

## Vision Series

# **AR-837-ER**

## Graphic Display Multi-Function Proximity Controller

IP-based controller supporting flush-mount and surface-mount installations and doorbell function; customizable panel design enhance overall building image



#### **Communication Redundancy**

Support TCP/IP and RS485 interface, when main communication disconnects, deputy communication will work to maintain normal work

#### **Enhance wateproof functionality and wear-resistant**

The seamless design of the touch panel prevents water entering the unit and enhance the waterproof function; the flat button will not wear out over time due to usage and causing the printed font to disappear.

#### Selectable Frequency

125KHz: Support EM card

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

#### Multi-Language Menu Setting

Intuitive menu make functional setting simple, no need to memorize command set

#### 8 Sets of Time Attendance

Duty On/Off, Break Out, Break Return, Overtime On/Off

#### Support SOYAL Cascade Structure

Built-in multiple control modes:

- 1. One door
- Two door (with WG reader)
- 3. Multiple doors (with multi-door control panel)

#### Reader Mode Supported

Not only a controller, but a reader if utilized with other brand's controller

## 2 Sets of UART Ports

Flexible integration with peripheral devices, like I/O module, floor control panel, LED display,infrared thermo-camera, etc.

## **Features**

















- Dual communication interfaces: RS485 and Ethernet (10/100M Base T)
- Built-in watchdog, real time clock, anti-vandalism switch, ingress protection, alarm setting, holiday edit, auto open door time zone, door group, door status DI, anti-passback function and duress code & output
- Support user capacity: 16,000 / 32,000 / 65,000 users
- Support floor control: 64 / 32 / 16 floors
- In case Ethernet disconnects, controller is still able to identify UID and record event log
- Multiple access mode: card only, card or password, card and password

- Two doors control: Two sets of push button and door status, relay output for lock and WG output for reader
- Multiple DO outputs: Lock, alarm, arming, duress and digital relay
- Supported frequency: 125kHz, 13.56MHz and dual band
- Standalone / Networking is switchable during working Support RS485 communication encryption, SSC (Soyal Security Communication)
- Communication Redundancy : Support TCP/IP and RS485 interface, when main communication disconnects, deputy communication will work to maintain normal work
- Patented relay design that can avoid the door mis-triggered by any vibration or external force

## **SPECIFICATION**

	125kHz: / 13.56MHz / Dual Band (125kHz & 13.56MHz)		
Frequency	125kHz: ISO18000-2: EM4001 and EM4095 compatible 13.56MHz: ISO14443/ISO 7816-4 Mifare Ultralight, Classic, Plus / DESFire EV1, EV2 / NFC (card simulation) / ISO15693 / Felica		
UID Bits	24~64 Bit (Adjustable)		
RF Reading Range	125kHz: 5-15 cm :13.56MHz: 2-5 cm :Dual Band: 2-15 cm		
Crypto	13.56MHz / Dual Band : CC Certification: AES Crypto comply with EAL5+		
Communication interface	Host	Order)	5 (9600 bps) / TCP/IP (Optional By / POE (Optional By Order) / Soyal Security Communication)
	Serial	TTL U	ART (4800~115200 bps) X2 (half-duplex)
	Wiegand Input	Wiega	nd 26~64
	Wiegand Output		nd Data 0, Data 1 and Arming Output, s Output share the same terminal
DI/DO	DI	Egress	s X2 / Door Status X2
	Relay ouput	Door L	ock Relay / Alarm Relay
	Open Collect Output		g Output / Security trigger signal / Duress : / Alarm Output / Wiegand Port open doo
Doors	2		
User Capacity / Floors Number	16,000 Users/64 Floors (Default value) ; 32,000 Users/32 Floors ; 65,000 Users/16 Floors		
Event Log	32,000		
Power Voltage	9-24VDC		
Power Consumption	<5W		
Indicator	6 LED (Green/ Red) : Buzzer: 1		
TAMPER	Limit switch (1 Form C/ 1000mA / 30VDC)		
LCD Panel	128*64 (4 line messages, 16 Characters each line)		
Housing Material	PC		
Color	Hairline texture printing : Edge: Black / Orange		
Keypad	Illuminated Touch-Panel		
Dimension (mm)	135(H)x103(W) x30(D)		
Net Weight(g)	approx. 255		
Ingress Protection	IP66		
Environment	Operating Temperature		-20°C ~ +70°C
	Storage Temperature		-40°C to +75°C
	Operating Humidity		0%~90% (non-condensing)
	Storage Humidity	,	0%~95% (non-condensing)

## WHAT WE OFFER

## Ouble Doors Control

Connected with Reader, it can manage 2 access control by a single unit of controller. The second set of access control also has the exit switch, door contact status and door output control, can also set different access level (such as - can access Door A but can not access Door B).

## Real-Time Event Log Integration

After reading card, IP-based controller will actively send the event logs through port 8031 for the integration with the 3rd party program.

## Auto-Schedule Function

AR-327-E special firmware connects with DO module AR-401RO16B, using Lift Control program enabling you to control each Digital Output and formulate a time schedule for each output, up to 64. It's suitable for each various switching devices, such as lighting, sprinkler system, air conditioning, etc

## Extended Application of Auto Open Time

The Wiegand reader Auto-Open time zone setting is able to control the infrared activation function / output the second set of door contact functions at a specific time.

## Auto-Alarm Function

Built-in 16 sets of alarm to output flash light, alarm clock, broadcast system, and each set of alarm can set the output time.

## With 2 Sets of UART Port

It can be applied to:

- (1) 256-point Mailbox Management System
- (2) Auto-scheduling control function-64-point DO control
- (3) Printer integration

**HOW TO ORDER** 

(4) Voice module (AR-721V-V2)

## Reader Mode Supported

Controller can be set to Reader mode, with Wiegand output that can be integrated with various brands of controllers, with a dual-band format that turns into Wiegand dual-band Reader.

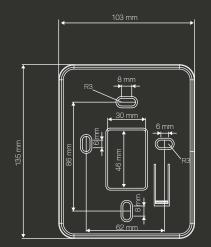
A=TCP/IP Module

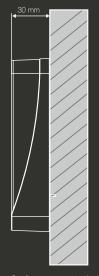
P=POE Features

Language(LCD) 1=English/Chinese

O=Orange Edge

## INSTALLATION(mm)





## AR-837-ERXR1X11-X Frequency -**B**=125kHz **D**=13.56MHz S=125KHz+13.56MHz **■** AR-837-ER R=內建 RTC Communication-**1**=RS485

Waterproof 1=Weatherproof

## **B**=Black Edge 1=Silver Edge

Surface mounting hole(Front View)

Surface mounting hole (Side view)



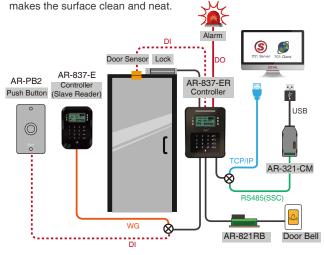
## **APPLICATION & STRUCTURE DIAGRAM**

#### STANDALONE & NETWORKING ACCESS CONTROL

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.

AR-837-E/EE can detect abnormal event with the door contact status in arming mode. When a forced entry or door opening too long, an alarm is generated and sent to the software, AR-837-E/EE alarm output can be equipped with a flash buzzer as warning on site

Visitor can either press the door bell on AR-837-E/EE controller or external bells that being connected to relay module which use the independent output PIN , no need to install other door bells, it



#### --16,000 User, 63 Timezone--

#### BUILT-IN HTTP WEB SERVER

IP-Based Controller has built-in HTTP WEB Server for Access Control, just input IP address, have it logged in to remotely control a single controller, enabling adding User card, time zone setting, review event logs, etc, even more can remotely open/close door regardless the brand of computer and smart phone. As long as there is a WEB browser, the remote management function can be achieved.



Support graphic animation and Pop-up real-time notification of abnormal events

Offline Cashless Payment & Store Value Application

Once swiping card, the LCD monitor will display the deduction and

With SOYAL SOR MifareKey Encryption to manage offline cashless payment & to store value. According to customer needs to deduct

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the value by time duration, time frequency, etc.

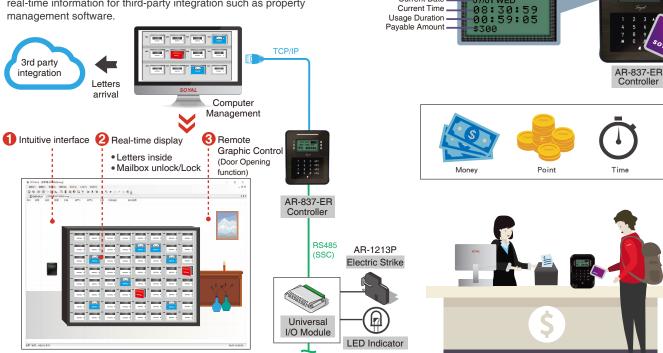
balance, etc.

Current Date

#### Smart Mailbox Integration Application

When letter arrives in mailbox, LED light will be flashing to remind user and send a real-time message to software 701Client Pop Graphic; when user swipe card to open mailbox and take out letter, then close the mailbox, LED light will be off and the message will be eliminate in 701Client Pop Graphic.

It can also detect whether the mailbox is not closed and activate alarm when open too long. In addition, no matter what is the status (letter inside or open too long), the controller always provide real-time information for third-party integration such as property management software.



Up to 64 Boxes

## PERIPHERALS / ACCESSORIES

## HIGH LEVEL SECURITY

Anti-Cloning Kits



Mifare Encryption Encoder: AR-725-P Authorization Tags

Software: Mifare Key



**Desfire Encryption** 

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

#### Expansion I/O Control



STANDALONE

Input/Output

Locks

AR-0600M

Magnetic Lock

AR-1207 Series

Cabinet Lock AR-1211-P/AR-1213-P

Electric Bolt Lock

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

**AR-837-ER** 

## **NETWORKING**

Software



File Based & Data Based Interchangeable Software for **Access Control. Time** Attendance.Status Monitoring and Configuration 701ServerSQL & 701ClientSQL



Udp Updater

Lift Control

**Remote Lift Control and Time** Table Setting LiftControl

#### Signal/Interface Converter



**POE Module** AR-MDL-RJ45-POE-12V12W



Isolated USB to RS-485 Ethernet to RS485 AR-321-CM

Isolated RS232 to **RS-485 Converter** AR-321-CM-485232

AR-727-CM AR-727-CM-IO-0804M

(with I/O for Fire Alarm to open all doors)

## Multi-Door AntiPassback





(UDP/TCP)



**Extensive Applications** 

Infrared Thermo-Camera. LPR (License Plate Recognition) AR-716-E18: 18 Doors IP Control Panel

Electric Strike AR-YS-130NO/AR-YS-131NO Vision Series



Door Sensor / Push Button /

**Burglary Security System** 

Door Bell / Alarm /



837 Series AR-837-FA AR-837-P AR-837-EF9DO/EF3DO



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

## • UART Port x 2



Lift Control / I/O Module / Printer / LED display / Voice Module / Bluetooth Module / Infrared Thermo-Camera

Programming
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 Plus, Mifare Desfire, Tags Selection: Thin Card, Round Keyfob, Square Keyfob

## **FAQ**

AR-837-E/EE

## Q: How to replace LCD display pictures in standby mode for SOYAL Enterprise Series controller?

A: E series LCD controllers can replace the pictures displayed in standby mode through a software tool, and can design the drawing file according to your needs, such as the company logo or building image, etc., which can improve the overall image.



Scan QR cod to view

## Q: How to Use Optional Voice Module on Enterprise (E Series) Controller?

SOYAL Enterprise Series Controller are able to connect SOYAL Optional "Voice Module" AR-721V to support Voice function; If the client need to integrate other Voice Module, SOYAL will provide related protocol for development and integration



■ Scan QR cod to view



