

Vision Series

Multifunction Face Recognition Controller

Dual cameras live dynamic face expression detection Access denied when using pictures, videos







(Flush Mounting or Surface Mounting)

Face Recognition & Dual Band Access Control & Time Attendance

Built-in door relay, alarm relay, duress output with multiple output port and function that can be work alone without connecting to extra controller; Support multiple verification mode such as Face, card, PIN code and more.

Dual cameras live face recognition & Anti-Spoofing Detection

Not only Single RGB Camera but also one more IR Camera; Facial expression detection to truly achieve the live face recognition; Access denied when using pictures, videos, fraud detection system.

Communication Redundancy

Support dual Communication Interface TCP/IP and RS485; When the main communication interface is abnormal and the secondary communication interface can run seamlessly, in which is suitable for occasions with extremely strict communication security requirements.

HTTP WEB Server Remote Management Interface

Remote Control via HTTP Browser whenever on PC or any brands Mobile phone.

2 sets of UART expansion interface

Flexible integration with Peripherals such as I/O Module, Lift controller, Display board and Infrared Thermometers.

Support Soyal serial overlay system structure

Adjustable Working Mode:

- Single door control
- Dual door control (Connect with WG reader)
- 3. Multi-door control (Connect with Multi-door control panel)

Multiple language menu setting

User-friendly menu setting: the user can follow menu to set up parameters and functions instead of remembering setting commands.

Features















o Doors Control





Wel

- RS-485 and TCP/IP communication interface
- Built-in Watch Dog to prevent the halting, Ingress Protection,
 Built-in set of Alarm, Holiday setting, auto-open zone settings,
 Auto-Open Zone editable, input of door contact, offering the alarm system of both door opening too long and beingforced to open
- User capacity: 16,000 / 32,000 / 65,000
- Lift Contro: 64 floors/32 floors/16 floors
- Data reduancy while system disconnected, identify users and store event log up to 32000 records
- Access Mode: Face only, Card only, PIN only, Card and PIN,
 Face and PIN, Face and Card and PIN

- 2 Exit Switch, Door Contact and Door Output to wiegand Built-in Multi-Output: Door Lock / Alarm / Arming / Duress / Security trigger signal
- 125kHz and 13.56MHz can be used simultaneously two channelsIntelligent to shift for standalone or networking mode while system disconnected
- Support SOYAL SECURITY COMMUNICATION encryption (SSC) to enchance security of communication
- Capacitor Door Bell Button: Built-in independent capacitor doorbell button and doorbell output, which can be used with various types of door bells for visitors.

SPECIFICATION

125kHz: / 13.56MHz / Dual Band (125kHz & 13.56MHz) 125kHz: ISO18000-2: EM4001 and EM4095 compatible Frequency 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 13.56MHz / Dual Band : Crypto CC Certification: AES Crypto comply with EAL5+ RS-485 (9600 bps) / TCP/IP (Optional By Host Order) / POE (Optional By Order) / SSC (Soyal Security Communication) Communication Serial TTL UART (4800~115200 bps) X1 (half-duplex) interface Wiegand Input Wiegand 26~64 Wiegand Data 0, Data 1 and Arming Output, Wiegand Output Duress Output share the same terminal DΙ Egress X2 / Door Status X2 Relay ouput Door Lock Relay / Alarm Relay DI/DO Arming Output / Security trigger signal / Duress Output / Alarm Output / Wiegand Port open door Open Collect Output Doors 16,000 Users/64 Floors (Default value); 32,000 Users/32 Floors; User Capacity / 65,000 Users/16 Floors Floors Number Event Log 32,000 Power Voltage 9-24VDC ower 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) lousing Material ARS Edge: Black / Silver Color Keypad **Iluminated Rubber** 128(H)X147(W)X60(D) Dimension (mm) Net Weight(g) approx. 340 Ingress Protection IP65 Operating Temperature: -20°C ~ +70°C / Storage Temperature: Environment 40°C to +75°C / Operating Humidity: 0%~90% (non-condensing) /

Face Recognition Specifications

Verification Speed	1:3000 < 3.0 Sec
Face Capacity	3000
Image Screen	2.8 TFT LCD Screen (320*240)
LCD Screen for Programming	128*64 Menu LCD Screen
Camera	RGB(640*480) + IR(640*480)
Assistant Exposure Light	White LED / IR high brightless LED
FAR (False Accept Rate)	≦0.0001%
FRR (False Rejection Rate)	≦0.4%
TAR (True Accept Rate)	≧ 99.6%

Storage Humidity: 0%~95% (non-condensing)

WHAT WE OFFER



Double Door Control

Connected with Reader, it can manage 2 access control by a signle unit AR-327-E. 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 AR-837-E/EE will actively send the event logs through port 8031 for the integration with the 3rd party program.



Auto-Schedule

AR-837-E/EE special firmware connect 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.



Auto-Open

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



Auto-Alarm

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

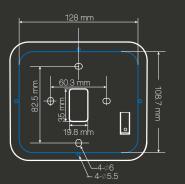
It can be applied to:

- (1) 256-point Mailbox Management System
- (2) Auto-scheduling control function-64-point DO control
- (3) Printer integration
- (4) Voice module (AR-721V-V2)

Reader Mode Supported

AR-837-E/EE controller can also 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.

INSTALLATION(mm)



- Surface mounting hole(Front View)

- 25 mm 40.3 mm
- Surface mounting hole

HOW TO ORDER





APPLICATION & STRUCTURE DIAGRAM

ACCESS & LIFT CONTROL

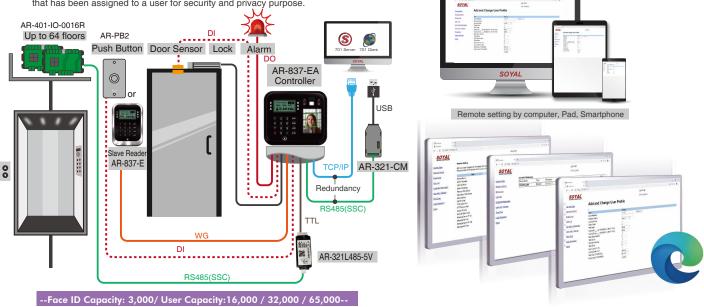
Anti Passback: restrict user to re-enter before exiting venue or increase security level by having access reader at the other side of the door. Both entering and exiting will required swipe card or keyfob for access.

AR-837-EA 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-EA alarm output can be equipped with a flash buzzer as warning on site.

Lift Floor Control: Authorize user access via AR-837EA face recognition technology for a touchless and tag-free access, at the same time give access to particular floors that has been assigned to a user for security and privacy purpose.

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.



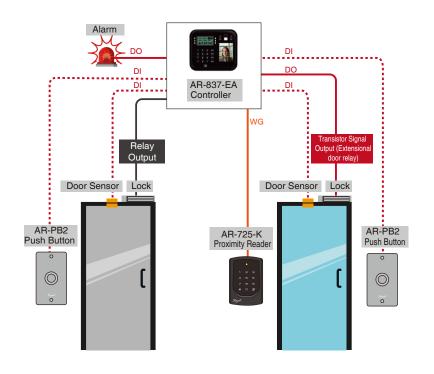
DUAL-DOOR CONTROL ON ENTERPRISE E SERIES **CONTROLLER AND WIEGAND READER**

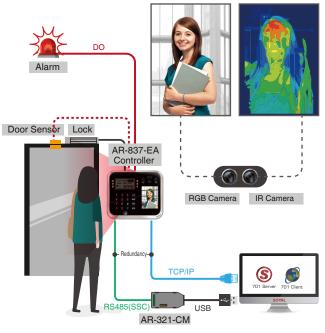
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SOYAL Enterprise E series controller supports dual-door control; Connecting one Wiegand reader to E controller, it can not only manage the entry and exit on the same door with Anti-pass back function and but also manage two different doors through independent access level setting (for example, access on Door A but access denied on Door B)

DUAL CAMERAS LIVE FACE RECOGNITION & **ANTI-SPOOFING DETECTION**

AR-837-FA is suitable for installation at the office door for access control and time & attendance. It is not only built-in Single RGB Camera but also built-in one more IR Camera that support Facial expression detection to truly achieve the live face recognition; this application can really implement non-contact epidemic prevention.





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

Magnetic Lock AR-0600M

Cabinet Lock

Electric Strike

Electric Bolt Lock AR-1207 Series

AR-1211-P/AR-1213-P

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

I/O Modules

NETWORKING

Software



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



Firmware Upgrade UdpUpdater



Remote Lift Control and Time **Table Setting**

Signal/Interface Converter



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



AR-321-CM Isolated RS232 to

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

Isolated USB to RS-485 Ethernet to RS485

RS-485 Converter AR-321-CM-485232

Extensive Applications

Multi-Door AntiPassback



Multi-Door Control Series AR-716-E16: 16 Doors IP Control Panel AR-716-E18: 18 Doors IP Control Panel

(UDP/TCP)



Infrared Thermo-Camera. LPR (License Plate Recognition)

Illuminate Series

AR-YS-130NO/AR-YS-131NO



Proximity Reader AR-725-K **Proximity Reader** AR-725-U

• External Relay Output (Security / Arming / Duress /

Door Sensor / Push Button /

Burglary Security System

Door Bell / Alarm /



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

• UART Port x 2

AR-837-EA



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)



125kHz: EM 13.56MHz: Mifare Classic. Mifare Plus, Mifare Desfire, UltraLight

Tags Selection: Thin Card. Round Keyfob, Square Keyfob

FAQ

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

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.

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.



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