

# SOYAL<sup>®</sup>

Nation Series

# AR-723-H

## Tiny Proximity Access Controller

RS485 interface controller, smaller than your palm hand



### Mini Controller

With only 8cm height it is not even as big as your palm

### Indoor & Outdoor Installation

We offer weatherproof and IP 68 epoxy waterproof, suitable for indoor and outdoor installation

### Keyless Editing

Just by swiping master card, quickly add or delete user

### Wiegand Keyboard for Quick Configuration Setting

Set up configuration and edit user card setting by entering command with external Wiegand Keyboard

### Selectable Frequency

125KHz: Support EM card  
13.56MHz : Support Mifare, NFC (emulate UID), DESFire (Crypto comply with EAL4+)

### As RS485 Reader

Flexible use, can be standalone and networking

## Features



Lift Control



Alarming for Abnormal Event



Keyless Editing



Arming and Disarming



Watchdog



Anti-Passback



Web



Youtube

- Built-in hardware watchdog and real time clock
- Standalone / Networking / Support Cascade Structure
- Support RS485 communication encryption, SSC (Soyal Security Communication)
- Master card for keyless editing
- In-field firmware upgrade
- Arming / Force alarm / Door close delay alarm
- Multi output: door lock output (0.1-600 sec. and toggle mode)& alarm output (1-600 sec.)
- Support 1.5 door control anti-passback
- Silent operation mode: push button mute and all mute
- Auto door open time zone: Built-in 2 time zones, with multi-door control panel upgrade to 16 time zones
- Assign user for door group (up to 254) and time zone (up to 11, with control panel up to 63)
- Holiday edit (Up to 120 days a year) for salary counting and auto open time zone setting
- Auto relock for anti-trailing and sneaking
- Access control, lift control, time attendance, payroll and SCADA: graphic monitoring & remote control function

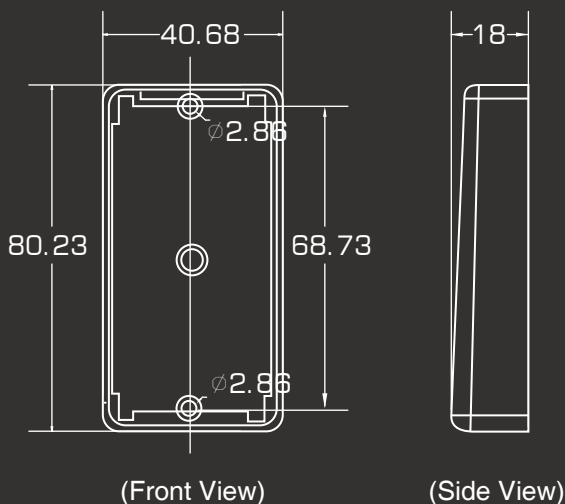
## SPECIFICATION

Communication interface	Host	RS485/9600 bps (N, 8, 1)	
	Serial	UART PORT (Output only)/4800 bps (N, 8, 1) SSC (Soyal Security Communication)	
Frequency	125kHz	13.56MHz	
Supported Tags	ISO18000-2: EM4001 and EM4095 compatible	1. ISO 14443 Mifare Ultralight, Classic, DESFire EV1 2. NFC (card simulation)	
Crypto	—	CC Certification: 3DES Crypto comply with EAL4+	
RFID Reading Range	5-12 CM	2-8CM	
UID Bits	24~32 (Adjustable)		
DI/DO	Digital Input	Egress / Door State	
	Digital Output*	Door Lock Output (share same terminal with Security trigger signal Output) Arming Output / Duress Output / Alarm Output	
	*Required External Relay Output Module		
Doors/Floors Number	1.5 Doors / 32 Floors		
User Capacity	1024		
Event Log	1100		
Indicator	LED	Bi-Color LED Ring Indicator GREEN= arming, disarming/standby mode & access granted RED= abnormal event: access denied & alarming	
	Buzzer	1	
TAMPER	No		
Dimension (mm)	81(H)X 43(W)X18(D)		
Housing Material	ABS		
Color	Black, Gray, Silver		
Weight (g)	approx. 40	approx. 60	
Power Consumption	<3W		
Power Voltage	9-24VDC		
Ingress Protection	IP56 / IP66(Epoxy)		
Enviroment	Operating Temperature	-20°C ~ +70°C	
	Storage Temperature	-40°C ~ +75°C	
	Operating Humidity	0%~90% (non-condensing)	
	Storage Humidity	0%~95% (non-condensing)	

## WHAT WE OFFER

- ✔ **Industrial Grade / High Durability**  
 Made of industrial grade materials in compliance with RoHS, which is far higher than general commercial grade, Soyal products work well in extreme environment with long working life.
- ✔ **Anti-Cloning and Anti-Duplicate**  
 We provide anti-cloning and encryption for whole system to tighten up the security. It supports DESFire in compliance with EAL4+, more secure than other brand's controller.
- ✔ **Support Soyal Cascade Structure**  
 When scaling your system it is not only having more hardware, higher security level, and more spaces to control; it also means there will be more people with access. Without replacing or changing installed hardware, adjust your controller user capacities by adding external Multi-Door Controller; from a thousand to more than ten thousand user capacity.
- ✔ **High Scalability, Beyond Access Controller**  
 Each product manufactured by Soyal is made for total solution and to offer flexibility. For instance, Soyal main product is access controller but you can find 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 sources such as SDK and protocol document that have "no-exclusively and open source integration" characteristic. SOYAL also supports integrations, like JSON, Graphic QL, Julia, Modbus, so customers can easily develop their own software.

## INSTALLATION(mm)



## HOW TO ORDER

**AR-723-HXR1XX1**

**Frequency**  
B=125kHz / D=13.56MHz

**RTC**  
R=Built-in RTC

**Communication**  
1=RS485

**Waterproof**  
1=Weatherproof  
2=Epoxy Waterproof IP68

**Type**  
1=Standard

**Color**  
1=Silver  
2=Gray  
B=Black

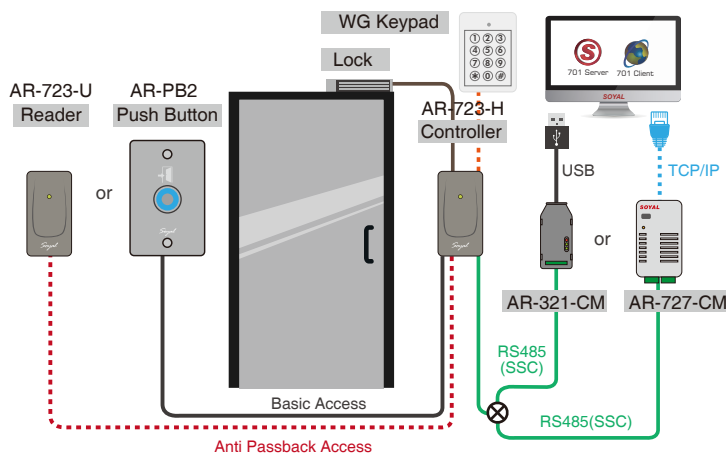
## APPLICATION & STRUCTURE DIAGRAM

### ● STANDALONE & NETWORKING ACCESS CONTROL

**Basic Access:** the most basic access, exiting venue is only by pressing a push button

**Anti Passback:** restrict user to re-enter before exiting venue or increase security level by having access reader at the other side of the door. Both entering and exiting will required swipe card or keyfob for access.

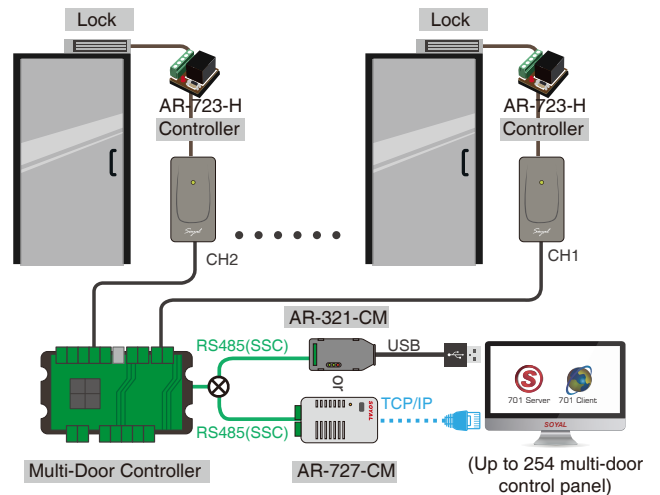
**Networking:** beside configuration through Wiegand Keyboard and Master Card, you can also link AR-723-H with Soyal converter to PC for configuration via SOYAL Software or for anti-cloning and encryption process.



--1024 User, 11 Timezone--

### ● CASCADE STRUCTURE

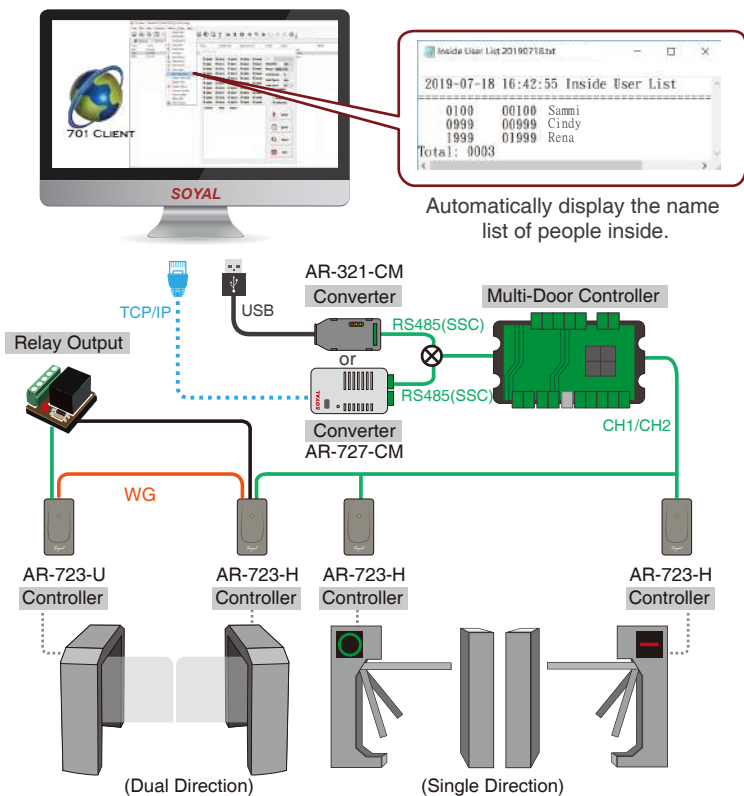
Upgrade user capacity without replacing AR-723-H installed with additional hardware of SOYAL Multi-Door Control Series. Under Multi-Door Control Panel, when RS485 communication is working normally, AR-723-H will be a Slave Reader of Control Panel. Once its communication is cut off, AR-723-H will automatically be Access Control and have control on its user and parameter setting.



--16000 User, 63 Timezone--

### ● TURNSTILE: COUNT AND DISPLAY NUMBER OF PEOPLE ON-SITE

Either with single direction or dual direction turnstile, with multi-door control panel AR-716-E16, restricts user access to re-enter venue without exiting first with anti-passback features and get the total number of people and the display the list of user on site via 701Client.

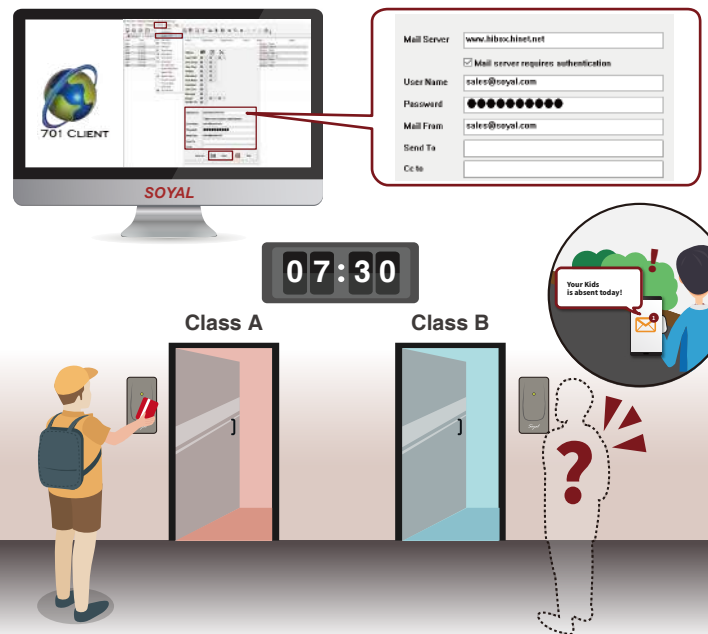


Automatically display the name list of people inside.

### ● Student Absent Automatically Send Email to Guardian

The application is recommended on School Security protection. With the customized version of 701client, the teachers can view the students' daily attendance records and also the transactions can be sent to assigned e-mail address to inform the parents if their children is absent or not.

- All student record is recorded on SOYAL 701Client software and Email field enter guardian's email.
- Student swipe card when entering classroom
- When first period begin, and student is absent from class, guardian will automatically receive email notification



# PERIPHERALS / ACCESSORIES

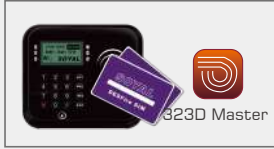
## HIGH LEVEL SECURITY

- 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

## STANDALONE

- Input/Output



### Locks

**Magnetic Lock**  
AR-0600M  
**Electric Bolt Lock**  
AR-1207 Series  
**Cabinet Lock**  
AR-1211-P/AR-1213-P  
**Electric Strike**  
AR-YS-130NO/AR-YS-131NO



### Door Sensor / Alarm/Siren / Burglary Security System



AR-723-H

## 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



**Parameter Setting**  
Node 737

- Signal/Interface Converter



### 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)



### TTL to RS-485

For external module converter

- Large User Capacity & Multi-Door AntiPassback



### Multi-Door Control Series

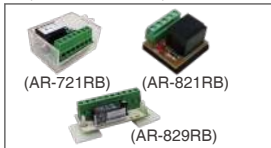
AR-716-E16: 16 Doors IP Control Panel  
AR-716-E18: 18 Doors Networking Control Panel

- Nation Series



**16,000 User IP Based Access Controller**  
AR-327-E / AR-727-E  
**Wiegand Reader**  
AR-723-U

- External Relay Output (Door lock & Alarm)
- Programming



**1 Form C relay with time delay**  
AR-721RB  
**1 Form C relay**  
AR-821RB  
**2 Form C relay**  
AR-829RB



**External Wiegand Keyboard**  
AR-WG-KEYBOARD-V2 (DMOD-WGKBA04)

- Necessary



**Keyless Editing**  
Self programmed master card



**Power Supply**  
BP-W12-1500 (1.5A)  
BP-W15-2400 (2.4A)



**Proximity Tags**  
125kHz: EM  
13.56MHz: Mifare Classic, Mifare Desfire, UltraLight  
Tags Selection: Thin Card, Thick Card, Round Keyfob, Square

## FAQ

**Q:** How to configure and add or delete user on keyless editing?

**A:**

- Under standalone mode, configuration and add or delete user can be done with Wiegand Keyboard by sending command to controller. Or you can also set up to three master cards for each controller to quickly add and delete users
- For networking, **Node737** Software provide easy setting for keyless controller or you can also choose **701Client** for more detailed setting and **Commview** by sending protocol command. All Soyal softwares are available for download on Soyal website.

**Q:** What is the difference between SOYAL Home Series and Enterprise Series Controller?

**A:** SOYAL access controller classified into two categories in term of specification; Home Series and Enterprise Series. SOYAL Home Series controller has already include all basic standalone and networking access controller that you need. But E series controller provide what Home Series controller has already have, and more advanced features like built in more user capacity, UART Port for extension module, and extension interface like Ethernet and POE.



More FAQ