SOYAL®

Industry Series

AR-727-CM-IO-0804M

Modbus Gateway Serial-to-Ethernet Server with I/O Module

SOYAL
AR-727CM V3

	■With I/O	
CH1	□RS-232	■RS-485
CH2	■RS-485	□N/A

SW		1	2	3	4
CH1	RS-232	ON	OFF		
	RS-485	OFF	ON		
DHCP Enable					ON
DHCP Disable					OFF

● Reset   ● RS-485   ● 8I4O

POWER
BUSY / ACT
RxTx / LINK
CH2-TxRx
CH1-TxRx
DI-7 / DI-6 / DO-3
DI-5 / DI-4 / DO-2
DI-3 / DI-2 / DO-1
DI-1 / DI-0 / Relay

CH2		CH1			CH1			Power	
RS-485		RS-485			RS-232 / 8I4O				
LB−	LA+	LB−	LA+	RTS / DI7	Tx / DI6	Rx / DI5	CTS / DI4	GND	V12
1	2	3	4	5	6	7	8	9	10
20	19	18	17	16	15	14	13	12	11
COM	NC	NO	DO1	DO2	DO3	DI3	DI2	DI1	DI0
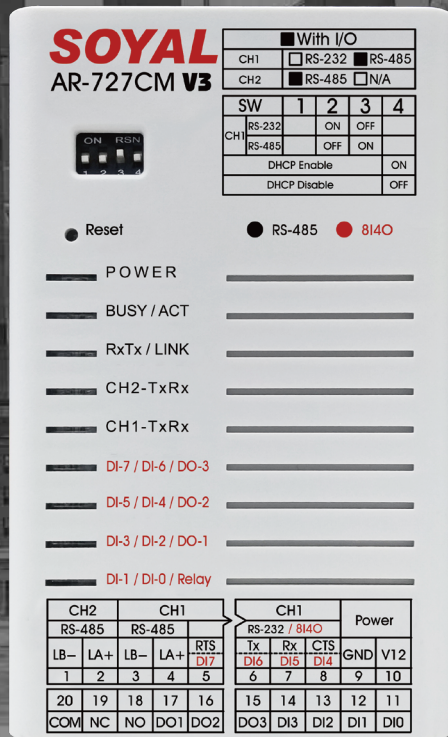
Multi-Modbus Protocol Supported

TCP/IP to Wiegand
TCP/IP to Serial
To get status of on board I/O, Modbus TCP or
Modbus RTU over TCP are supported
Modbus TCP to Modbus RTU Auto Conversion
 (Applicable for Ethernet & WIFI)

TCP Connection LED Indicator

ACT led indicating TCP connection status for visual
check and trouble shooting.

Surge Protection

Power: Bi-directional avalanche breakdown device
RS485: Bi-directional avalanche breakdown device

Simulation of Wiegand Output

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

Features

Remote I/O Function

With I/O logic for conditional control,
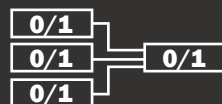suitable for remote monitoring and control

Two Channels Transmission & Receipt

Built-in two channels with buffer 1K for each transmission and receipt
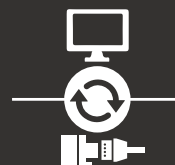without missing data, suitable for transmission of massive data

IoT Application

Wide applications in IoT monitoring,
Factory Automation or remote monitoring
equipment.

SOYAL Protocol

Support SOYAL Protocol, integrated with
SOYAL access control and SCADA. Support
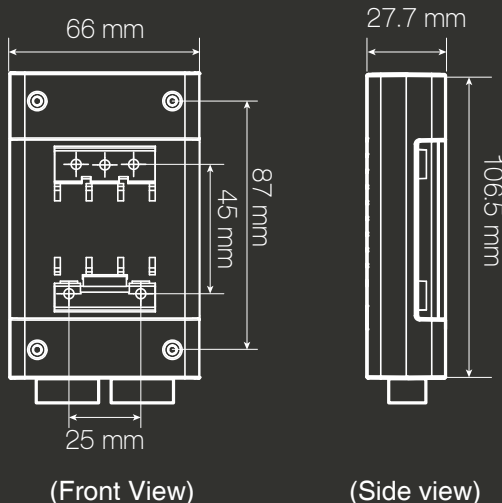all-door release when fire alarm is triggered

Multi-data conversion

Supporting TCP/IP to WG, TCP/IP to Serial,
TCP/IP to I/O.

SPECIFICATION

Model No.			AR-727-CM-IO-0804M
Hardware	Interface	Ethernet	10/100 Mbps Base T Ethernet <--> RS485
		Serial port (CH1/CH2)	RS485 *2 Baud Rate 2400 bps - 115200 bps (By order: RS232, RS232+RS485) Auto detect suppor TCP/Server、TCP/Client、UDP Mode
		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.
	Protocol		ModBus-TCP, ARP, IP, TCP Client, UDP, ICMP, HTTP, DHCP, NetBIOS
	Serial Buffer		1K each channel
	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		Power & RS485 both with PTC Protector
	Isolation		optical 5 kV
	Power Supply		9-24 VDC
	Power Consumption		<2W
	Dimension (mm)		106.5(W)x66(H)x27.7(D)
	Weight (g)		approx. 120
Software	OS Supported		Windows 7 / 8 / 10, Win Server 2008/2012/2016
	Network / Device setting		701Server, 701Client, HTTP Web browser
Enviroment	Operating Temperature		-20℃ ~ +70℃
	Storage Temperature		-40℃ to +75℃
	Operating Humidity		0%~90% (non-condensing)
	Storage Humidity		0%~95% (non-condensing)

INSTALLATION(mm)

66 mm

27.7 mm

87 mm

45 mm

106.5 mm

25 mm

(Front View)

(Side view)

HOW TO ORDER

AR-727-CM-IO-0804M

Controller Option
IO=I/O Module Series

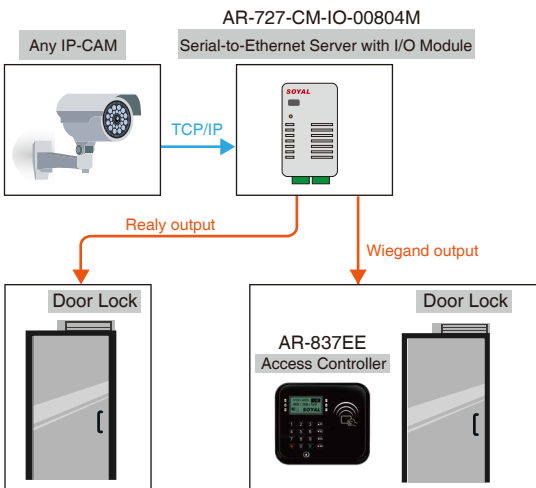**Input Qty / Output Qty**
0804=8 Input & 4 Output

Output Type
M=Mosfet

APPLICATION & STRUCTURE DIAGRAM

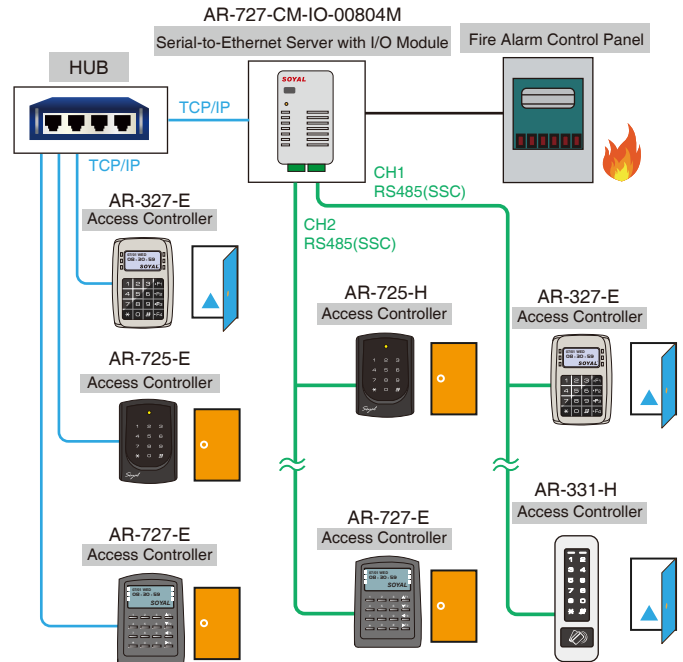## • Seamless integration with Face Recognition & Access Control System

The most flexible way to integrate any IP-Based devices, with AR-727-CM-IO-0804M Serial to Ethernet Networking Device (with Digital Input/Output), such as IP-CAM, IP-Face Recoginition, IP-LPR (License Plate Recognition), I/O trigger electric lock, etc. No need other software.

Supporting TCP/IP to Wiegand output. Help easy integration among surveillance system and access control system as total solution with any brand.
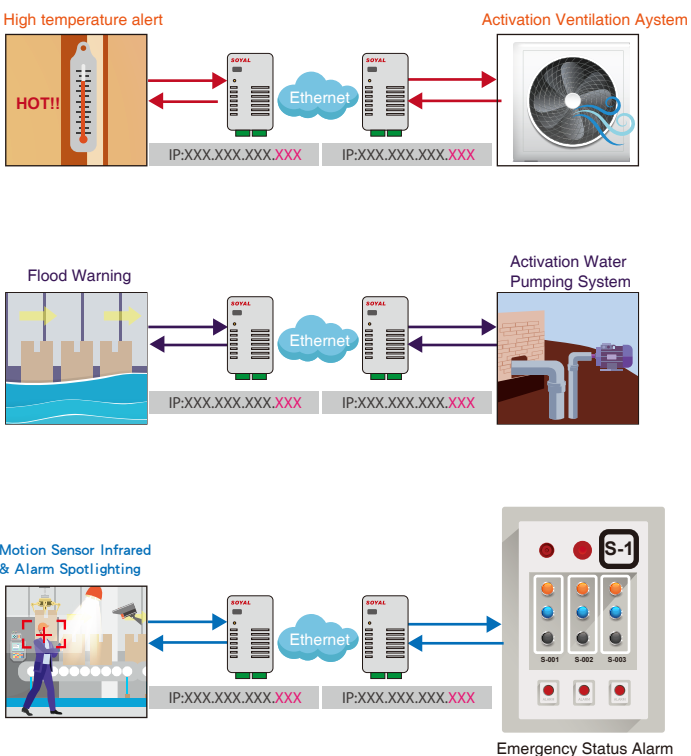
Any IP-CAM

AR-727-CM-IO-00804M
Serial-to-Ethernet Server with I/O Module

TCP/IP

Realy output

Wiegand output

Door Lock

Door Lock

AR-837EE
Access Controller

• Fire-Alarm release all doors

Providing various of customized firmware to meet all customer needs, eg. release all doors or specified doors via RS485 or Ethernet once fire-alarm event
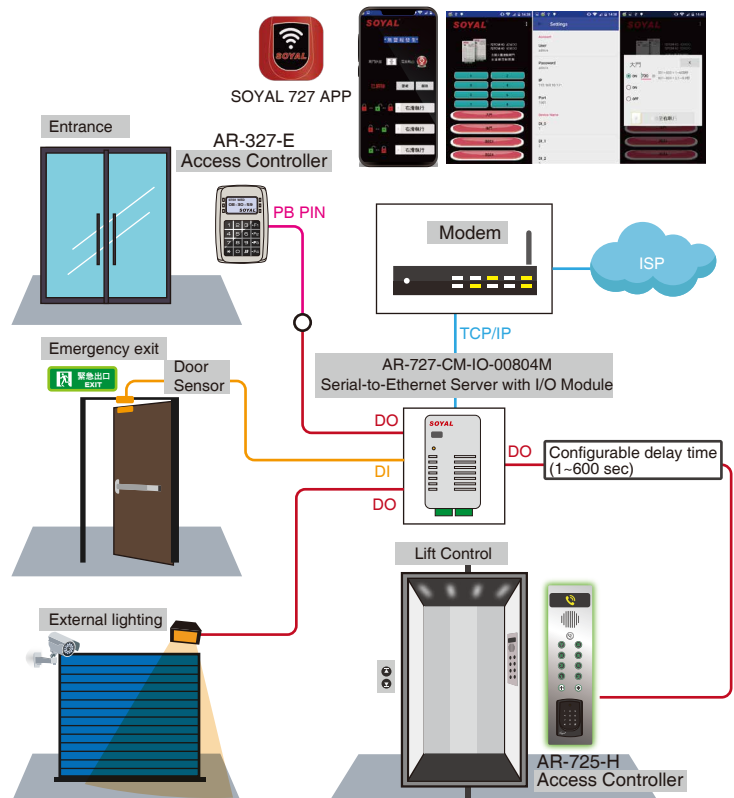
AR-727-CM-IO-00804M
Serial-to-Ethernet Server with I/O Module   Fire Alarm Control Panel

HUB

TCP/IP

TCP/IP

CH1 RS485(SSC)

AR-327-E
Access Controller

CH2 RS485(SSC)

AR-725-H
Access Controller

AR-327-E
Access Controller

AR-725-E
Access Controller

AR-331-H
Access Controller

AR-727-E
Access Controller

AR-727-E
Access Controller

• Remotely I/O linkage control application

AR-727-CM-IO-0804M can fulfill the linkage control in different locations such as trigger DI in location A; linkage DO in location B. Suited to remote control equipment or alarm warning linkage.
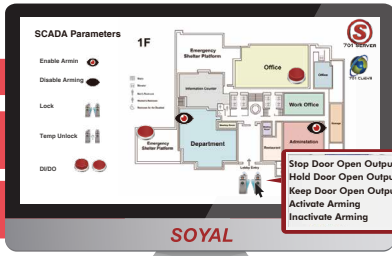
High temperature alert

Activation Ventilation Aystem

HOT!!

Ethernet

IP:XXX.XXX.XXX.XXX   IP:XXX.XXX.XXX.XXX

Flood Warning

Activation Water Pumping System

Ethernet

IP:XXX.XXX.XXX.XXX   IP:XXX.XXX.XXX.XXX

Motion Sensor Infrared & Alarm Spotlighting

Ethernet

IP:XXX.XXX.XXX.XXX   IP:XXX.XXX.XXX.XXX

S-1

S-001 S-002 S-003

Emergency Status Alarm

• Mobile APP - I/O control lighting, electric lock & door contact status

SOYAL 727APP working with AR-727-CM-IO-0804M module that has built-in 8 digital inputs and 4 digital outputs, each I/O name can be self-defined, showing status of each DI; setting Normal Open/Normal Close of each DO with delay time (0.1~600 seconds) to fulfill smart life style through mobile APP.

SOYAL 727 APP

Entrance

AR-327-E
Access Controller

PB PIN

Modem

ISP

Emergency exit

緊急出口
EXIT

Door Sensor

TCP/IP

AR-727-CM-IO-00804M
Serial-to-Ethernet Server with I/O Module

DO

DI

DO

Configurable delay time (1~600 sec)

Lift Control

External lighting

AR-725-H
Access Controller

PERIPHERALS / ACCESSORIES

SCADA Solutions

SCADA Parameters 1F

- Enable Armin
- Disable Arming
- Lock
- Temp Unlock
- DI/DO

Stop Door Open Output
Hold Door Open Output
Keep Door Open Output
Activate Arming
Inactivate Arming

SOYAL

- 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

SOYAL 727 APP

Ethernet

Modem

AR-727-CM-IO-0408M
Serial-to-Ethernet Server with I/O Module

AR-727-CM-IO-0408M
Serial-to-Ethernet Server with I/O Module
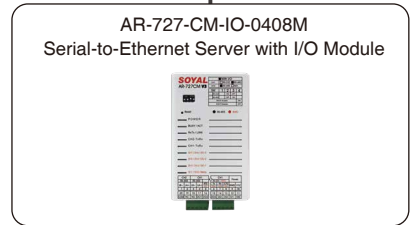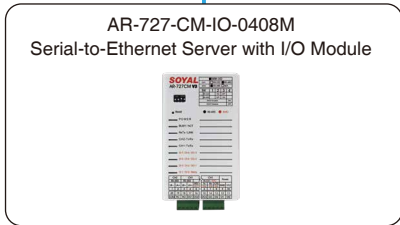
| CH1 RS485 * | CH2 RS485 * | DI | DO |

| DI | DO |

DI | DO

Door Sensor Detection
Door Lock
DO

Universal I/O Module

AR-327-E
Access Controller

Emergency Button

Lighting Control

DI

Emergency Button

Lighting Control

Universal I/O Module

Relay

Door Sensor Detection

Power Switch on / off
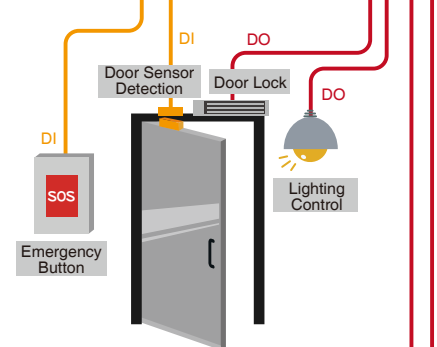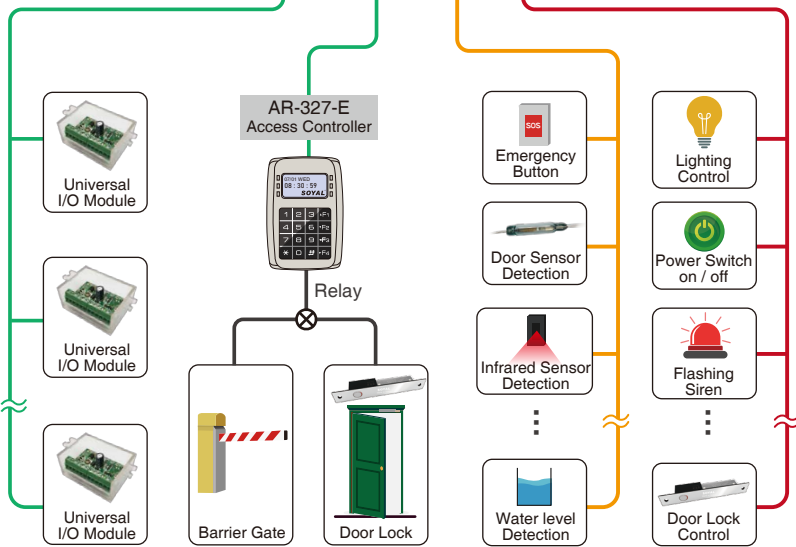
USB serial I/O control application

Universal I/O Module

Barrier Gate

Door Lock

Infrared Sensor Detection

Flashing Siren

Sprinklers

Water level Detection
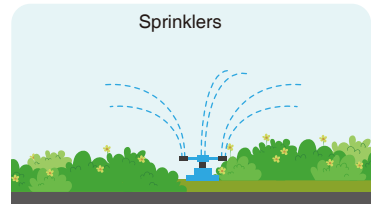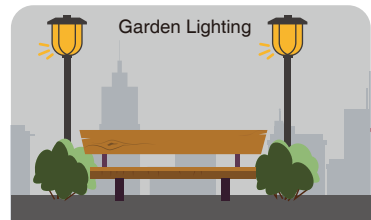
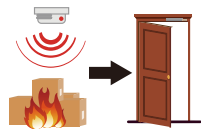Door Lock Control

Garden Lighting

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

Remote I/O monitoring
and control

*SSC(SOYAL SECURITY COMMUNICATION)

More FAQ