

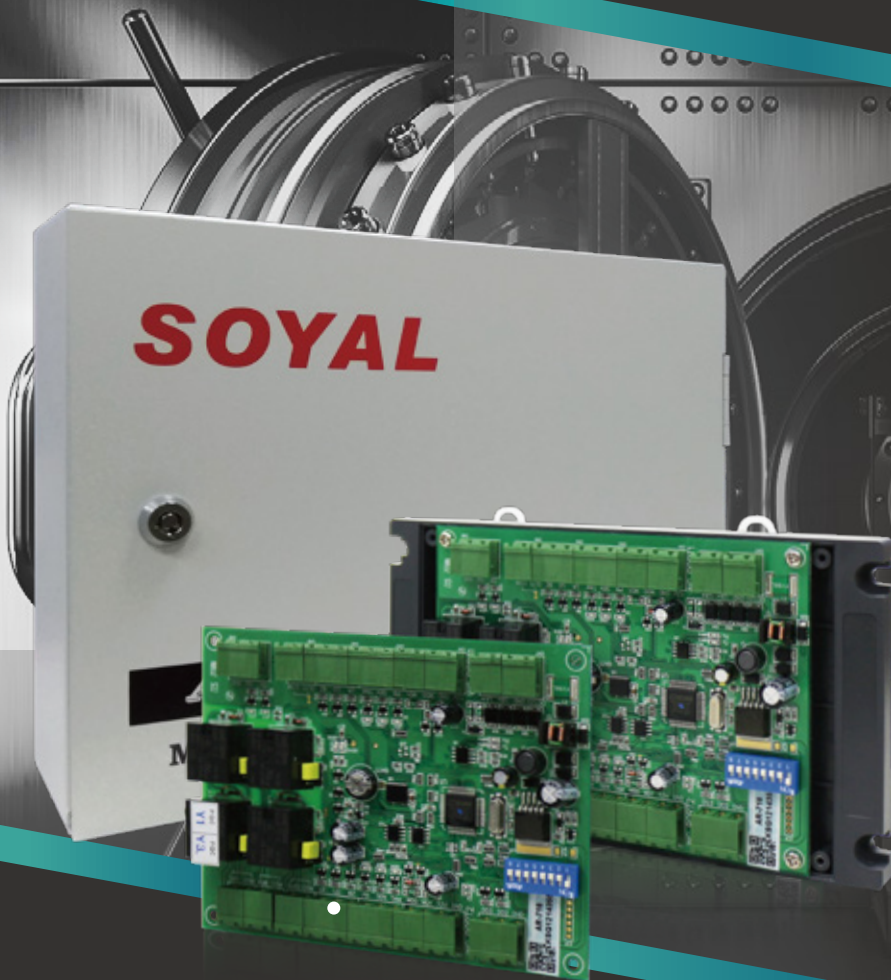
# SOYAL<sup>®</sup>

Multi-Door & Large Capacity Control

# AR-716-E02

## IP-Based 2-Door Networking Control Panel (16 Doors)

Designed for large access control structure, large user capacity control and parking lot access management



### RS485 Communication Encryption

Built-in RS485 communication encryption to ensure communication security and at the same time provide connection to PC

### Time Management

Built-in RTC (Real Time Clock) for accurate date and time calculation and built-in watchdog that can prevent the device from hang up.

### Security Functions

Built-in multiple sets of DI input for door sensor / exit button and DO for door lock, tamper switch, alarm output.

### Support UPS

Be able to connect one UPS Power supply AR-716-TC-P to keep the device running during power outage to enhance system safety



### Installation Design

Complied with Industrial standard and locking design; Quick-release terminal design for wiring, convenient for installation and maintenance

## Features



Data Redundancy



Multi-door  
Anti-passback



Release All Door Locks  
in Fire event



Multiple  
LED indicator



Web



Youtube

- Support RS485 communication encryption, SSC (Soyal Security Communication)
- Built-in RS485 communication interface; Built-in watchdog that can prevent the device from hang up.
- Support 2 sets of Auto-open zone to unlock/lock automatically.
- Built-in 2 WG input interface for 2 WG slaver readers .
- Built-in power and data transmission LED indicators for convenient debugging and status judgement.
- Support maximum 128 controllers in parallel connection and control
- Support 11 sets of Time zone on networking mode and extend up to 63 Time zone and 255 Door groups when connecting with Multi-door controller; be able to set holiday and level, link with other zones.
- Support 2-doors Anti-passback; be able to assign which door is for entry and which door is for exit.

## SPECIFICATION

Interface	Host	RS-485	RS485 : 9600(N,8,1)
	Slave Reader	Wiegand	2 Readers
Door Numbers		2	
User Capacity		3071	
Event Log		1456	
DI/DO	DI	Door Open Button X2 / Prepared for DI X2 Door Sensor X2 / Housing open detection X2	
	DO / Relay Output	Door Lock Relay X2 / Alarm Relay X1 Reserved DO X2 / Reserved Relay Output X1	
Watchdog Function		Standard	
Power Supply		9-24 VDC	
Power Consumption		<2W	
Communication Redundancy		NO	
Anti-Passback		2Doors	
Door Group		Yes	
Time Zone		11	
Others		Support UPS AR-716-TC	
Dimension (mm)	PCB	100(H)x132(W)x20(D)	
	With Plastic Mounting Base	103(H)x175(W)x32(D)	
	With Metal Casing	180(H)x231(W)x62(D)	
Net Weight (g)	PCB	approx. 175	
	With Plastic Mounting Base	approx. 255	
	With Metal Casing	approx. 255	
Environment	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



### Built-in LED Indicator

Built-in power and data transmission LED indicators for convenient debugging and status judgement



### High Cost-Performance ratio

High C/P ratio controller for dual door control via WG interface; simple and easy to use ,with excellent performance, easy to upgrade and expand (Be able to connected to Multi-door controller through RS485 communication interface).



### Multi-door Anti-passback

Support 2-door Anti-pass back when working alone and be expanded to 32-doors Anti-pass back when connected to Multi-door controller;Effectively control the entry of people and vehicles to prevent one card for multi-use in door control or car-parking system. A variety of different functions and applications can effectively achieve as needed.



### Security

Built-in RS485 interface that reach 1200 meters communication distance; Built-in 2 WG port that can be connected with 2 WG slaver reader to realize two doors extry and exit by swipping card or pressing PIN code ;Stable performance, fast communication, strong compatibility and separate design using I/O module to open door lock for high security access.



### WIEGAND Output Format

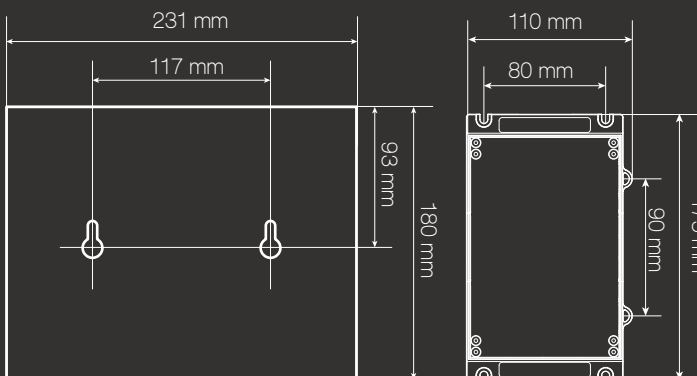
Be compatible with WG readers from different brands in multiple card number format in WG 26/32/34/35/37 and so on



### In-Field firmware Upgrade

In-field firmware upgrade is available by SOYAL ISP Tools when connecting to computer via RS485 converter provided by SOYAL

## INSTALLATION(mm)



▲ Metal Box

▲ Plastic Mounting Base

## HOW TO ORDER

### AR-716-**EXX**-X-X

**Doors No.**

02=Dual Doors (WG)  
16=16 Doors (RS485)+ 2 WG  
18=18 Doors (RS485)+ 2 WG

**Additional Module**  
A=TCP/IP Module

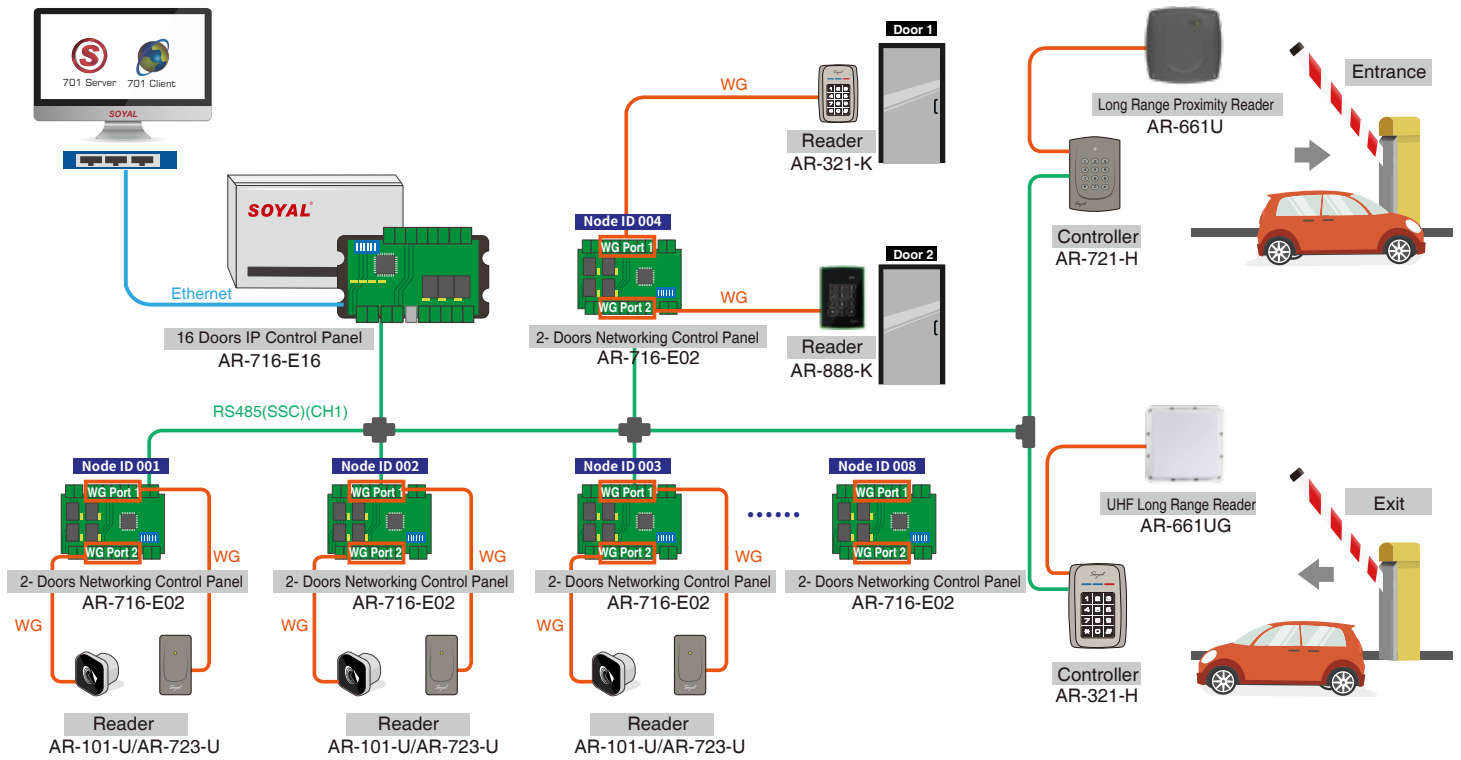
**Type**

N/A=PCB  
M=Metal Case  
X=Plastic Mounting Base  
(AR-716-E18 does not have plastic mounting base option)

## APPLICATION & STRUCTURE DIAGRAM

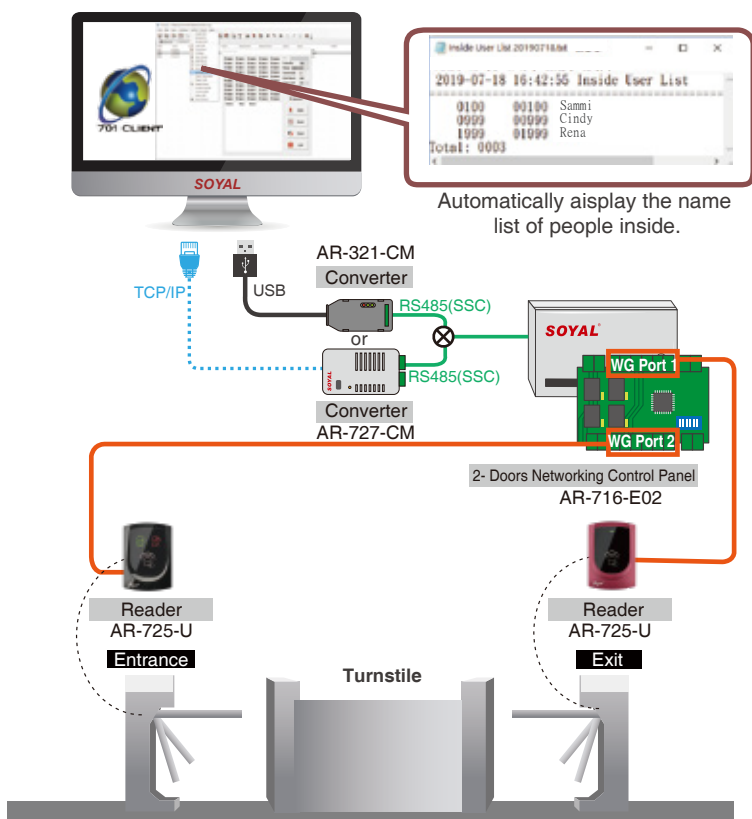
### ● BASIC ACCESS CONTROL STRUCTURE

Built-in 2 WG input interface that can connect 2 WG slaver readers to complete 2 doors control and separate I/O control to realize higher security control that the door lock can not be unlocked even if the door is forcibly damaged and support lift control as well ; Built-in RS485 communication interface can expand to connect with Multi-door controller in parallel connection way for large user capacity and Multi-door Anti-passback access.



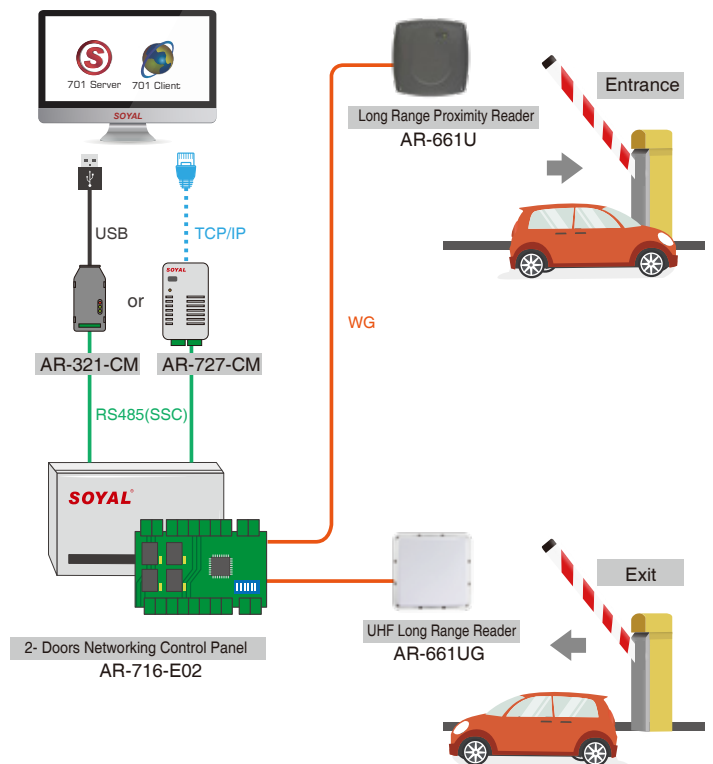
### ● PERSONNEL ACCESS CONTROL

Built-in 2 WG port that can be connected to two WG readers installed in the entrance and exit of turnstile to effectively control personnel single / double direction access.



### ● VEHICLE ENTRY / EXIT CONTROL

Built-in 2 WG port that can be connected to two general or long range range WG readers installed in lane entrance and exit area to effectively control vehicles access.



# PERIPHERALS / ACCESSORIES

## MULTI-DOOR CONTROL SERIES

- Multi-door Control Series



**18 Doors Networking Control Panel**  
AR-716-E18



**16 Doors IP Control Panel**  
AR-716-E16

## WG Reader



**Proximity Reader**  
AR-723-U



**Proximity Reader**  
AR-101-U/ AR-101-PBI



**Proximity Reader**  
AR-321-U



**Proximity Reader**  
AR-721-K



**AR-716-E02**

## Wiegand Fingerprint Controller



**Mullion Fingerprint Controller**  
AR-331-EF



**Fingerprint Controller**  
AR-837-EF9DO  
AR-837-EF3DO

## NETWORKING

- Software



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



**Firmware Upgrade**  
UDP Tools

- Signal/Interface Converter



### USB to RS485

AR-321-CM

### 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)

## Necessary



### Power Supply

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



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

- 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

## FAQ

**Q:** What are the main features and advantage of 2-Door WG Control panel?

**A:** Built-in 2 WG port that can be connected with 2 WG slaver reader to realize two doors entry and exit and two door interlock ; Built-in RS485 interface that can expand to 32-doors Anti-pass back when connected to Multi-door controller.

**Q:** How to keep controller and reader running normally when the power failure?

**A:** Please purchase one UPS Power supply AR-716-TC that can provide power and keep the device running normally the power failure.

