

# SOYAL<sup>®</sup>

## QR Code Recognition Series

LCD QR Code Controller **AR-837-EL**  
QR Code Proximity Reader **AR-888-UL**

Built-in RFID card and QR Code scanning technology that allow the user to scan QR Code for temporary access and also read card ID for normal access.



### Features



Access by PIN Code & Card Reader



QR Code Scanning



Temp Access Badge with limit of time period or time frequency



Dual Band Frequency



QR Code Format Customization



(Web : AR-837-EL)



(Web : AR-888-UL)

### Common Features

- Support QR Code 2D / 1D Barcode that is applied for most of scanning requirements
- QR Code RFID Reading Range 5~20cm (Adjustable according to QR Code Size)
- Support various QR Code Format Customization depending on the integrated requirement with the 3rd party software.

### 837-EL Features

- Built-in RFID antenna in dual band technology : 125Khz EM / 13.56MHz ISO1443 Mifare Ultralight / Classic / DESFire / - EV1/ EV2 / NFC (card simulation) / ISO15693 / Felica
- Multi Communication Interface : RS485/ TCP/IP / WG input & output / UART Port
- Support Standalone and Networking Mode
- Support RS485 communication encryption, SSC (Soyal Security Communcation)

### 888-UL Features

- Built-in RFID antenna in dual band technology : 125Khz EM / 13.56MHz ISO1443 Mifare Ultralight / Classic / DESFire / - EV1
- Multi Communication Interface : WG output / RS485
- Flush-Mounted design for US and EU compatible

# SPECIFICATION

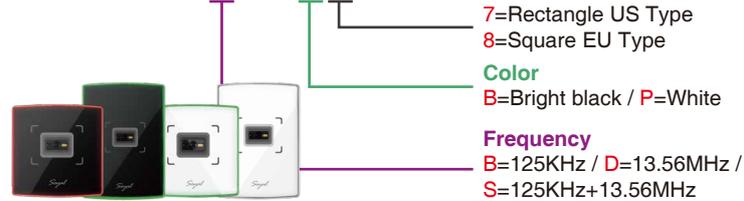
## AR-837-EL / LCD QR Code Controller

Communication interface	Host	RS485(9600 bps (N, 8, 1) / TCP/ POE
	Serial	UART PORT (Output only)/4800 bps (N, 8, 1) SSC (Soyal Security Communication)
RFID Frequency	125kHz / 13.56MHz / Dual Band	
Supported Tags	125Khz	ISO18000-2: EM4001 and EM4095 compatible
	13.56MHz	ISO1443 Mifare Ultralight / Classic / Plus / DESFire / - EV1/ EV2 / NFC (card simulation)/ISO15693 / Felica
Crypto	13.56MHz:CC Certification: AES Crypto comply with EAL5+	
RFID Reading Range	125Khz : 5-15 CM / 13.56MHz : 2-5 CM	
QR Code Reading Range (Adjust according to QR code size)	5-20 CM	
UID Bits	64	
DI/DO	Digital Input	EgressX2 / Door StateX2 / Door Bell
	Digital Output	Door Bell Output / Security Output / Arming Output / Duress Output
	Relay Output	Door Lock Relay / Alarm Relay
Doors/Floors Number	2 Doors / 64 Floors	
User Capacity	16000	
Event Log	32000	
Indicator	LED	6 LEDs with functions : Power / Alarm / Arming / Valid / Invalid / Card Present
	Buzzer	1
Others	Wiegand In / Output; Tamper Switch / Tamper Output	
Dimension (mm)	128(H)X147(W)X65(D)/30(D)	
Housing Material	ABS	
Color	BR: Black with Roof / 1R: Silver with Roof	
Weight (g)	450±10	
Power Consumption	<5W	
Power Voltage	9-24VDC	
Ingress Protection	IP65	
Enviroment	Operating Temperature	-20°C ~ +65°C
	Storage Temperature	-25°C to +70°C
	Operating Humidity	20%~90%
	Storage Humidity	5%~95%

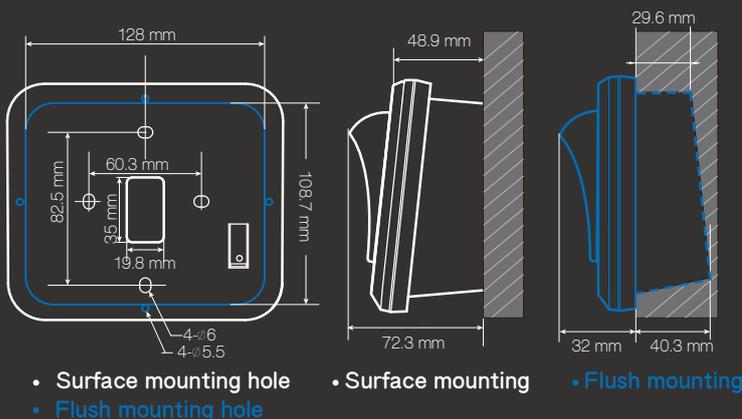
## AR-888-UL / QR Code Proximity Reader

Communication interface	WG24~34 Output / RS485/ ABAll/ QR Code	
RFID Frequency	Dual Band 125kHz & 13.56MHz	
Supported Tags	125Khz	ISO18000-2: EM4001 and EM4095 compatible
	13.56MHz	ISO 14443 Mifare Ultralight / Classic / Plus / DESFire / - EV1 NFC (card simulation)
Crypto	13.56MHz:CC Certification: 3DES Crypto comply with EAL4+	
RFID Reading Range	125Khz : 5-15 CM / 13.56MHz : 2-5 CM	
QR Code Reading Range (Adjust according to QR code size)	5-20 CM	
Indicator	LED	Red/Green LED Ring on the edge
	Buzzer	1
Extend Port	Wiegand Output	
Dimension (mm)	88(H)X86(W)X9(D)/34(D)	
Housing Material	ABS	
Color	Bright Black / Pure White	
Weight (g)	110±10	
Power Consumption	<1W	
Power Voltage	9-24VDC	
Ingress Protection	IP65	
Enviroment	Operating Temperature	-20°C ~ +65°C
	Storage Temperature	-25°C to +70°C
	Operating Humidity	20%~90%
	Storage Humidity	5%~95%

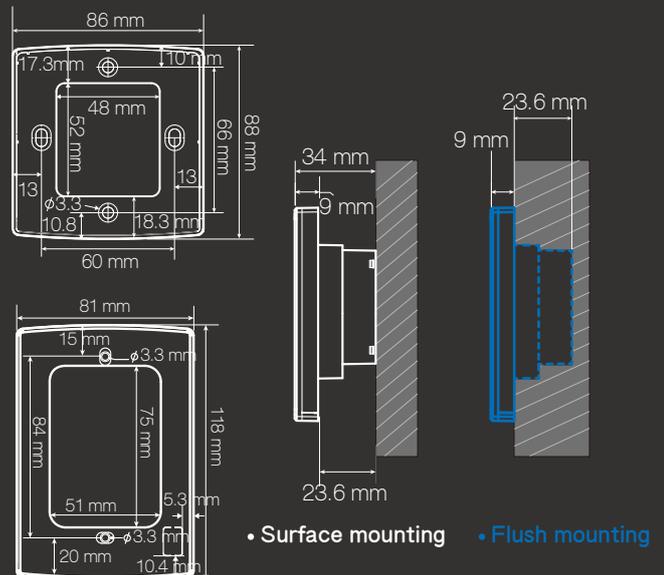
### AR-888-UXX31XX



## INSTALLATION(mm)



▲ AR-837-EL



▲ AR-888-UL

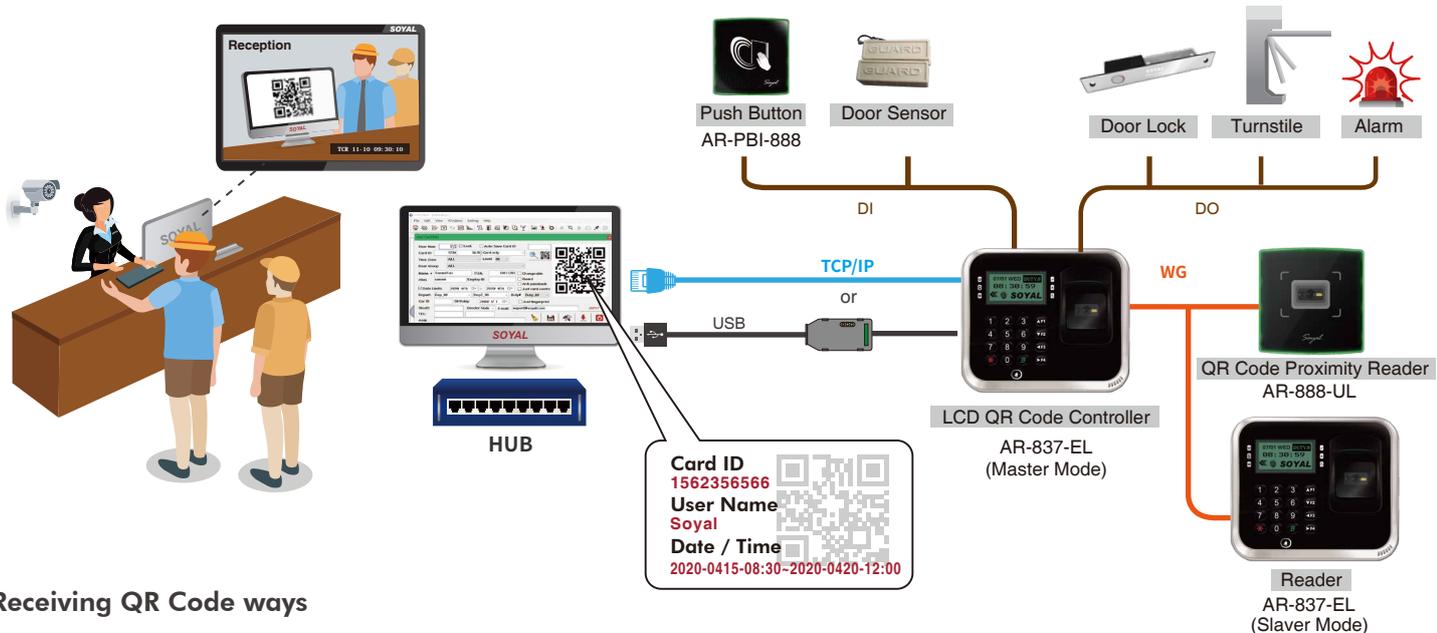
## APPLICATION & STRUCTURE DIAGRAM

### ● Apply for QR Code on Registration

SOYAL provides two types of QR Code devices,

QR Code proximity reader AR-888-UL can be connected to QR Code controller AR-837-EL via WG interface so the user can scan QR Code or swipe card for access at entry and exit.

QR Code can be created on SOYAL software with SOYAL QR code form or the 3rd Party software with customized QR Code form.

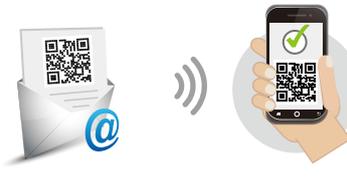


### ● Receiving QR Code ways

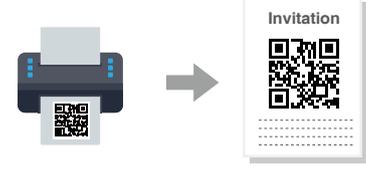
#### 1 Take a QR Code Picture via Mobile Phone



#### 2 Send out QR Code via Email



#### 3 Instant QR Code Badge Printing



### ● Application

Visitor management in Exhibition / Conference Events, Community and Commercial building , Hotel management, Supermarkets and various places that require QR code access.



#### Scanning Badge on Entrance

At an international conference or event, visitors will receive a badge with registration info., then scan QR Code on Badge through QR Code device at Entrance to obtain temporary pass for a limited date.



#### Sharable Meeting Room Reservation

To effectively use sharable meeting room, the user can register a QR Code through Reservation Software System, then Scan QR Code through QR Code device installed outside the meeting room to open electronic lock to obtain a temporary use right within a reservation time.

# PERIPHERALS / ACCESSORIES

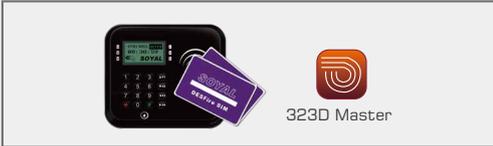
## HIGH LEVEL SECURITY

- 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

## STANDALONE

- Necessary



### Power Supply

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



### Proximity Tags

125kHz: EM  
13.56MHz: Mifare Classic, Mifare Desfire, UltraLight, ISO15693  
Tags Selection: Thick Card, Thin Card, Round Keyfob, Square Keyfob



AR-888-UL  
AR-837-EL

## NETWORKING

- Software



File Based & Data Based Interchangeable Software for Access Control, Time Attendance, Status Monitoring and Configuration  
701 Server & 701 Client



### Firmware Upgrade

UDPUpdater (for 837-EL)  
ISPTools (for 888-UL)



### Parameter Setting

Node 737 (for 888-UL)

- 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)

- Large User Capacity & Multi-Door AntiPassback



### Multi-Door Control Series

AR-716-E02: Dual Wiegand Networking Control Panel (for 888-UL)  
AR-716-E16: 16 Doors IP Control Panel  
AR-716-E18: 18 Doors Networking Control Panel

## FAQ

### Q: How to create QR Code?

**Method 1:** SOYAL 701Server / Client Software can be created QR Code with limited time for temporary access.

**Method 2:** The clients have their own VMS (Visitor Management Software) or APP / other systems that can be created QR Code and purchase QR Code devices from SOYAL to scan QR Code created from their system. SOYAL can customize hardware firmware to read different QR Code format.



More FAQ