol provide more flexibility to your requirement.



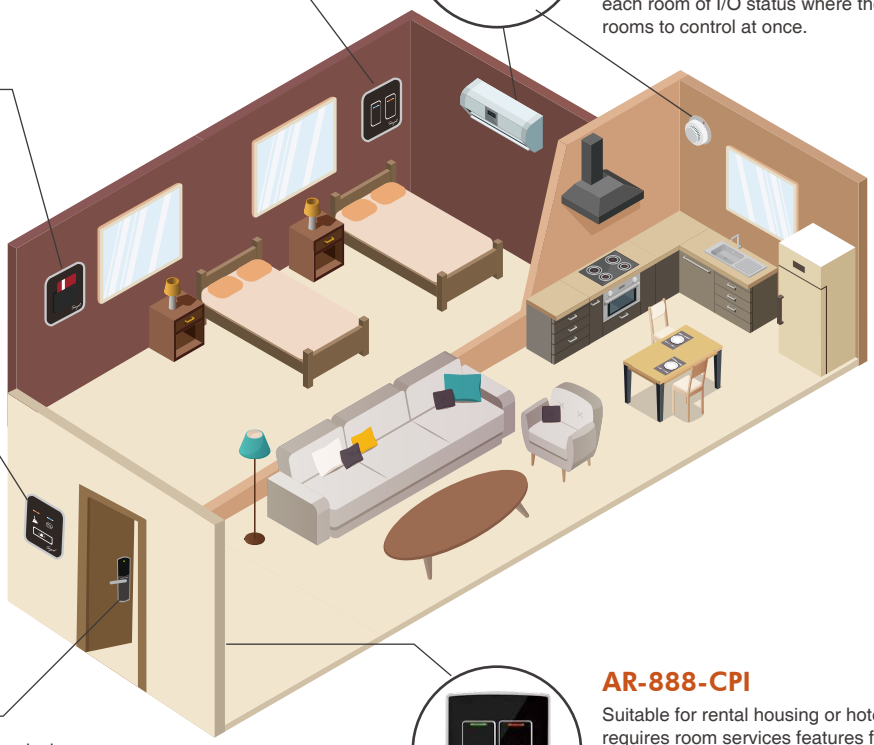
I/O Series

SOYAL 701Client built-in SCADA function that support both access controller and I/O Module series in one system. Under one computer, monitoring and remotely control each room of I/O status where there are many rooms to control at once.



AR-888-W

Card energy saver for rental housing or hotel room, combined with SOYAL SOR it can not only read valid card but must only be able to read paired card to AR-888W in order to activate electric devices in the room. That way, AR-888W provide both basic security level and high security level based on your requirement.





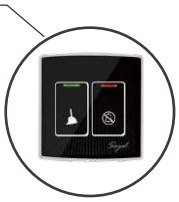
AR-888-CPO

Following AR-888-CPI functions, AR-888-CPO will display option selected by room guests either to clean the room or not. Equipped with another button, Doorbell function is replacing door knocking when room services have delivery for guests.



AR-323-D

Secure your home with digital door lock AR-323-D. Access controller with door lock and handle in one body provide easy installation. Have access to you home with RFID tags, PIN, or both combine. For emergency access, mechanical key is supported to open door.

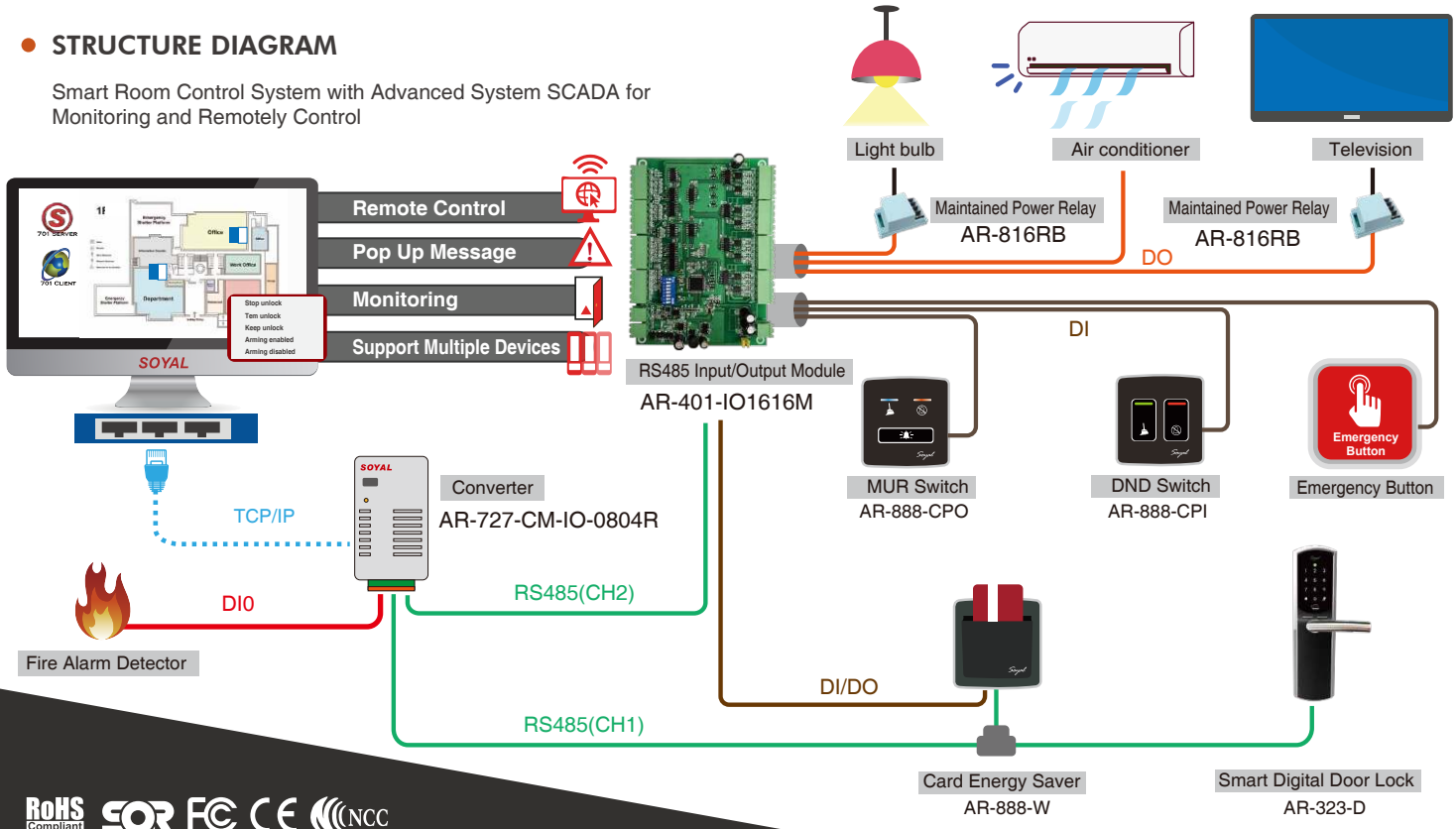


AR-888-CPI

Suitable for rental housing or hotel room that requires room services features for its guests. Guests can select DND (Do Not Disturb) to say no to room cleaning or MUR (Make Up Room) to let room services know guest want the room to be cleaned.

STRUCTURE DIAGRAM

Smart Room Control System with Advanced System SCADA for Monitoring and Remotely Control



RoHS Compliant FC CE NCC