

QR Code Recognition Series

Graphic Display Proximity / QR Code Controller

Dual-Band / QR Code Reader 🔑

Built-in RFID and QR Code scanning technology, providing temporary access by QR Code and normal access by RFID card



Support QR Code 3D and Barcode 2D, applicable for most of requirements

QR Code reading distance: 5~20cm (adjustable depending on QR Code size)

Support various QR Code format customization depending on the integrated requirement with the 3rd party

ush-Mount Design,

Flush-mount US rectangle size and EU square size are available















6CM

(Web: AR-837-EL) (Web: AR-888-UL)

- 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 Communication)

QR Code

module

- 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 QR Code reading distance: The test lowest environmental 2CM illuminance (250 lux):

3CM

2CM

8.5CM

SPECIFICATION

Frequency

UID Bits

AR-837-EL

LCD QR Code Controller

125kHz: / 13.56MHz / Dual Band (125kHz & 13.56MHz)

125kHz: ISO18000-2: EM4001 and EM4095 compatible

24~64 Bit (Adjustable)

Classic, Plus / DESFire EV1, EV2 / NFC

(card simulation) / ISO15693 / Felica

13.56MHz: ISO14443/ISO 7816-4 Mifare Ultralight,



AR-888-UL

QR Code **Proximity Reader**





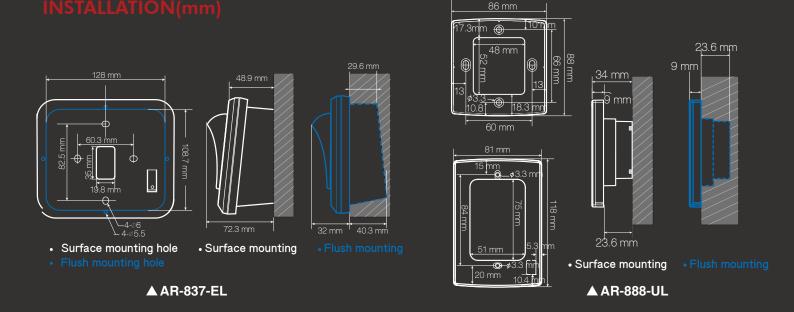
(EU) 125kHz / 13.56MHz / Dual Band(125kHz & 13.56MHz)

125kHz: EM

13.56MHz: ISO 14443/ISO 7816-4 Mifare Ultralight, Classic, DESFire EV1, NFC (card simulation)

24~32 (Adjustable)

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RF Reading Range / QR Code Scan Distance		RF Reading Range: 125kHz: 5-15 cm :13.56MHz: 2-5 cm:Dual Band: 2-15 cm	RF Reading Range: 125kHz: 5-15 cm :13.56MHz: 2-5 cm: Dual Band: 2-15 cm / QR Code Scan Distance: 5-20 cm
Crypto		13.56MHz / Dual Band : CC Certification: AES Crypto comply with EAL5+	13.56MHz / Dual Band : CC Certification: 3DES Crypto comply with EAL4+
Communication interface	Host	RS-485 (9600 bps) / TCP/IP (Optional By Order) / POE (Optional By Order) / SSC (Soyal Security Communication)	125kHz: RS-485 (9600 bps) 13.56MHz / Dual Band: RS-485 (9600 bps) / SSC (Soyal Security Communication)
	Serial	TTL UART (4800~115200 bps) X1 (half-duplex)	UART PORT (Only Output)
	Wiegand Input	Wiegand 26~64	Wiegand 24~34 (support external Wiegand Keyboard)
	Wiegand Output	Wiegand Data 0, Data 1 and Arming Output, Duress Output share the same terminal	Wiegand Data 0 Data 1
DI/DO	DI	Egress X2 / Door Status X2	LED (Red) / LED (Green) / Buzzer
	Relay ouput	Door Lock Relay / Alarm Relay	No
	Open Collect Output	Arming Output / Security trigger signal / Duress Output / Alarm Output / Wiegand Port open door	No
Doors		2	No
User Capacity / Floors Number		16,000 Users/64 Floors (Default value); 32,000 Users/32 Floors; 65,000 Users/16 Floors	No
Event Log		32,000	No
Power Voltage		9-24VDC	9-24VDC
Power Consumption		<5W	<1W
Indicator		6 LED (Green/ Red) : Buzzer: 1	Bi-Color LED Frame (Green/Red) : Buzzer: 1
TAMPER		Limit switch (1 Form C/ 1000mA / 30VDC)	No
LCD Panel		128*64 (4 line messages, 16 Characters each line)	No
Housing Material		ABS	ABS+PC Panel
Color		Edge: Black / Silver	Black / White / Hairline texture printing
Keypad		Iluminated Rubber	No
Dimension (mm)		128(H)X147(W)X73(D)	EU: 88(H)X86(W)X34(D): US: 110(H)X81(W)X34(D)
Net Weight(g)		approx. 320	EU: approx. 110 : US: approx. 120
Ingress Protection		IP65	IP65 (Surface)
Environment		Operating Temperature: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ / Storage Temperature: -40°C to $+75^{\circ}\text{C}$ / Operating Humidity: $0\%-90\%$ (non-condensing) / Storage Humidity: $0\%-95\%$ (non-condensing)	





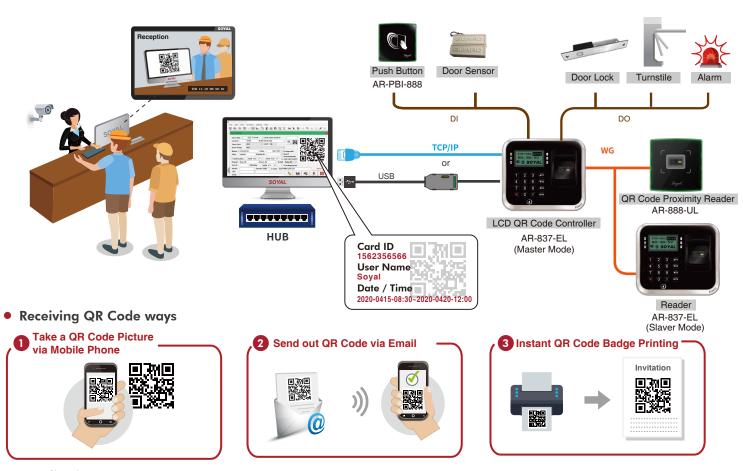
APPLICATION & STRUCTURE DIAGRAM

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.



Application

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



Scaning Badge on Entrance

At an internation 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 limted 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 an temporary use right within an 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 Master

STANDALONE

Necessary



Power Supply

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



Proximity Tags

125kHz: FM 13.56MHz: Mifare Classic, Mifare Desfire, UltraLight, ISO15693

Tags Selection: Thick Card, Thin Card, Round Keyfob, Square Keyfob

NETWORKING

AR-888-UL

AR-837-EL

Software



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

701ServerSQL & 701ClientSQL



Firmware Parameter Setting **Upgrade**

ISPTools (for 888-UL)

UDPUpdater (for 837-EL) 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

• 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.





