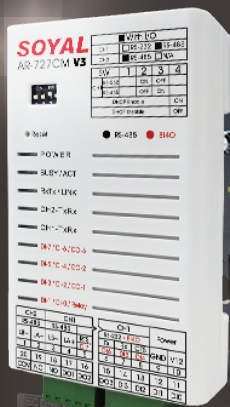


SOYAL[®]

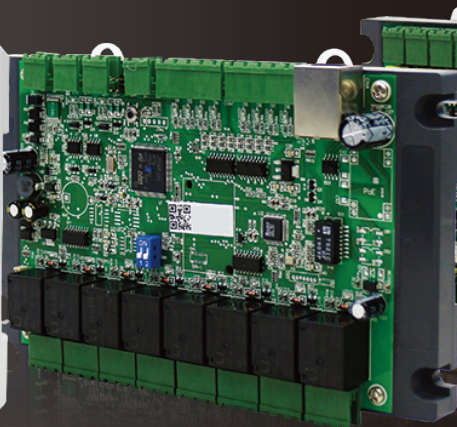
IoT Gateway and I/O Module

AR-727-CM-IO / AR-401-IO / AR-403-IO

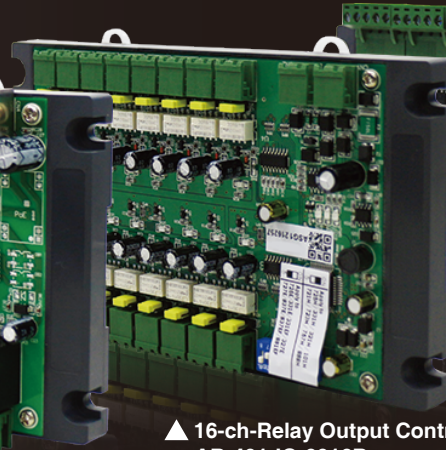
Universal I/O modules supporting SOYAL & Modbus protocols brings wired devices to online to fulfill Industrial Automation and IoT



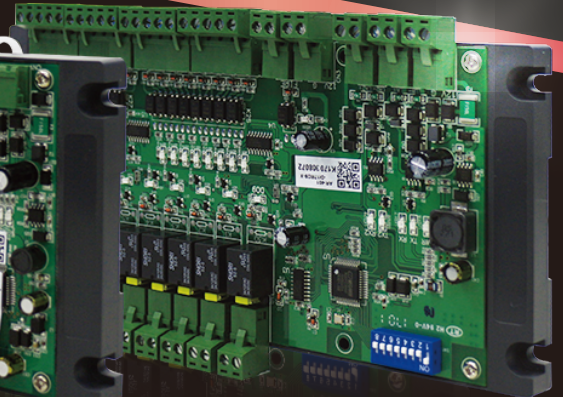
▲ Modbus Gateway
Serial-to-Ethernet Server
with I/O Module
AR-727-CM-IO-0804M



▲ Serial-to-Ethernet Server with I/O Module
AR-401-IO-0808R-U2



▲ 16-ch-Relay Output Controller
AR-401-IO-0016R



▲ 26-ch Isolated DI/RO Module
AR-401-IO-1709R



▲ Universal I/O Module
AR-403-IO-0404M-E

▲ Universal I/O Module
AR-403-IO-0001M-IR

▲ Universal I/O Module
AR-403-IO-0202M
AR-403-IO-0404M

▲ Universal I/O Module
AR-403-IO-0202M-IR

Features

Modbus

Modbus Gateway

AR-727-CM-IO and AR-401-IO-0808-R-U2 support TCP/IP Modbus RTU over TCP, Modbus TCP to Modbus RTU auto conversion (applicable for Ethernet & Wifi), TCP/IP to Wiegand and TCP/IP to Serial.



IoT Application

Wide application in IoT monitoring, factory automation and remote monitoring & control systems



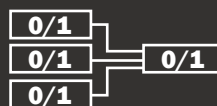
Customizable Firmware

In-field firmware update to support customized firmware per conditional logic control



Diversity of Timer Output

Replace traditional timer, can remotely control & program to avoid on-site misconfiguration and support positive & negative trigger & output



AR-727-CM-IO and AR-401-IO-0808R-U2

With onboard two RS485 channel and I/O could wire with I/O devices, extended I/O modules, and SOYAL access controllers; to release all doors open under fire alarm.



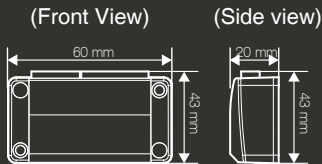
SCADA Software

Soyal 701Client supports graphical control SCADA and seamless integration with 3rd party SCADA software; offer real-time monitor and remote control

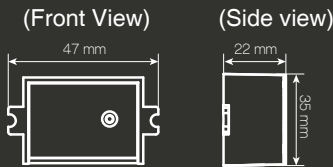
SPECIFICATION

Model No.	AR-727-CM-IO-0804M	401-IO-0808R-U2	401-IO-0016R	401-IO-1709R	403-IO-0202M	403-IO-0202M-IR	403-IO-0404M 403-IO-0404M-E	403-IO-0001M-IR
Interface	Ethernet	10/100 Mbps Base T Ethernet <-> RS485	support TCP/Server, TCP/Client, UDP Mode					
	Serial port (CH1/CH2)	RS485 *2 Baud Rate 2400 bps - 115200 bps (By order: RS232, RS232+RS485) Auto detect Support TCP/Server \\ TCP/Client \ UDP Mode	RS485 *2 Support TCP/Server, TCP/Client, UDP Mode		RS485 * 1			
	Digital Inputs / Outputs or WG port	8 Digital Input / 4 Digital Outputs: 1 Relay Output + 3 DO or DO-1 is able to simulate WG Data:1, and DO-2 is able to simulate WG Data:0, supporting WG output up to 128 bits. Auto add even and odd parity bit and various format, etc.	8 Digital Input 8 Relay Output	16 Relay Output (Form C)	17 Digital Input 9 Relay Output (Form C)	2 Digital Input 2 Digital Output (MosFET)	2 Digital Input (with 1 IR) 2 Digital Output (MosFET)	4 Digital Input 4 Digital Output (MosFET)
PoE	—	PoE option,12W/1A						
Protocol	ModBus-TCP, ARP, IP, TCP Client, UDP, ICMP, HTTP, DHCP, NetBIOS			Modbus, Soyal				
LED Indicator	Power,Tx/Rx, D.O./D.I							
Watchdog Function	Yes							
Surge Suppression	400W peak power dissipation. / Clamping time < 1 picosecond (theoretical) / Power: bi-directional avalanche breakdown device. RS485 bi-directional avalanche breakdown device.							
Fuses	Dual PTC Protection For Power & RS485							
Power Supply	9-24 VDC							9-24 VDC or DC 0V
Isolation	optical 5 kV 1K each channel		Input optical isolation					
Serial Buffer								
Power Consumption	<2W	<2W	<8W	<4W	<1W			<0.5W
Dimension(mm)	106.5(H)x66(W)x27.7(D)	PCB: 100(H)x191(W)x20(D) Panel Mounting Base : 97(H)x225(W)x44(D) Metal Box: 180(H)x231(W)x62(D)	PCB: 100(W)x150(H)x20(D) Panel Mounting Base : 100(H)x175(W)x20(D) Metal Box: 180(H)231(W)x62(D)	PCB: 100(H)x191(W)x20(D) Panel Mounting Base : 97(H)x225(W)x44(D)	403-IO-0202M \ 403-IO-0202M-IR: 60(W)x20(H)x43(D) 403-IO-0404M-E: 48(W)x24(H)x35(D)			60(W)x20(H)x43(D)
Net Weight (g)	approx. 120	Panel Mounting Base : approx. 232	PCB: approx.100 Panel Mounting Base : approx.182 Metal Box: approx. 1760	Panel Mounting Base : approx. 455	403-IO-0202M \ 403-IO-0202M-IR: approx. 31 403-IO-0404M-E: approx. 23			approx. 28
OS Supported	Windows 7 / 8 / 10, Win Server 2008/2012/2016			Windows 7/8/10, Win Server 2008/2012/2016				
Network/Device setting	701Server, 701Client, HTTP Web browser			701Server, 701Client, Commview.exe				
Operation Temperature	-20°C to +65°C							

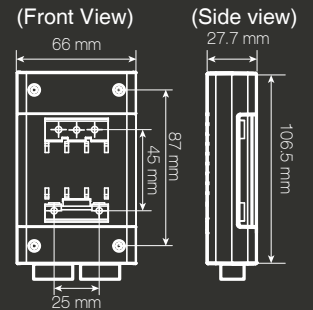
INSTALLATION(mm)



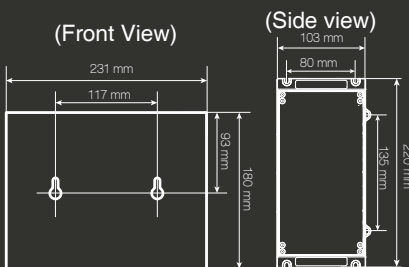
▲ AR-403-IO-0202M / AR-403-IO-0404M
AR-403-IO-0001M-IR / AR-403-IO-0202M-IR



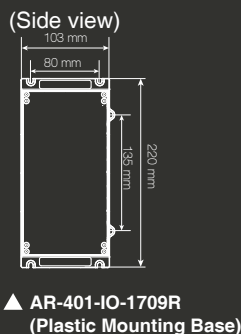
▲ AR-403-IO-0404M-E



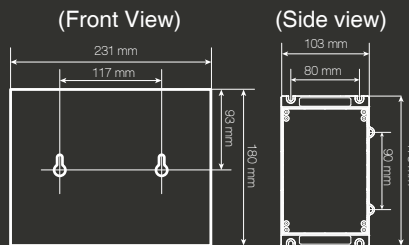
▲ AR-401-IO-1709R



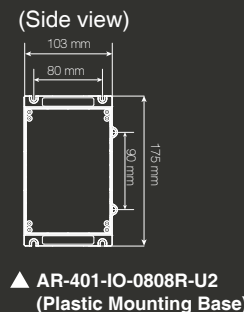
▲ AR-401-IO-1709R
(Metal Case)



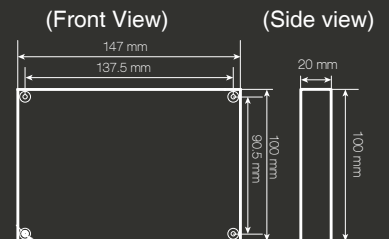
▲ AR-401-IO-1709R
(Plastic Mounting Base)



▲ AR-401-IO-0808R-U2
(Metal Case)



▲ AR-401-IO-0808R-U2
(Plastic Mounting Base)

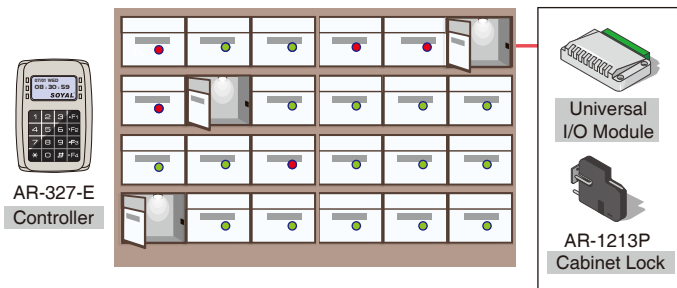


▲ AR-401-IO-0808R-U2

APPLICATION & STRUCTURE DIAGRAM

MAILBOX / STORAGE APPLICATION

One unit of RFID mailbox controller support 64 mailboxes. Residents only need to use the proximity card that also used for building access control to open the personal mailbox and obtain the letter or package. Management can use the software to check each mailbox's open/close status in real time, and assist closing the mailbox doors that residents forget to close.



Direction for use

- 1 Step.**

DI1/3: Sensor
When the letters are dropped, the sensor will detect the motion.
- 2 Step.**

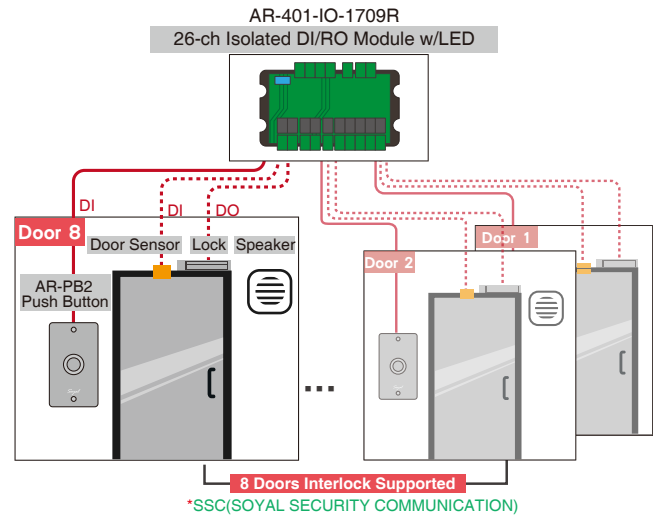
DO1/3: Indicator
The Indicator will light up when there are letters in the mailbox
- 3 Step.**

DO2/4: Cabinet lock
The mailbox will open after the card is presented
- 4 Step.**

DI2/4: Door Sensor
Close the door after taking out the letters. Door Sensor detects the door is closed and the indicator will be off.

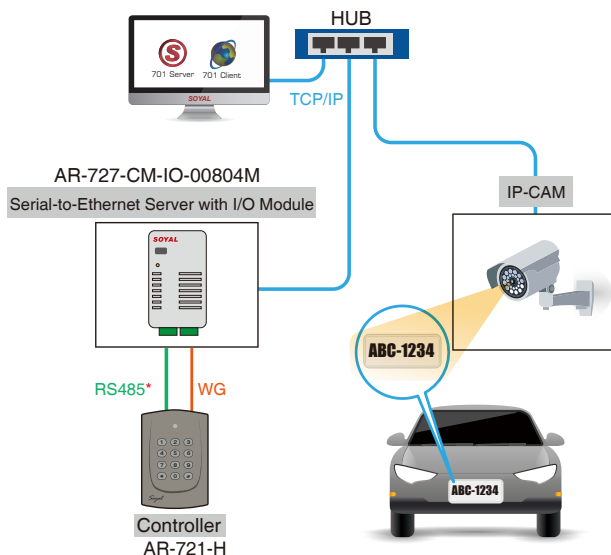
• MULTI-DOOR INTERLOCK CONTROL SOLUTION

Limit access on more than one door open at the same time with interlock control solution. Suitable for area that required high hygienic protection or exposure prevention such as laboratory and cleanroom. The application can control up to 8 doors interlocking with installed door lock, exit button, door sensor and alarm on each door.



• SEAMLESS INTEGRATION WITH AI & ACCESS CONTROL SYSTEM

Serial to Ethernet Networking Device AR-727-CM-IO-0804M (with Digital Input/Output), easily convert any brand of IP-based AI devices such as IP-CAM, IP-Face Recognition, IP-LPR (License Plate Recognition) to Wiegand Output that directly wire to SOYAL access controller.



HOW TO ORDER

AR-401-IO-XXXXR-XX-X-X

Input Qty / Output Qty

- 0016=16 Output
- 0808= 8 Input & 8 Output
- 1709=17 Input & 9 Output

Output Type

R=Realy

Additional Features

- N/A=No Additional Features
- U2=UART * 2

Additional Module

N/A=No Additional Module

P=POE Features

Type

N/A=PCB

M=Metal Case

X=Plastic Mounting Base

AR-403-IO-XXXXM-XX

Input Qty / Output Qty

- 0001=1 Output
- 0202=2 Input & 2 Output
- 0404=4 Input & 4 Output

Output Type

M=Mosfet

Additional Features

N/A=No Additional Features

IR=1 Infrared Output

AR-727-CM-IO-0804M

Input Qty / Output Qty

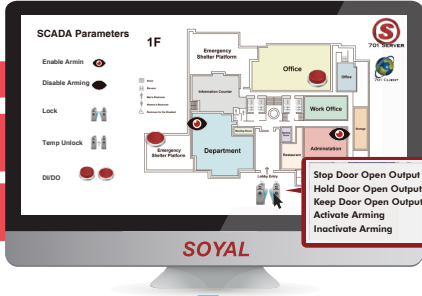
0804=8 Input & 4 Output

Output Type

M=Mosfet

PERIPHERALS / ACCESSORIES

SCADA Solutions



Remotely control I/O status

Support various devices on one Scada Mapping

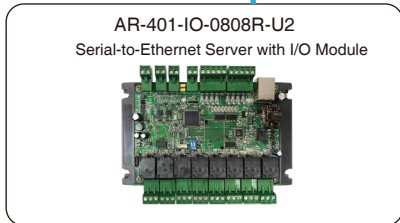
Create multiple windows for each Scada Mapping

Set up abnormal events indicator for pop-up message

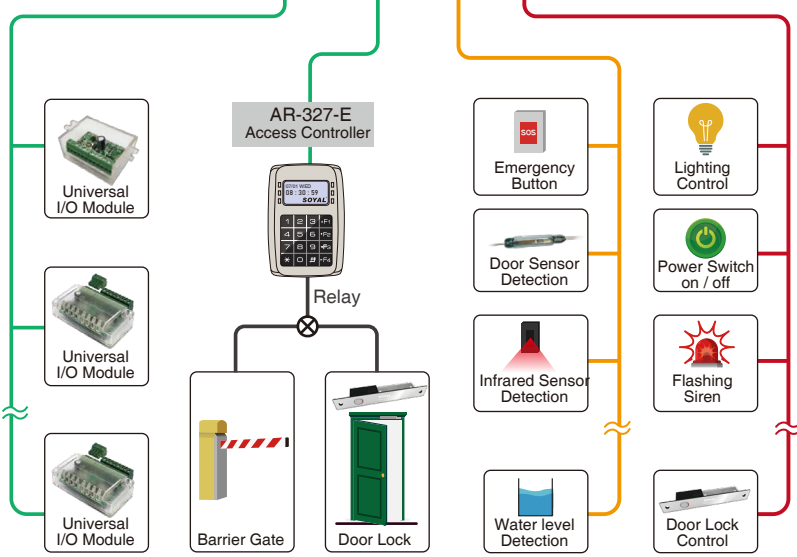
New icon status and mapping is available

Create your own icon and mapping

Ethernet



CH1 RS485 CH2 RS485 DI DO



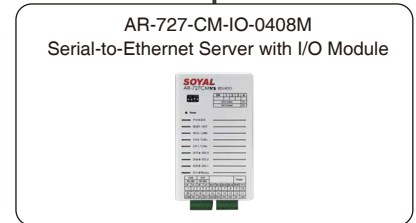
TCP/IP convert to RS-485 (2 Channel) + Release all door locks in fire event



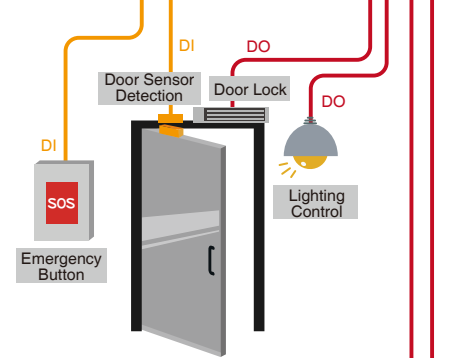
Remote I/O monitoring and control



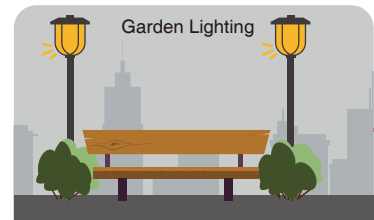
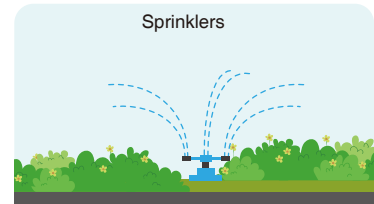
SOYAL 727 APP



DI DO



USB serial I/O control application



More FAQ